



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

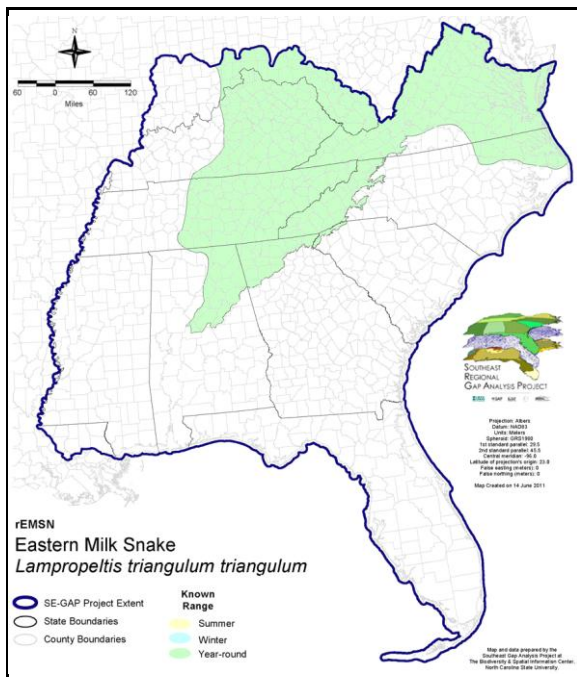
Eastern Milk Snake

Lampropeltis triangulum triangulum

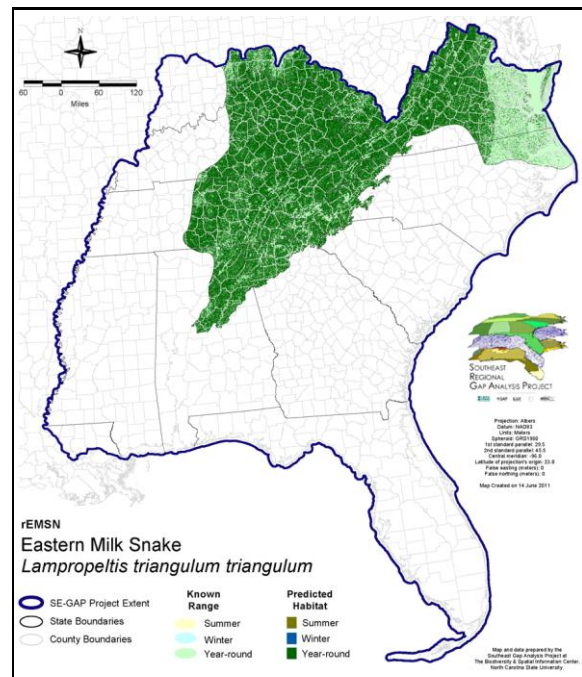
Taxa: Reptilian
Order: Squamata
Family: Colubridae

SE-GAP Spp Code: **rEMSN**
ITIS Species Code: 209242
NatureServe Element Code: ARADB1905A

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rEMSN_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), NC (W3), NJ (SC), RI (Not Listed)

NS Global Rank: G5T5

NS State Rank: AL (S2), DC (SNR), GA (S2), IL (S4), IN (S4), KY (S4), NC (S2S3), NJ (S3), PA (S5), RI (S5), SC (S3), VA (S5), ON (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	4,014.5	< 1	21,134.6	< 1	0.0	0	0.0	0
Status 2	4,399.7	< 1	198,963.9	< 1	0.0	0	36.9	< 1
Status 3	181.5	< 1	1,016,763.3	4	54,977.9	< 1	88,479.0	< 1
Status 4	38.7	< 1	0.0	0	0.0	0	128.7	< 1
Total	8,634.5	< 1	1,236,861.8	5	54,977.9	< 1	88,644.6	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	136,050.8	< 1	0.0	0	0.0	0
Status 2	0.0	0	7,499.4	< 1	26.4	< 1	0.0	0
Status 3	11,713.8	< 1	75,213.9	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	11,713.8	< 1	218,764.2	< 1	26.4	< 1	0.0	0
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	637.0	< 1	77.6	< 1	0.0	0
Status 2	0.0	0	9,923.4	< 1	196,925.2	< 1	1,011.8	< 1
Status 3	14,054.6	< 1	51,364.6	< 1	67,757.9	< 1	25,097.1	< 1
Status 4	0.0	0	0.0	0	23,445.6	< 1	0.0	0
Total	14,054.6	< 1	61,925.0	< 1	288,206.3	1	26,108.9	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	8,710.2	< 1	0.0	0	0.0	0
Status 2	323.7	< 1	28,916.9	< 1	6.8	< 1	487.9	< 1
Status 3	0.0	0	2,125.2	< 1	1,758.6	< 1	47.3	< 1
Status 4	0.0	0	1.0	< 1	514.4	< 1	0.0	0
Total	323.7	< 1	39,753.3	< 1	2,279.8	< 1	535.2	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	170,624.8	< 1		
Status 2	0.0	0	0.0	0	448,522.0	2		
Status 3	0.0	0	0.0	0	1,409,534.6	11		
Status 4	19,557,581.9	86	12,224.6	< 1	19,617,341.9	87		
Total	19,557,581.9	86	12,224.6	< 1	21,646,023.4	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: Eastern milk snakes can be found in a wide variety of habitats including prairies, open woodlands, high pines, pine ridges, upland hammocks, bogs, hardwoods, talus slopes, and edges of lakes, ponds, and streams (Wright and Wright 1957, Williams 1988). In some regions they seem to prefer forested areas while in others, prairies are more preferential (Mount 1975). At higher elevations they will occupy hardwood and mixed-pine hardwoods, grassy balds, rock outcrops and ledges, whereas at lower elevations habitat will also include pine woods, old fields, pastures and meadows (Mitchell 1995, Palmer & Braswell 1995). Mount (1975) and Williams (1988) identified that there may be some seasonal variation in habitat use with this species. They may utilize low mesic areas in the summer months and drier hills and higher elevations throughout the remaining months of the year. However, regardless of habitat type optimal microhabitat conditions for eastern milk snake would include places where there is an abundance of surface objects to provide cover such as large flat rocks, sandstone or limestone slabs, logs or boards (Palmer & Braswell 1995, Mitchell 1995, Williams 1988). Amy Silvano 22Aug05

Notes: Couldn't find supporting literature however***All L. triangulum species will feed on other snakes and mice and usually do not venture far from food source which indicates they are usually found in more open or woodland habitat and do not commonly occur in deep or closed forests. Also have been recent studies & presentations at current herp meetings that L. triangulum are continuously being found in power line right, leading more support to them being in open woodland species. This all as per confirmed conversations with Dr. Craig Guyer. *****Hand Modeling use Forest Interior layer as an AVOID mask OR use Ecotone buffer (Forest/open & Woodland) of 500m on all forested classes, but don't restrict pastures or disturbed successional classes. Amy Silvano 22Aug05

Ecosystem Classifiers: All MU's EXCEPT Open water, Coastal, Brackish, & Flatwoods. Amy Silvano 22Aug05

Elevation Mask: < 1435m

Mask of Forest Interior Avoidance: Exclude forest interiors with 500m buffer into them.

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Low Intensity Developed
Anthropogenic	Pasture/Hay
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Bald	Central Appalachian Montane Rocky Bald - Herbaceous Modifier
Bald	Central Appalachian Montane Rocky Bald - Shrub Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Herbaceous Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Shrub Modifier
Forest/Woodland	Alabama Ketona Glade and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Appalachian Serpentine Woodland
Forest/Woodland	Appalachian Shale Barrens
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 Alkaline Glade and Woodland
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland

Forest/Woodland	Central Interior Highlands Calcareous Glade and Barrens
Forest/Woodland	Central Interior Highlands Dry Acidic Glade and Barrens
Forest/Woodland	Cumberland Sandstone Glade and Barrens
Forest/Woodland	Nashville Basin Limestone Glade
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southeastern Interior Longleaf Pine Woodland
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Mafic Glade and Barrens
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Loblolly Pine Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Piedmont Glade and Barrens
Forest/Woodland	Southern Piedmont Mafic Hardpan Woodland
Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southern Piedmont Northern Triassic Basin Dry Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier
Prairie	Pennyroyal Karst Plain Prairie and Barrens
Prairie	Southern Ridge and Valley Patch Prairie
Prairie	Western Highland Rim Prairie and Barrens
Rock Outcrop	Allegheny-Cumberland Sandstone Box Canyon and Rockhouse
Rock Outcrop	Central Interior Acidic Cliff and Talus
Rock Outcrop	Central Interior Calcareous Cliff and Talus
Rock Outcrop	North-Central Appalachian Acidic Cliff and Talus
Rock Outcrop	North-Central Appalachian Circumneutral Cliff and Talus
Rock Outcrop	Southern Appalachian Granitic Dome
Rock Outcrop	Southern Appalachian Montane Cliff
Rock Outcrop	Southern Appalachian Rocky Summit
Rock Outcrop	Southern Appalachian Spray Cliff
Rock Outcrop	Southern Interior Acid Cliff
Rock Outcrop	Southern Interior Calcareous Cliff
Rock Outcrop	Southern Interior Sinkhole Wall
Rock Outcrop	Southern Piedmont Cliff
Rock Outcrop	Southern Piedmont Granite Flatrock
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier

Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	Cumberland Riverscour
Wetlands	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	North-Central Interior and Appalachian Rich Swamp
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Wetlands	Unconsolidated Shore (Lake/River/Pond)
Wetlands	Western Highland Rim Seepage Fen

CITATIONS: Williams, K.L. 1988. Systematics and Natural History of the American Milk Snake, *Lampropeltis triangulum*. Milwaukee Public Museum. Milwaukee. 176 Pp.

Wright, A. H. and A. A. Wright. 1957. Handbook of snakes of the United States and Canada. 2 Volumes. Comstock Publishing Associates, Ithaca, New York. 1105 pp.

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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.