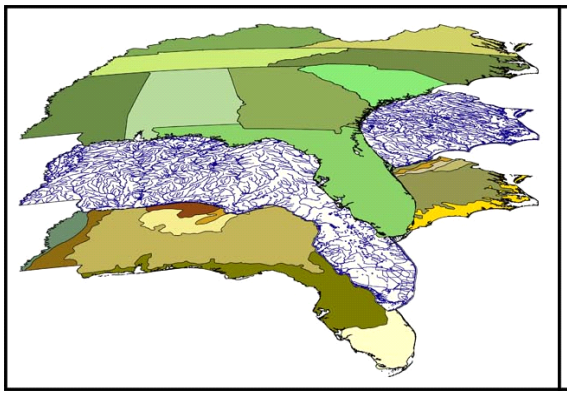


SOUTHEAST GAP ANALYSIS PROJECT

Species Modeling Report

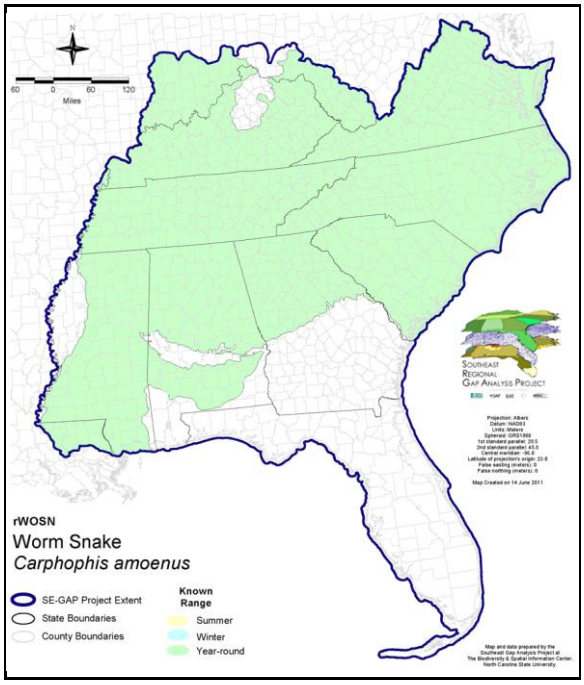
Worm Snake

Carphophis amoenus

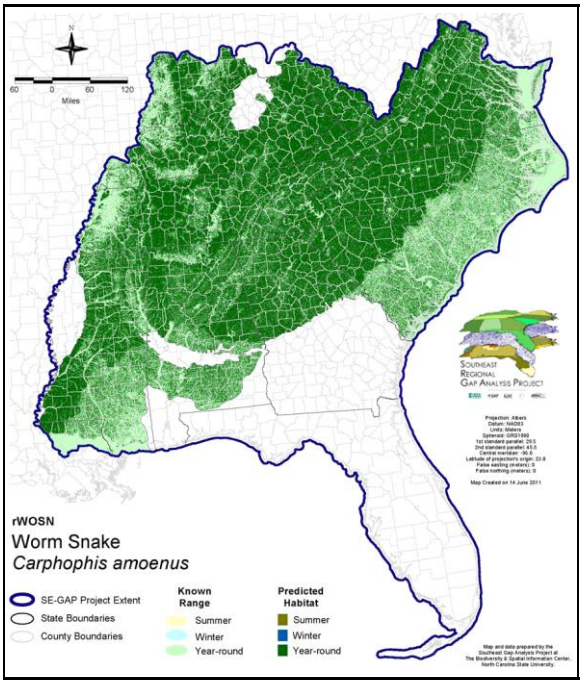
Taxa: Reptilian
Order: Squamata
Family: Colubridae

SE-GAP Spp Code: **rWOSN**
ITIS Species Code: 174161
NatureServe Element Code: ARADB02010

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_rWOSN.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_rWOSN.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=rWOSN
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rWOSN_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: IA (T), KY (N), MA (T), MS (Non-game species in need of management), NY (SC), RI (Concern)

NS Global Rank: G5

NS State Rank: AL (S5), AR (SNR), CT (S4), DC (S4), DE (S5), GA (S5), IA (S2), IL (SNR), IN (SNR), KY (S5), LA (S5), MA (S1S2), MD (S5), MS (S5), NC (S5), NJ (SNR), NY (S2), OH (SNR), PA (S3), RI (S1), SC (SNR), TN (S5), VA (S5), WV (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	23,400.1	< 1	27,136.6	< 1	0.0	0	0.0	0
Status 2	51,376.5	< 1	324,218.6	< 1	0.0	0	3,882.2	< 1
Status 3	2,862.1	< 1	1,933,891.6	3	66,003.3	< 1	270,689.3	< 1
Status 4	74.3	< 1	0.0	0	0.0	0	130.7	< 1
Total	77,713.0	< 1	2,285,246.8	4	66,003.3	< 1	274,702.1	< 1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	229,602.6	< 1	28.4	< 1	0.0	0
Status 2	0.0	0	12,681.1	< 1	4,750.7	< 1	0.0	0
Status 3	37,479.1	< 1	108,224.0	< 1	0.0	0	1,023.0	< 1
Status 4	0.0	0	1.0	2	0.0	0	0.0	0
Total	37,479.1	< 1	350,509.2	< 1	4,779.1	< 1	1,023.0	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,238.0	< 1	77.0	< 1	0.0	0
Status 2	0.0	0	17,236.3	< 1	375,359.5	< 1	1,442.2	< 1
Status 3	24,816.7	< 1	133,743.0	< 1	128,219.4	< 1	48,539.0	< 1
Status 4	0.0	0	0.0	0	99,478.4	< 1	0.0	0
Total	24,816.7	< 1	152,217.2	< 1	603,134.4	1	49,981.1	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	10,895.5	< 1	0.0	0	0.0	0
Status 2	3,930.6	< 1	51,789.6	< 1	4.3	< 1	1,300.0	< 1
Status 3	0.0	0	3,279.5	< 1	5,416.5	< 1	4,926.3	< 1
Status 4	0.0	0	2.1	< 1	3,257.6	< 1	0.0	0
Total	3,930.6	< 1	65,966.7	< 1	8,678.4	< 1	6,226.3	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	292,378.1	< 1
Status 2	0.0	0	0.0	3	847,971.6	2
Status 3	0.0	0	0.0	0	2,769,112.7	8
Status 4	49,925,972.8	89	15,515.8	< 1	50,143,837.4	90
Total	49,925,972.8	89	15,516.0	< 1	54,053,299.9	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: Fossorial in nature, worm snakes occupy forested and wooded habitats where the soil allows burrowing (Mitchell 1994). They prefer moist to mesic hardwoods with an abundance of leaf litter and humus (Wilson 1995), but can also be found in flatwoods (Dundee & Rossman 1989) and dry upland environments such as oldfields and power line right of ways (Willson & Dorcas 2004) when adjacent to woodlands (Palmer & Braswell 1995). Amy Silvano 18aug05

Ecosystem Classifiers: Hardwood, Mixed, Mesic Slope & Cove, Montane, Maritime, Flatwoods, Swamps as PMUs and Low Urba, Pasture/Hay, Developed Open, Succession grass & Utility swaths as AMUs. Amy Silvano 18aug05

Elevation Mask: < 1300m

Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
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	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Maritime Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	South-Central Interior Mesophytic 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 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 - 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 Mesic Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier

Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Interior and Appalachian Rich Swamp
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods

Selected Secondary Map Units within 250m of Primary Map Units:

Functional Group	Map Unit Name
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Offsite Pine Modifier
Anthropogenic	Developed Open Space
Anthropogenic	Low Intensity Developed
Anthropogenic	Evergreen Plantations
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Pasture/Hay

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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.