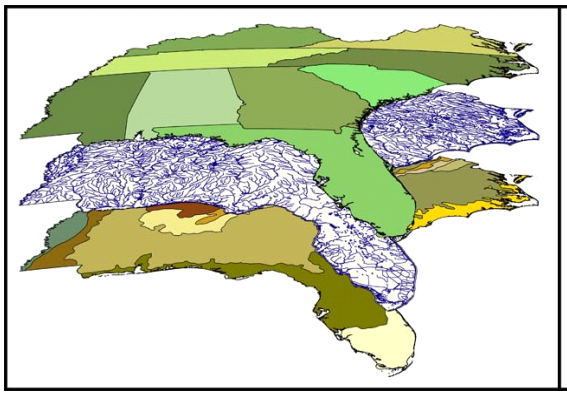


SOUTHEAST GAP ANALYSIS PROJECT

Species Modeling Report

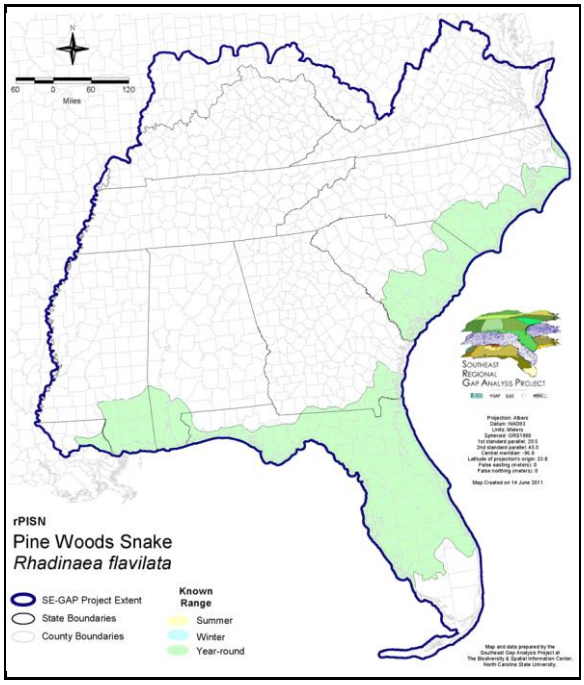
Pine Woods Snake

Rhadinaea flavilata

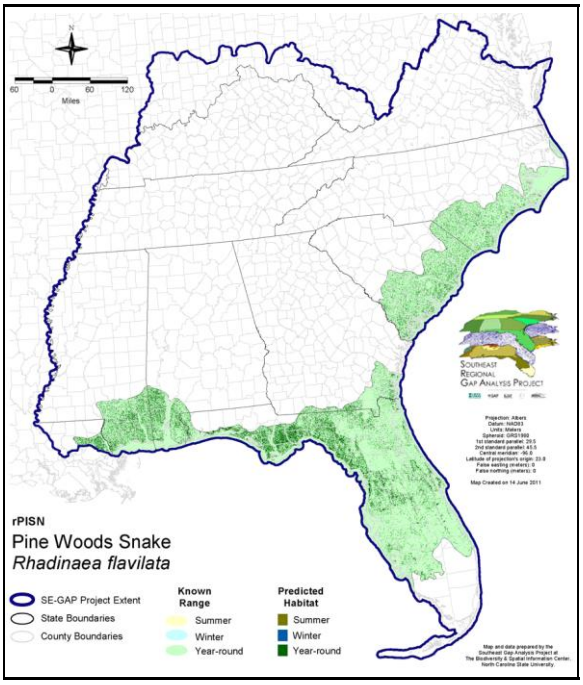
Taxa: Reptilian
Order: Squamata
Family: Colubridae

SE-GAP Spp Code: **rPISN**
ITIS Species Code: 174265
NatureServe Element Code: ARADB28010

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_rPISN.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_rPISN.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=rPISN
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rPISN_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---
State Status: MS (Non-game species in need of management), NC (W2)
NS Global Rank: G4
NS State Rank: AL (S2), FL (SNR), GA (S2), LA (S1), MS (S3?), NC (S3), SC (SNR)

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	11,667.0	< 1	475.7	< 1	0.0	0	0.0	0
Status 2	17,103.8	< 1	21,407.9	< 1	0.0	0	2.1	< 1
Status 3	2.8	< 1	251,197.9	6	0.0	0	60,255.2	2
Status 4	4.9	< 1	< 0.1	< 1	0.0	0	0.0	0
Total	28,778.4	< 1	273,081.7	7	0.0	0	60,257.3	2

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	909.8	< 1	56.6	< 1	9,406.0	< 1
Status 2	0.0	0	6,016.8	< 1	3,018.8	< 1	47.1	< 1
Status 3	79.3	< 1	82.7	< 1	0.0	0	2,282.0	< 1
Status 4	0.0	0	1.0	3	0.0	0	0.0	0
Total	79.3	< 1	7,010.8	< 1	3,075.4	< 1	11,735.1	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	48.0	< 1	0.0	0	0.0	0
Status 2	0.0	0	65.3	< 1	71,883.8	2	0.0	0
Status 3	7.0	< 1	126,405.4	3	6,016.6	< 1	92,880.0	2
Status 4	0.0	0	< 0.1	< 1	5,053.6	< 1	0.0	0
Total	7.0	< 1	126,518.8	3	82,954.0	2	92,880.0	2

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,318.3	< 1	0.0	0	0.0	0
Status 2	2,314.4	< 1	6,794.0	< 1	0.0	0	928.7	< 1
Status 3	0.0	0	7,608.2	< 1	3,402.2	< 1	36,754.2	< 1
Status 4	0.0	0	0.0	0	43.4	< 1	0.0	0
Total	2,314.4	< 1	15,720.6	< 1	3,445.6	< 1	37,682.9	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	23,881.4	< 1
Status 2	0.0	0	0.0	4	129,582.8	3
Status 3	81.4	< 1	1.0	< 1	587,055.9	22
Status 4	2,873,353.2	74	2,292.0	< 1	2,885,797.5	74
Total	2,873,434.6	74	2,293.2	< 1	3,626,317.6	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: Pine woods snakes are small secretive snakes found mainly in damp pine flatwoods (NatureServe 2005). However, they may also be observed in a few other moist, forested situations such as some maritime live oak forests (GA-GAP 2003) and hardwood hammocks near pine flatwoods (Wilson 1995, NatureServe 2005). Some pine snakes will also occur in dry woodlands or marshy areas on coastal islands off North Carolina and Florida (NatureSeve 2005). Amy Silvano 24Aug05

FL-GAP: Moist pine flatwoods near cypress heads. Wooded edges of wet prairies (Ashton 1988). # Flatwoods and upland hammock (Carr 1940). # Flatwoods with poorly drained soils with slash or longleaf pines. Occasionally in hardwood hammocks adjacent to flatwoods. On some coastal islands in dry woodlands or marsh (Ernst and Barbour 1989). # Flatwoods and longleaf pine (Dundee and Rossman (1989). # Flatwoods, hammocks, and in moist microhabitats such as at the edge of cypress ponds (Carr and Goin 1955). # Pine/oak flatwoods (Allen 1939).

Pine woods snake collected in drier sandhill environments in NC were usually near water or in ecotones between pine and bottomlands or pocosins (Palmer & Braswell 1995).

Ecosystem Classifiers: Evergreen, Maritime Forest, Domes/Hammocks, Flatwoods. Amy Silvano 25Aug05

Customized Model: Pine woods snake collected in drier sandhill environments in NC were usually near water or in ecotones between pine and bottomlands or pocosins (Palmer & Braswell 1995). ***Hand Modeling apply buffer to upland forested systems ONLY; i.e. do not restrict other wet systems to buffer. Amy Silvano 15feb06

Hydrography Mask:

Utilizes wet vegetation features with buffer of 250m from selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Northern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Forest/Woodland	East Gulf Coastal Plain Maritime Forest
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Mississippi Delta Maritime Forest
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	Central Florida Pine Flatwoods
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	South Florida Hardwood Hammock
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome

CITATIONS:

Ashton, R. E., Jr., and P. S. Ashton. 1981. Handbook of Reptiles and Amphibians of Florida. Part One:The Snakes. Windward Pub. Co., Miami, Florida. 176 pp.

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.

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.

Ernst, C. H., and R. W. Barbour. 1989. Snakes of eastern North America. George Mason Univ. Press, Fairfax, Virginia. 282 pp.

Fitch, H. S. 1970. Reproductive cycles of lizards and snakes. Univ. Kansas Museum Natural History Miscellaneous Publication 52:1-247.

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.

Mount, R. H. 1975. The Reptiles and Amphibians of Alabama. Auburn University Agricultural Experiment Station, Auburn, Alabama. vii + 347 pp.

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

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.