



Species Modeling Report

Pygmy Rattlesnake

Sistrurus miliarius

Taxa: Reptilian

- Order: Squamata
- Family: Viperidae

KNOWN RANGE:

SE-GAP Spp Code: **rPYRA** ITIS Species Code: 174302 NatureServe Element Code: ARADE03020

PREDICTED HABITAT:



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

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

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

 Data Download:
 http://www.basic.ncsu.edu/segap/datazip/region/vert/rPYRA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), MS (Non-game species in need of management), NC (SC)

NS Global Rank: G5

NS State Rank: AL (S4), AR (S4), FL (SNR), GA (S5), KY (S2), LA (S4), MO (S4), MS (S5), NC (S3), OK (S4), SC (SNR), TN (S2), TX (S5)

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	128,059.1	< 1	5,489.3	< 1	0.0	0	0.0	0	
Status 2	103,061.3	< 1	65,391.1	< 1	0.0	0	612.4	< 1	
Status 3	617.9	< 1	722,732.3	4	7,548.3	< 1	353,285.1	2	
Status 4	590.9	< 1	0.0	0	0.0	0	0.0	0	
Total	232,329.2	1	793,612.7	4	7,548.3	< 1	353,897.5	2	
	US Dont of Energy		LIS Nat Park	Service	I	NOAA	Other Feder	allande	
	ba	% Litergy	ba	%	ha	NOAA %	ba	ar Lanus %	
Status 1	0.0	0	36.058.6	70 < 1	65.5	< 1	11 883 3	/0 < 1	
Status 2	0.0	0	10 186 0	< 1	5 677 4	< 1	49.2	< 1	
Status 2	44 228 6	< 1	147 673 4	< 1	3,077.4	0	3 256 8	< 1	
Status 3	44,228.0	0	147,073.4	0	0.0	0	0.0	0	
Total	44,228.6	< 1	193,918.0	1	5,742.9	< 1	15,189.4	< 1	
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	Native Am. Reserv.		State Park/Hist. Park		State WMA/G	State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	657.7	< 1	19.0	< 1	0.0	0	
Status 2	0.0	0	2,401.4	< 1	283,596.0	2	0.0	0	
Status 3	5,086.4	< 1	371,321.3	2	80,714.3	< 1	246,859.2	1	
Status 4	0.0	0	< 0.1	< 1	48,082.8	< 1	36.3	< 1	
Total	5,086.4	< 1	374,380.5	2	412,412.0	2	246,895.5	1	
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	State Coastal	Reserve	ST Nat.Area/I	Preserve	Other Sta	ate Lands	Private Cons.	Easemt.	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	3,685.7	< 1	0.0	0	0.0	0	
Status 2	9,203.0	< 1	26,776.4	< 1	0.0	0	2,075.9	< 1	
Status 3	0.0	0	17,338.8	< 1	9,625.3	< 1	66,857.8	< 1	
Status 4	0.0	0	0.0	0	1,119.8	< 1	0.0	0	
Total	9,203.0	< 1	47,800.8	< 1	10,745.1	< 1	68,933.7	< 1	
Private Land - No Res.		Water		1		Over	all Total		
	ha	%	ha	%			ha	%	
Status 1	0.0	0	0.0	0			185,918.2	< 1	
Status 2	169.5	< 1	0.0	9			509,199.8	3	
Status 3	1,083.1	< 1	1.0	< 1			2,078,229.4	15	
Status 4	15,127,706.6	81	11,190.6	< 1			15,236,218.9	81	
Total	15,128,959.1	81	11,191.8	< 1			18,009,566.3	100	
			1		1				

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:	Pygmy rattlesnakes may be encountered in a wide array of habitats throughout the Southeast. They can be found in bottomland hardwood or mixed forest, pine flatwoods, swamps and wet savannas, as well as drier situations such as upland mixed forest and longleaf pine-scrub oak. This species is Generally associated with moist habitats, but may be found in dry situations (Dundee and Rossman 1989). NatureServe, identifies pygmy rattlesnakes as occuring in "everglades prairie, wet savannas, palmetto-pine flatwoods, swamps, hardwood-dominated floodplains, sandhills, mixed pine-hardwood forest, borders of cypress ponds, vicinity of lakes and marshes; most common in moist or wet lowlands."
	Ecosystem Classifiers: Evergreen, Mixed, & Maritime Forests, Bare Sand, Flatwoods, Shrub.scrub,

Hydrography Mask:

Freshwater Only

Utilizes flowing water features with buffer of 2000m from selected water features. Utilizes open water features with buffer of 2000m from selected water features. Utilizes wet vegetation features with buffers of 2000m from and unlimited into selected vegetation features.

Domes/Hammocks, Floodplain/Riparian. 29Aug05 Amy Silvano

Selected Map Units:

Bare SandAllegheny-Cumberland Dry Oak Forest and Woodland - Pine ModifierAtlantic Coastal Plain Central Maritime ForestAtlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Loblolly ModifierAtlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Open Understory ModifierAtlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory ModifierAtlantic Coastal Plain Northern Maritime ForestAtlantic Coastal Plain Northern Mixed Oak-Heath ForestAtlantic Coastal Plain Southern Maritime ForestAtlantic Coastal Plain Upland Longleaf Pine WoodlandCentral Appalachian Oak and Pine ForestEast Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed ModifierEast Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier
Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier Atlantic Coastal Plain Central Maritime Forest Atlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Loblolly Modifier Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Open Understory Modifier Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier Atlantic Coastal Plain Northern Maritime Forest Atlantic Coastal Plain Northern Mixed Oak-Heath Forest Atlantic Coastal Plain Northern Mixed Oak-Heath Forest Atlantic Coastal Plain Southern Maritime Forest Atlantic Coastal Plain Upland Longleaf Pine Woodland Central Appalachian Oak and Pine Forest East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier
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East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier
East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier
East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Open Understory Modifier
East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
East Gulf Coastal Plain Maritime Forest
East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Juniper Modifier
Florida Longleaf Pine Sandhill - Open Understory Modifier
Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Mississippi Delta Maritime Forest
Northeastern Interior Dry Oak Forest - Mixed Modifier
Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Southeast Florida Coastal Strand and Maritime Hammock
Southeastern Interior Longleaf Pine Woodland
Southern Appalachian Low Mountain Pine Forest
Southern Coastal Plain Oak Dome and Hammock
Southern Piedmont Dry Oak-(Pine) Forest - Loblolly Pine Modifier
Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Southwest Florida Coastal Strand and Maritime Hammock
Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Atlantic Coastal Plain Brownwater Stream Floodplain Forest

Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Basin Peat Swamp
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Florida Pine Flatwoods
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
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 Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	South Florida Bayhead Swamp
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Hardwood Hammock
Wetlands	South Florida Pine Flatwoods
Wetlands	South Florida Wet Marl Prairie
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest

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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.