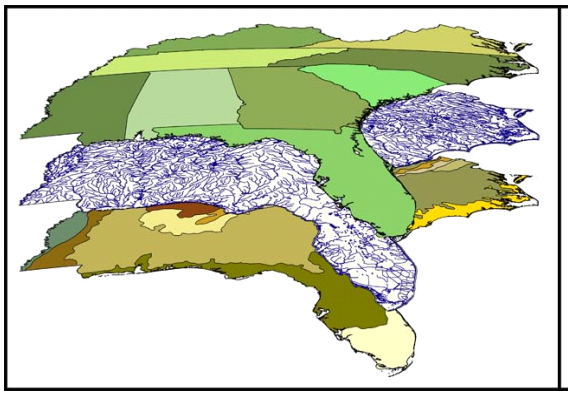


SOUTHEAST GAP ANALYSIS PROJECT

Species Modeling Report

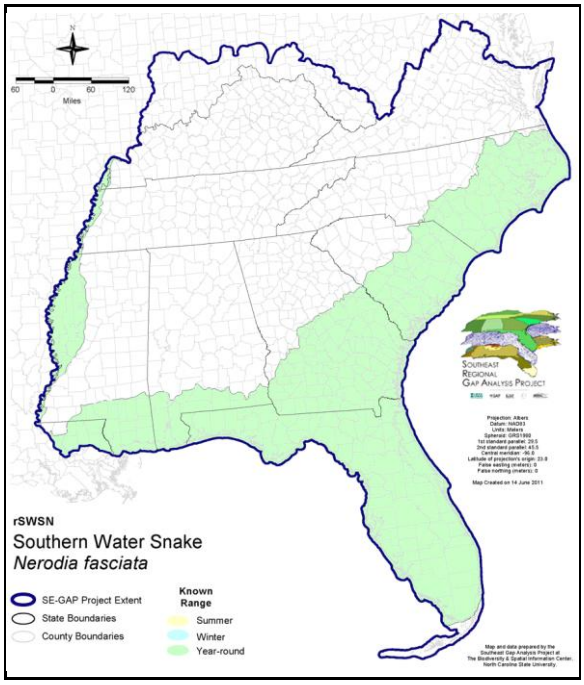
Southern Water Snake

Nerodia fasciata

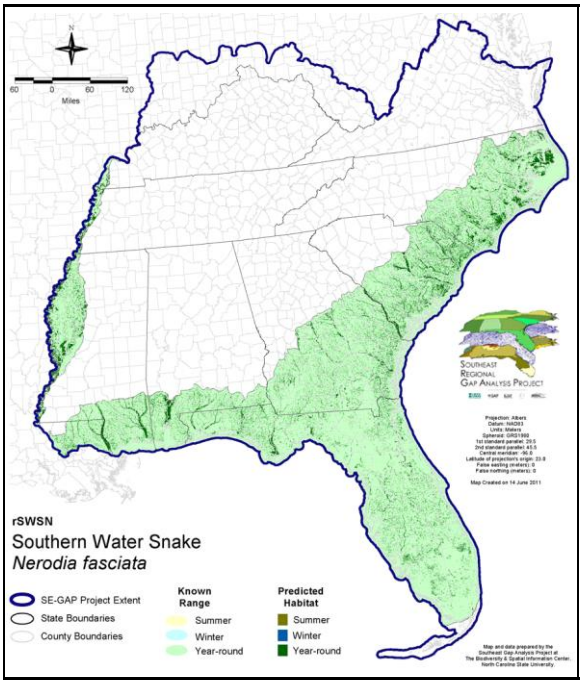
Taxa: Reptilian
Order: Squamata
Family: Colubridae

SE-GAP Spp Code: **rSWSN**
ITIS Species Code: 174248
NatureServe Element Code: ARADB22030

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_rSWSN.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_rSWSN.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=rSWSN
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rSWSN_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

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

NS Global Rank: G5

NS State Rank: AL (S4), AR (S5), CA (SNA), FL (S5), GA (S5), IL (SH), KY (S1), LA (S5), MO (SNR), MS (S4), NC (S5), OK (S2), SC (SNR), TN (S4S5), 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	19,603.3	< 1	5,270.0	< 1	0.0	0	0.0	0
Status 2	135,078.0	2	11,778.3	< 1	0.0	0	0.0	0
Status 3	603.4	< 1	142,745.3	3	0.0	0	67,286.3	1
Status 4	11.9	< 1	0.0	0	0.0	0	0.0	0
Total	155,296.5	3	159,793.6	3	0.0	0	67,286.3	1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	12,607.2	< 1	1.7	< 1	1,036.6	< 1
Status 2	0.0	0	531.9	< 1	1,200.8	< 1	2.9	< 1
Status 3	15,534.0	< 1	31,875.6	< 1	0.0	0	1,083.5	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	15,534.0	< 1	45,014.7	< 1	1,202.5	< 1	2,123.0	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	41.2	< 1	0.0	0	0.0	0
Status 2	0.0	0	462.9	< 1	235,924.4	4	0.0	0
Status 3	2.4	< 1	158,212.1	3	65,515.2	1	46,607.2	< 1
Status 4	0.0	0	0.0	0	6,565.1	< 1	5.2	< 1
Total	2.4	< 1	158,716.2	3	308,004.7	6	46,612.4	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	483.1	< 1	0.0	0	0.0	0
Status 2	10,494.5	< 1	26,142.8	< 1	0.0	0	328.9	< 1
Status 3	0.0	0	3,139.5	< 1	3,635.8	< 1	30,021.8	< 1
Status 4	0.0	0	0.0	0	713.5	< 1	0.0	0
Total	10,494.5	< 1	29,765.3	< 1	4,349.3	< 1	30,350.6	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	39,043.1	< 1
Status 2	0.0	0	0.0	0	421,945.3	8
Status 3	366.9	< 1	0.0	0	566,629.0	13
Status 4	4,325,060.0	78	17,852.9	< 1	4,356,761.7	79
Total	4,325,426.9	78	17,852.9	< 1	5,384,379.1	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: N. Fasciata occupy primarily freshwater habitats (NatureSeve 2005, Dundee & Rossman, Conant & Collins 1998). They prefer habitats of slow, shallow, permanent water, and are especially common in sinkholes, borrow pits, ponds, and swamps with abundant vegetation (Mount 1975, Wilson 1995). Amy Silvano 23Aug05

Notes: N. fasciata=freshwater, N. clarkii previously considered a subspecies under N.fasciata (N. fasciata clarkii) is found in brackish, saltwater & mangrove. Amy Silvano 23Aug05

Ecosystem Classifiers: All Wetlands, open water. Amy Silvano 23Aug05

Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes flowing water features with buffers of 250m from and 120m into selected water features.

Utilizes open water features with buffers of 250m from and 120m into selected water features.

Utilizes wet vegetation features with buffer of unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Quarry/Strip Mine/Gravel Pit
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Water	Open Water (Fresh)
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
Wetlands	Atlantic Coastal Plain Depression Pondshore
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore
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 Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Northern Pondshore
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	Central Florida Herbaceous Pondshore
Wetlands	Central Florida Herbaceous Seep
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Northern Depression Pondshore
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Southern Depression Pondshore
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest

Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	South Florida Bayhead Swamp
Wetlands	South Florida Freshwater Slough and Gator Hole
Wetlands	South Florida Pond-Apple/Popash Slough
Wetlands	South Florida Willow Head
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation

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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.