







# Species Modeling Report

## **Black Swamp Snake**

Seminatrix pygaea

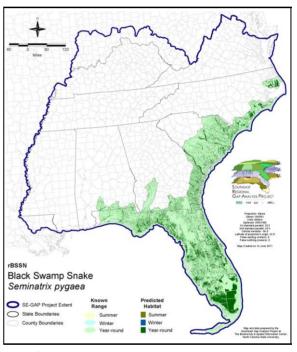
Taxa: Reptilian Order: Squamata Family: Colubridae SE-GAP Spp Code: rBSSN ITIS Species Code: 174273

NatureServe Element Code: ARADB31010

### **KNOWN RANGE:**

# Black Swamp Snake Seminatrix pygaea

### PREDICTED HABITAT:



Range Map Link: <a href="http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Range\_rBSSN.pdf">http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Range\_rBSSN.pdf</a> Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Dist\_rBSSN.pdf GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=rBSSN http://www.basic.ncsu.edu/segap/datazip/region/vert/rBSSN\_se00.zip Data Download:

### **PROTECTION STATUS:**

Reported on March 14, 2011

Federal Status: ---State Status: NC (SR) NS Global Rank: G5

NS State Rank: AL (S2), FL (SNR), GA (S3), NC (S2), SC (SNR)

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### SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

	l	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%	
Status 1	59,987.0	< 1	4,372.3	< 1	0.0	0	0.0	0	
Status 2	115,502.1	2	24,869.9	< 1	0.0	0	0.0	0	
Status 3	1,355.0	< 1	189,527.9	3	0.0	0	106,540.8	2	
Status 4	5.2	< 1	< 0.1	< 1	0.0	0	0.0	0	
Total	176,849.4	3	218,770.2	3	0.0	0	106,540.8	2	
1	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	223,098.9	3	1,018.2	< 1	11,337.7	< 1	
Status 2	0.0	0	24,070.1	< 1	29,635.0	< 1	26.8	< 1	
Status 3	15,196.8	< 1	266,330.2	4	0.0	0	0.0	0	
Status 4	0.0	0	0.0	0	0.0	0	0.0	0	
Total	15,196.8	< 1	513,499.2	7	30,653.2	< 1	11,364.5	< 1	
	Native Am.	Reserv.	State Park/Hist. Park		State WMA/Gameland		State Forest		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	0.0	0	0.0	0	0.0	0	
Status 2	0.0	0	462.3	< 1	571,860.5	8	0.0	0	
Status 3	0.0	0	450,798.8	6	24,685.2	< 1	148,845.8	2	
Status 4	0.0	0	< 0.1	< 1	1,704.8	< 1	4.1	< 1	
Total	0.0	0	451,261.2	6	598,250.5	8	148,849.9	2	
1	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	34.4	< 1	0.0	0	0.0	0	
Status 2	9,691.4	< 1	30,431.0	< 1	0.0	0	1,571.5	< 1	
Status 3	0.0	0	18,378.6	< 1	5,813.4	< 1	69,383.7	< 1	
Status 4	0.0	0	0.0	0	727.9	< 1	0.0	0	
Total	9,691.4	< 1	48,844.0	< 1	6,541.3	< 1	70,955.2	1	
	Private Land -	No Res.		Water			Overa	all Total	
	ha	%	ha	%			ha	%	
Status 1	0.0	0	0.0	0			299,848.4	4	
Status 2	0.0	0	0.0	0			808,120.7	11	
Status 3	89.7	< 1	0.5	< 1			1,296,946.4	21	
Status 4	4,416,253.5	63	43,100.5	< 1			4,463,495.7	63	
Total	4,416,343.2	63	43,101.0	< 1			6,868,411.3	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.

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### PREDICTED HABITAT MODEL(S):

### Year-round Model:

Habitat Description:

Generally aquatic, black swamp snakes are typically associated with densely vegetated, aquatic habitats such as cypress- gum swamps, marshes, ponds in pine flatwoods, sluggish streams, and lakes with abundant floating or emergent vegetation (Palmer & Braswell 1995, Mount 1975, NatureServe 2005). They can also be found in Carolina Bays and tidal water environments (Wilson 1995, Palmer & Braswell 1995), including brackish waters and salt marshes (Ernst and Barbour 1989). Prefered habitat for this swamp snake includes waters with floating mats of water hyacinths and debris along the waters edge for shelter (Mount 1975, Conant & Collins 1998). Amy Silvano 25Aug05

Ecosystem Classifers: Coastal, Brackish, & Tidal wetlands, Flatwoods, Swamps, Shrub/Scrub, Domes/Hammocks, Lakes/Pondshores, Floodplain/Riparian and open water. Amy Silvano 25Aug05

### Hydrography Mask:

Slow Current Only

Utilizes flowing water features with buffers of 30m from and 120m into selected water features.

Utilizes open water features with buffers of 30m from and 120m into selected water features.

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

Functional Group	Map Unit Name					
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Central Salt and Brackish Tidal Marsh					
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Salt and Brackish Marsh					
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Indian River Lagoon Tidal Marsh					
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Sea-Level Fen					
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Salt Marsh					
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					
Brackish Tidal Marsh & Wetland	Florida Big Bend Salt-Brackish Tidal Marsh					
Brackish Tidal Marsh & Wetland	South Florida Everglades Sawgrass Marsh					
Brackish Tidal Marsh & Wetland	Southwest Florida Perched Barriers Salt Swamp and Lagoon - Marsh Modifier					
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland					
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh					
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Freshwater Marsh					
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh					
Freshwater Tidal Marsh & Wetland	Florida Big Bend Fresh-Oligohaline Tidal Marsh					
Water	Open Water (Brackish/Salt)					
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 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 Northern Wet Longleaf Pine Savanna and Flatwoods					
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 Southern Wet Pine Savanna and Flatwoods Wetlands Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall Wetlands Atlantic Coastal Plain Xeric River Dune Wetlands Central Florida Herbaceous Pondshore Wetlands Central Florida Herbaceous Seep Central Florida Pine Flatwoods Wetlands 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 East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier Wetlands Wetlands East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier Wetlands Fast 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 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 East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods East Gulf Coastal Plain Treeless Savanna and Wet Prairie Wetlands Wetlands Floridian Highlands Freshwater Marsh Lower Mississippi River Bottomland Depressions - Herbaceous Modifier Wetlands Wetlands South Florida Bayhead Swamp Wetlands South Florida Cypress Dome Wetlands South Florida Dwarf Cypress Savanna Wetlands South Florida Freshwater Slough and Gator Hole Wetlands South Florida Hardwood Hammock Wetlands South Florida Pine Flatwoods Wetlands South Florida Pond-Apple/Popash Slough Wetlands South Florida Wet Marl Prairie Wetlands South Florida Willow Head Wetlands South-Central Interior/Upper Coastal Plain Wet Flatwoods Wetlands Southern Coastal Plain Blackwater River Floodplain Forest Wetlands Southern Coastal Plain Herbaceous Seepage Bog Wetlands Southern Coastal Plain Hydric Hammock Wetlands Southern Coastal Plain Nonriverine Basin Swamp Wetlands Southern Coastal Plain Nonriverine Cypress Dome Wetlands Southern Coastal Plain Seepage Swamp and Baygall

### **CITATIONS:**

Wetlands

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For more information:: SE-GAP Analysis Project / BaSIC

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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.

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