



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

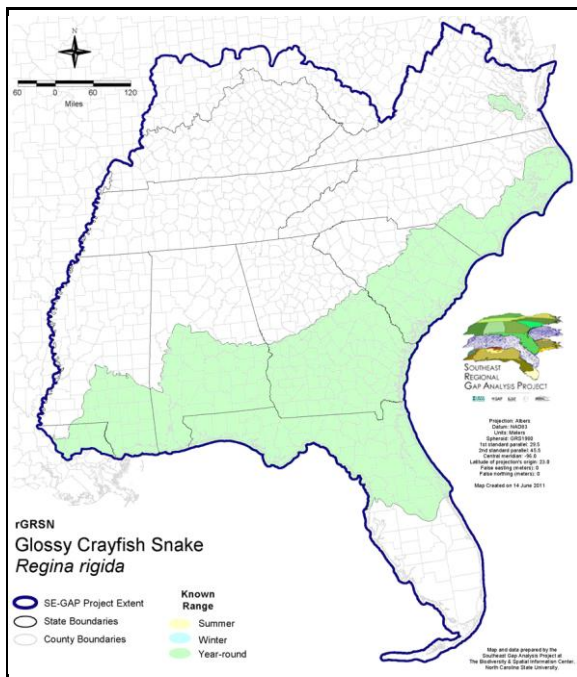
Glossy Crayfish Snake

Regina rigida

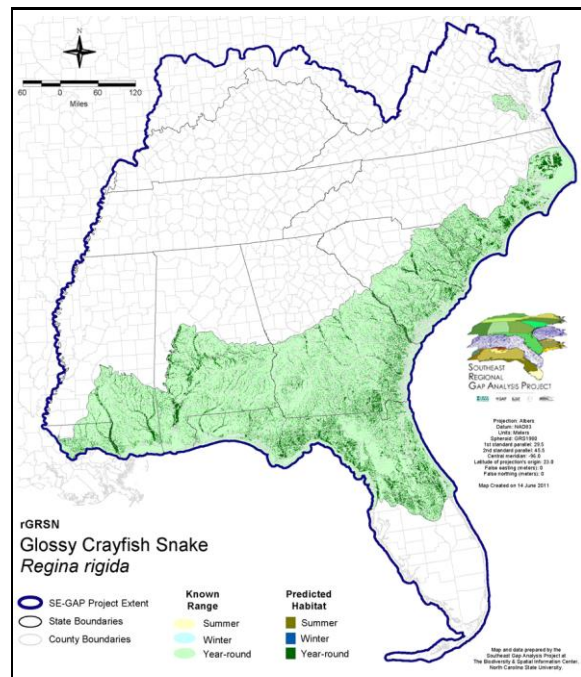
Taxa: Reptilian
 Order: Squamata
 Family: Colubridae

SE-GAP Spp Code: **rGRSN**
 ITIS Species Code: 174123
 NatureServe Element Code: ARADB27030

KNOWN RANGE:



PREDICTED HABITAT:



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

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

GAP Online Tool Link: <http://www.gapservice.ncsu.edu/segap/segap/index2.php?species=rGRSN>

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rGRSN_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

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

NS Global Rank: G5

NS State Rank: AL (S4), AR (S3), FL (SNR), GA (S4), LA (S5), MS (S4), NC (S2S3), OK (S1), SC (SNR), TX (S5), VA (S1)

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 | 112,283.8 | 2 | 5,475.9 | < 1 | 0.0 | 0 | 0.0 | 0 |
| Status 2 | 121,158.4 | 2 | 32,607.4 | < 1 | 0.0 | 0 | 0.0 | 0 |
| Status 3 | 726.5 | < 1 | 236,309.4 | 3 | 0.0 | 0 | 86,427.5 | 1 |
| Status 4 | 640.0 | < 1 | < 0.1 | < 1 | 0.0 | 0 | 0.0 | 0 |
| Total | 234,808.7 | 3 | 274,392.7 | 4 | 0.0 | 0 | 86,427.5 | 1 |
| | US Dept. of Energy | | US Nat. Park Service | | NOAA | | Other Federal Lands | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 8,331.5 | < 1 | 10.4 | < 1 | 5,616.5 | < 1 |
| Status 2 | 0.0 | 0 | 2,313.0 | < 1 | 3,173.9 | < 1 | 0.0 | 0 |
| Status 3 | 15,331.9 | < 1 | 851.0 | < 1 | 0.0 | 0 | 1,492.7 | < 1 |
| Status 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Total | 15,331.9 | < 1 | 11,495.4 | < 1 | 3,184.2 | < 1 | 7,109.3 | < 1 |
| | Native Am. Reserv. | | State Park/Hist. Park | | State WMA/Gameland | | State Forest | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 106.9 | < 1 | 0.0 | 0 | 0.0 | 0 |
| Status 2 | 0.0 | 0 | 616.9 | < 1 | 236,021.8 | 3 | 0.0 | 0 |
| Status 3 | 29.1 | < 1 | 231,067.2 | 3 | 53,346.4 | < 1 | 104,580.9 | 1 |
| Status 4 | 0.0 | 0 | < 0.1 | < 1 | 3,476.6 | < 1 | 4.4 | < 1 |
| Total | 29.1 | < 1 | 231,791.0 | 3 | 292,844.8 | 4 | 104,585.3 | 1 |
| | State Coastal Reserve | | ST Nat.Area/Preserve | | Other State Lands | | Private Cons. Easemt. | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 560.7 | < 1 | 0.0 | 0 | 0.0 | 0 |
| Status 2 | 11,084.8 | < 1 | 21,127.8 | < 1 | 0.0 | 0 | 512.6 | < 1 |
| Status 3 | 0.0 | 0 | 14,181.6 | < 1 | 4,706.4 | < 1 | 42,725.4 | < 1 |
| Status 4 | 0.0 | 0 | 0.0 | 0 | 749.2 | < 1 | 0.0 | 0 |
| Total | 11,084.8 | < 1 | 35,870.0 | < 1 | 5,455.5 | < 1 | 43,238.1 | < 1 |
| | Private Land - No Res. | | Water | | Overall Total | | | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 0.0 | 0 | 132,385.7 2 | | | |
| Status 2 | 176.1 | < 1 | 0.0 | 0 | 428,792.5 6 | | | |
| Status 3 | 1,135.5 | < 1 | 0.0 | 0 | 792,911.4 15 | | | |
| Status 4 | 5,410,931.9 | 77 | 16,781.0 | < 1 | 5,435,420.0 77 | | | |
| Total | 5,412,243.6 | 77 | 16,781.0 | < 1 | 6,789,509.6 100 | | | |

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: Glossy crayfish snakes occupy a variety of freshwater habitats where they typically inhabit the shallow water of bogs, marshes, and slow-flowing streams. They may also thrive in low, damp situations around the edges of ponds and in cypress or gum swamps. Glossy crayfish snakes are highly and are normally rather secretive in nature (GA-GAP 2004).

Found in or near non-flowing aquatic habitat, cypress ponds, marshes, sphagnum choked canals, alluvial swamps, Carolina Bays, rice fields, ponds.(Wilson 1995)# Small to medium streams. Sphagnum swamps (Ashton 1988). # Very aquatic - in or immediately adjacent to water. In Louisiana, found in small streams and ditches (Dundee and Rossman 1989). # Swamps, marshes, bogs, lakes, ponds, sloughs, and small streams. Brackish tidal areas at the mouth of the St. Johns (Ernst and Barbour 1989).

'Mucky areas along slow streams; edges of ponds, lakes, swamps, freshwater tidal marshes, rice fields, flatwoods ponds, and floodplains. Usually in burrows, under mats of wet vegetation or debris at water's edge, or among aquatic plants. May wander on land during rain' (NatureServe 2005).

***From compiled Habitat notes Amy Silvano 23Aug05

Ecosystem Classifiers: Wetlands, Shrub/scrub, Domes/Hammocks, Flatwoods, Depressional, Floodplain.
Amy Silvano 23Aug05

Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes flowing water features with buffers of 60m from and 60m into selected water features.

Utilizes open water features with buffers of 60m from and 60m into selected water features.

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

Selected Map Units:

| Functional Group | Map Unit Name |
|-----------------------------------|--|
| 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 |
| 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 (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 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 Small Brownwater River Floodplain Forest |
| Wetlands | Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods |
| Wetlands | Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall |
| Wetlands | Central Florida Herbaceous Pondshore |
| Wetlands | Central Florida Herbaceous Seep |
| Wetlands | Central Florida Pine Flatwoods |
| 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 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 |
| Wetlands | East Gulf Coastal Plain Treeless Savanna and Wet Prairie |
| Wetlands | Floridian Highlands Freshwater Marsh |
| 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 Pond-Apple/Popash Slough |
| 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 |
| Wetlands | Southern Coastal Plain Spring-run Stream Aquatic Vegetation |

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.

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Dundee, H. A., and D. A. Rossman. 1989. The amphibians and reptiles of Louisiana. Louisiana State Univ. Press, Baton Rouge.

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

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

Tennant, A. 1984. The Snakes of Texas. Texas Monthly Press, Austin, Texas. 561 pp.

Wilson, L. A. 1995. The Land Manager's Guide to the amphibians and reptiles of the South. Chapel Hill, NC: The Nature Conservancy.

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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.