



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Rough Green Snake

*Opheodrys aestivus*

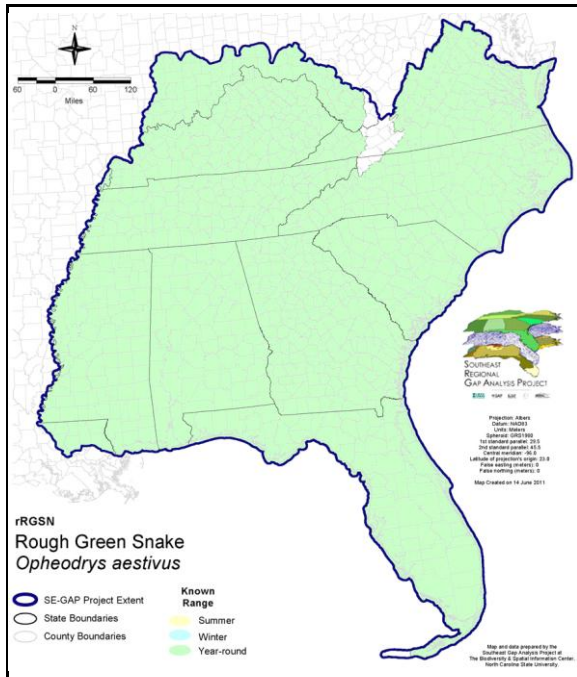
Taxa: Reptilian  
 Order: Squamata  
 Family: Colubridae

SE-GAP Spp Code: **rRGSN**

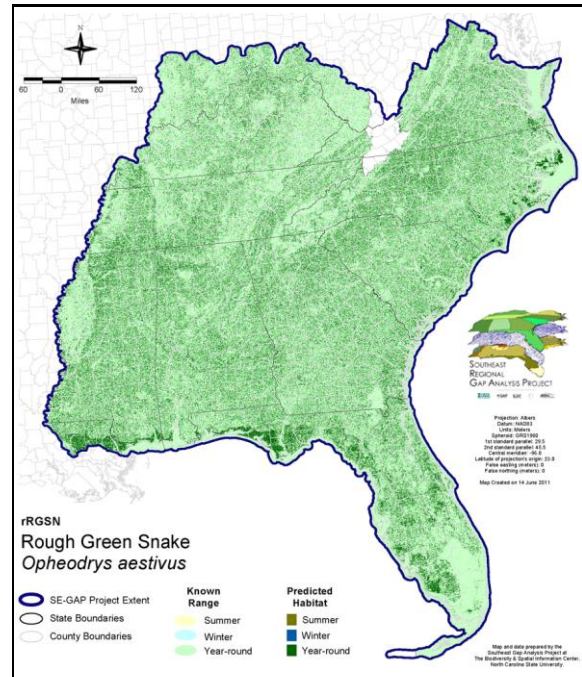
ITIS Species Code: 174172

NatureServe Element Code: ARADB23010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



Range Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Range\\_rRGSN.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_rRGSN.pdf)

Predicted Habitat Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Dist\\_rRGSN.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_rRGSN.pdf)

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/rRGSN\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/rRGSN_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: IN (SSC), KY (N), MS (Non-game species in need of management), NJ (S), OH (SC), PA (PE)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S5), DC (S4), DE (S2), FL (SNR), GA (S5), IL (S5), IN (S3), KS (S4), KY (S5), LA (S5), MD (S5), MO (S5), MS (S4), NC (S5), NJ (S5), NM (SNA), OH (S3), OK (S5), PA (S1), SC (SNR), TN (S5), TX (S5), VA (S5), WV (S3)

**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	59,577.2	< 1	2,694.6	< 1	0.0	0	0.0	0
Status 2	109,545.7	< 1	31,408.3	< 1	0.0	0	1,301.8	< 1
Status 3	1,066.4	< 1	369,189.0	1	27,187.0	< 1	242,541.5	< 1
Status 4	26.5	< 1	0.0	0	0.0	0	20.3	< 1
Total	170,215.7	< 1	403,291.9	1	27,187.0	< 1	243,863.6	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	27,978.9	< 1	37.4	< 1	6,560.9	< 1
Status 2	0.0	0	5,489.3	< 1	5,705.2	< 1	54.9	< 1
Status 3	10,117.7	< 1	118,904.3	< 1	0.0	0	3,866.9	< 1
Status 4	0.0	0	0.0	< 1	0.0	0	0.0	0
Total	10,117.7	< 1	152,373.1	< 1	5,742.6	< 1	10,482.8	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	298.7	< 1	6.9	< 1	0.0	0
Status 2	0.0	0	1,695.9	< 1	234,192.0	< 1	42.3	< 1
Status 3	4,653.2	< 1	242,437.3	< 1	75,197.9	< 1	168,464.3	< 1
Status 4	0.0	0	0.0	0	24,081.7	< 1	9.1	< 1
Total	4,653.2	< 1	244,431.9	< 1	333,478.4	1	168,515.7	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2,524.1	< 1	0.0	0	0.0	0
Status 2	8,826.1	< 1	24,704.8	< 1	2.7	< 1	1,815.2	< 1
Status 3	0.0	0	12,096.7	< 1	14,038.8	< 1	69,746.2	< 1
Status 4	0.0	0	0.0	0	1,327.5	< 1	< 0.1	< 1
Total	8,826.1	< 1	39,325.6	< 1	15,369.0	< 1	71,561.5	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	99,678.8 < 1			
Status 2	0.0	0	0.0	6	424,784.3 2			
Status 3	324.8	< 1	1.1	< 1	1,359,833.2 6			
Status 4	25,128,383.0	91	34,665.3	< 1	25,212,569.1 92			
Total	25,128,707.8	91	34,666.6	< 1	27,096,865.4 100			

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: The rough green snake is common throughout the southeast and can be found moist habitats of open forests, woodland edges, and swamp bottomlands (Palmer & Braswell 1995, Barbour 1971). Typical habitats include 'dense vegetation near water, often at forest edges or in fairly open forests; also overgrown pasture, tallgrass prairie, thickets, barrier islands; open marsh and spoil banks in Louisiana; pine-oak, mesic hardwood hammocks, and occasionally mangrove swamps in Florida' (NatureServe 2005). Amy Silvano 23Aug05

Ecosystem classifiers: Hardwood, Mesic Slope and Maritime Forest, Disturbed, Ag, Flatwoods, Swamps, Scrub/snrub, Depressional, Floodplain/Riparian. Amy Silvano 23Aug05

Mask of Forest/Open Ecotone: Include within 60m of ecotone edge.

Mask of Woodlands and Shrublands: Include all woodland and shrubland interiors and 60m buffer from them.

**Selected Map Units:**

Functional Group	Map Unit Name
Anthropogenic	Deciduous Plantations
Anthropogenic	Developed Open Space
Anthropogenic	Pasture/Hay
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Forest/Woodland	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Woodland Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Maritime Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	Mississippi Delta Maritime Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier

Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Herbaceous Modifier
Prairie	East Gulf Coastal Plain Jackson Plain Prairie and Barrens
Prairie	East Gulf Coastal Plain Jackson Prairie and Woodland
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier
Prairie	Panhandle Florida Limestone Glade
Prairie	Pennyroyal Karst Plain Prairie and Barrens
Prairie	Southern Ridge and Valley Patch Prairie
Prairie	Western Highland Rim Prairie and Barrens
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	Atlantic Coastal Plain Xeric River Dune
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Central Florida Herbaceous Pondshore
Wetlands	Central Florida Herbaceous Seep
Wetlands	Central Florida Pine Flatwoods
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	Cumberland Riverscour
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 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	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	North-Central Interior and Appalachian Rich Swamp
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 Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
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
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Wetlands	Unconsolidated Shore (Lake/River/Pond)
Wetlands	Western Highland Rim Seepage Fen

**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.

Barbour, R. W. 1971. Amphibians and reptiles of Kentucky. Univ. Press of Kentucky, Lexington. x + 334 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.

Collins, J. T. 1982. Amphibians and reptiles in Kansas. Second edition. Univ. Kansas Mus. Nat. Hist., Pub. Ed. Ser. 8. xiii + 356 pp.

Collins, J. T. 1990. Standard common and current scientific names for North American amphibians and reptiles. SSAR Herpetol. Circular No. 19. 41 pp.

Collins, J. T. 1992. Reply to Grobman on variation in *OPHEODRYS AESTIVUS*. Herpetol. Rev. 23:15-16.

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.

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

- Goldsmith, S. K. 1984. Aspects of the natural history of the rough green snake, *OPHEODRYS AESTIVUS* (Colubridae). *Southwest. Nat.* 29:445-452.
- Grobman, A. 1992. On races, clines, and common names in *OPHEODRYS*. *Herpetol. Rev.* 23:14-15.
- Grobman, A. B. 1984. Scutellation variation in *OPHEODRYS AESTIVUS*. *Bull. Florida State Mus., Biol. Sci.* 29(3):153-170.
- Minton, S. A., Jr. 1972. Amphibians and reptiles of Indiana. *Indiana Academy Science Monographs* 3. v + 346 pp.
- Mount, R. H. 1975. *The Reptiles and Amphibians of Alabama*. Auburn University Agricultural Experiment Station, Auburn, Alabama. vii + 347 pp.
- Oldham, J. C., and H. M. Smith. 1991. The generic status of the smooth green snake, *OPHEODRYS VERNALIS*. *Bull. Maryland Herp. Soc.* 27(4):201-215.
- Palmer, W. M., and A. L. Braswell. 1995. *Reptiles of North Carolina*. North Carolina State Museum of Natural Sciences, University of North Carolina Press, Chapel Hill, North Carolina.
- Plummer, M. V. 1985. Demography of green snakes (*OPHEODRYS AESTIVUS*). *Herpetologica* 41:373-381.
- Plummer, M. V. 1985. Growth and maturity in green snakes (*OPHEODRYS AESTIVUS*). *Herpetologica* 41:28-33.
- Plummer, M. V. 1989. Observations on the nesting ecology of green snakes (*OPHEODRYS AESTIVUS*). *Herpetol. Rev.* 20:87-89.
- Plummer, M. V. 1990. Nesting movements, nesting behavior, and nest sites of green snakes (*OPHEODRYS AESTIVUS*) revealed by radiotelemetry. *Herpetologica* 46:190-195.
- Plummer, M. V. 1993. Thermal ecology of arboreal green snakes (*OPHEODRYS AESTIVUS*). *J. Herpetol.* 27:254-260.
- Plummer, M. V. 1997. Population ecology of green snakes (*OPHEODRYS AESTIVUS*) revisited. *Herpetological Monographs* 11:102-123.
- Tennant, A. 1984. *The Snakes of Texas*. Texas Monthly Press, Austin, Texas. 561 pp.

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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.