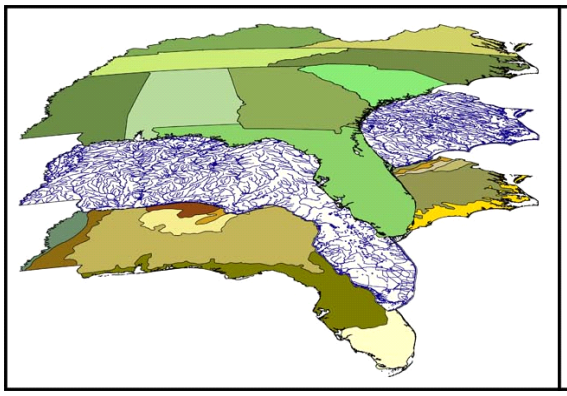


SOUTHEAST GAP ANALYSIS PROJECT

USGS | gap | BaSIC | NARSAL

Species Modeling Report

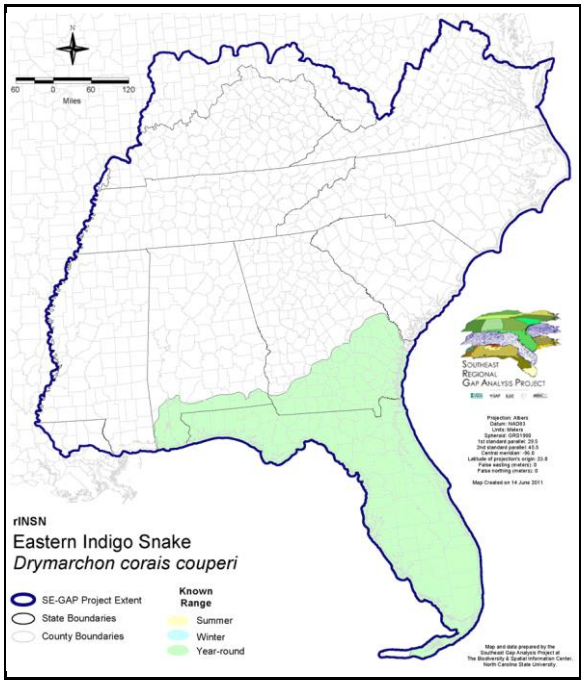
Eastern Indigo Snake

Drymarchon corais couperi

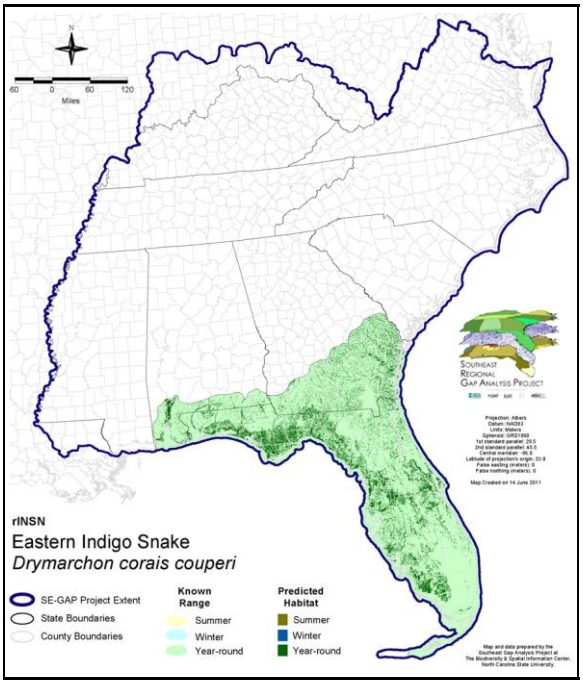
Taxa: Reptilian
Order:
Family:

SE-GAP Spp Code: **rINSN**
ITIS Species Code: 202172
NatureServe Element Code: ARADB11011

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_rINSN.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_rINSN.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=rINSN
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rINSN_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---
State Status: ---
NS Global Rank: ---
NS State Rank: ---

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	21,039.5	< 1	128.5	< 1	0.0	0	0.0	0
Status 2	19,208.7	< 1	26,014.0	< 1	0.0	0	6.3	< 1
Status 3	2.8	< 1	174,752.8	4	0.0	0	154,157.3	3
Status 4	4.6	< 1	< 0.1	< 1	0.0	0	0.0	0
Total	40,255.6	< 1	200,895.4	5	0.0	0	154,163.6	3

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	7,568.2	< 1	0.0	0	11,171.2	< 1
Status 2	0.0	0	7,284.9	< 1	2,275.3	< 1	39.8	< 1
Status 3	0.0	0	107,526.6	2	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	122,379.7	3	2,275.3	< 1	11,210.9	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	102.1	< 1	0.0	0	0.0	0
Status 2	0.0	0	442.7	< 1	174,127.1	4	0.0	0
Status 3	0.0	0	304,807.9	7	8,707.3	< 1	168,329.7	4
Status 4	0.0	0	< 0.1	< 1	1,511.7	< 1	13.4	< 1
Total	0.0	0	305,352.7	7	184,346.2	4	168,343.1	4

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,421.6	< 1	0.0	0	0.0	0
Status 2	517.4	< 1	5,758.9	< 1	0.0	0	1,273.8	< 1
Status 3	0.0	0	14,691.0	< 1	4,575.2	< 1	56,139.2	1
Status 4	0.0	0	0.0	0	181.4	< 1	0.0	0
Total	517.4	< 1	21,871.5	< 1	4,756.6	< 1	57,413.0	1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	41,431.1	< 1
Status 2	0.0	0	0.0	0	236,948.9	5
Status 3	73.2	< 1	0.0	0	993,763.0	26
Status 4	2,973,345.1	67	7,316.3	< 1	2,983,879.8	67
Total	2,973,418.3	67	7,316.3	< 1	4,256,022.7	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 habitat preferences of the indigo snake tend to differ latitudinally, with less restrictive habitat requirements in the sourthern portion of its range than in the north (Mount 1986). Indigo snakes typically inhabit dry, well-drained sandy soils (USFWS species account, http://www.fws.gov/endangered/i/c/sac1q.html). They are commonly associated Gopher Tortoise habitat in the sandhills, such as longleaf pine and scrub oak environments, where they utilize tortoise burrows (Wilson 1995). In FL and AL this species can also be found in mesic habitats such as swamps, bottomlands, and pine flatwoods (USFWS species account, http://www.fws.gov/endangered/i/c/sac1q.html), tropical hammocks, and muckland fields (Mount 1986). In Georgia, they are most often associated with dry sand ridge habitat having vegetation of longleaf pine and turkey oak (GA-GAP, Mount 1986). Amy Silvano 18Aug05

NatureServe Global Notes (2004): Habitat includes sandhill regions dominated by mature longleaf pines, turkey oaks, and wiregrass; flatwoods; most types of hammocks; coastal scrub; dry glades; palmetto flats; prairie; brushy riparian and canal corridors; and wet fields (Matthews and Moseley 1990, Tennant 1997, Ernst and Ernst 2003). Occupied sites are often near wetlands and frequently are in association with gopher tortoise burrows. Pineland habitat is maintained by periodic fires. Viable populations of this species require relatively large tracts of suitable habitat. Refuges include tortoise burrows, stump holes, land crab burrows, armadillo burrows, or similar sites. Eggs may be laid in gopher (Geomys) burrows (Ashton and Ashton 1981).

Ecosystem Classifiers: Evergreen, Maritime, Flatwoods, Bare sand, Domes/Hammock, Floodplain/Riparian. Amy Silvano 18Aug05

Contiguous Patch Minimum Size (hectares): 19

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Forest/Woodland	East Gulf Coastal Plain Maritime Forest
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
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 Florida Pine Flatwoods
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	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Hardwood Hammock

Wetlands	South Florida Pine Flatwoods
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome

CITATIONS:

Mount, R.H. (ed) 1986. Vertabate Animals of Alabama in Need of Special Attention, Alabama Agricultural Experiment Station, Auburn University, 124 pp

U.S. Fish and Wildlife Service. 1999. South Florida multi-species recovery plan. Atlanta, GA. 2172 pp.

For more information:: SE-GAP Analysis Project / BaSIC
127 David Clark Labs
Dept. of Biology, NCSU
Raleigh, NC 27695-7617
(919) 513-2853
www.basic.ncsu.edu/segap

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.