



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

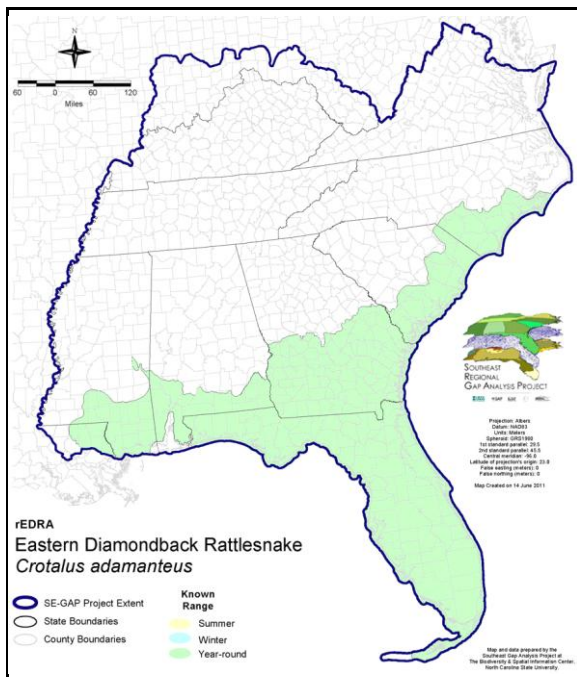
Eastern Diamondback Rattlesnake

Crotalus adamanteus

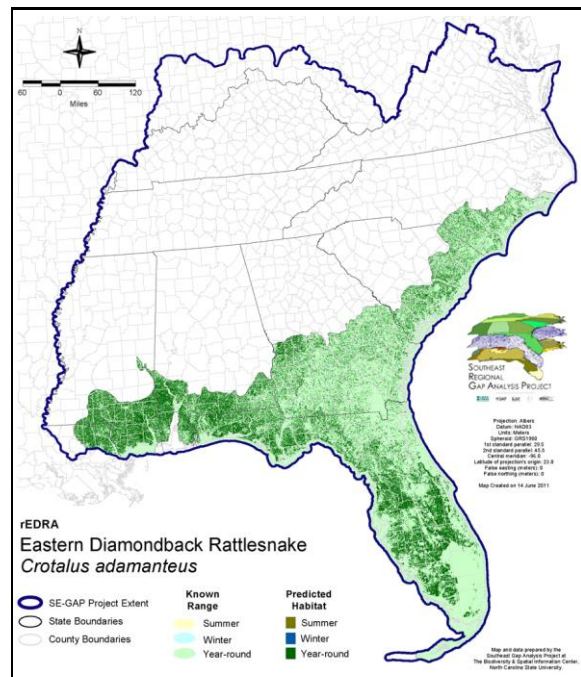
Taxa: Reptilian
 Order: Squamata
 Family: Viperidae

SE-GAP Spp Code: **rEDRA**
 ITIS Species Code: 174309
 NatureServe Element Code: ARADE02010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rEDRA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

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

NS Global Rank: G4

NS State Rank: AL (S3), FL (S3), GA (S4), LA (S1), MS (S3S4), NC (S1), SC (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	23,374.8	< 1	756.5	< 1	0.0	0	0.0	0
Status 2	17,580.6	< 1	29,848.9	< 1	0.0	0	6.3	< 1
Status 3	1.8	< 1	384,046.1	3	0.0	0	266,552.9	2
Status 4	4.6	< 1	< 0.1	< 1	0.0	0	0.0	0
Total	40,961.8	< 1	414,651.6	4	0.0	0	266,559.2	2
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	18,355.6	< 1	72.0	< 1	7,466.7	< 1
Status 2	0.0	0	4,773.7	< 1	1,372.5	< 1	40.0	< 1
Status 3	61.2	< 1	129,111.2	1	0.0	0	2,963.6	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	61.2	< 1	152,240.5	1	1,444.5	< 1	10,470.2	< 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	49.7	< 1	144,058.9	1	0.0	0
Status 3	10.6	< 1	309,993.7	3	11,218.9	< 1	211,339.7	2
Status 4	0.0	0	< 0.1	< 1	19,574.0	< 1	41.5	< 1
Total	10.6	< 1	310,043.4	3	174,851.7	2	211,381.2	2
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	559.4	< 1	0.0	0	0.0	0
Status 2	1,352.3	< 1	6,473.6	< 1	0.0	0	1,794.2	< 1
Status 3	0.0	0	14,889.1	< 1	7,082.3	< 1	83,079.2	< 1
Status 4	0.0	0	0.0	0	219.1	< 1	< 0.1	< 1
Total	1,352.3	< 1	21,922.0	< 1	7,301.3	< 1	84,873.4	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	50,585.0 < 1			
Status 2	0.0	0	0.0	0	207,350.6 2			
Status 3	39.4	< 1	0.0	0	1,420,389.6 16			
Status 4	9,293,922.2	82	5,588.6	< 1	9,338,919.6 82			
Total	9,293,961.6	82	5,588.6	< 1	11,017,244.7 100			

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: Eastern diamondback rattlesnakes inhabit mostly open canopy, dry upland habitats, especially longleaf pine forests on sandhills, clay hills and flatwoods (Means 2004). Additional suitable habitat for this species includes xeric and mesic oak hammocks, mixed pine-hardwoods, coastal scrub and dunes, and abandoned farms, fields, pastures, and rural homesteads (NatureServe 2005, Neill 1952, Fernald 1989). Means (2004), identified that hardwood bottomlands will be utilized to a lesser degree and only when adjacent to pine woods. Amy Silvano 29Aug05

Ecosystem Classifiers: Evergreen, Mixed, Hardwood, & Maritime Forests, Low Urban, Ag, Sand, Pasture, Flatwoods, & Hammocks and Coastal Dunes as PMU's. Floodplain/Riparian (Forest Mod's only) as AMU's. Amy Silvano 29Aug05

Contiguous Patch Minimum Size (hectares): 45

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Pasture/Hay
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Northern Dune and Maritime Grassland
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Southern Dune and Maritime Grassland
Coastal Dune & Freshwater Wetland	East Gulf Coastal Plain Dune and Coastal Grassland
Coastal Dune & Freshwater Wetland	Southwest Florida Dune and Coastal Grassland
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
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 Northern Mixed Oak-Heath Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
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 Northern Loess Plain Oak-Hickory Upland - Juniper Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Florida Peninsula Inland Scrub
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	South Florida Pine Rockland
Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest
Forest/Woodland	Southern Coastal Plain Oak Dome and Hammock
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	Central Florida Pine Flatwoods
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 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	South Florida Wet Marl Prairie
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome

Selected Secondary Map Units within 120m of Primary Map Units:

Functional Group	Map Unit Name
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Mississippi River Riparian Forest
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
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	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest

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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.