



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Striped Mud Turtle

*Kinosternon baurii*

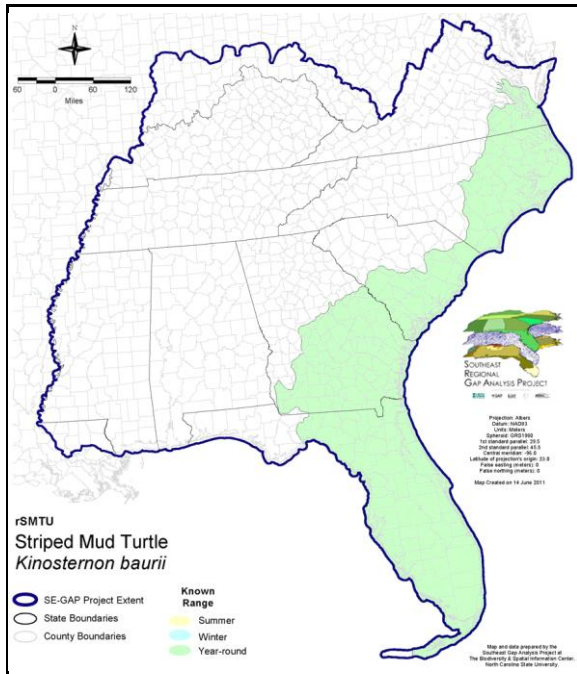
Taxa: Reptilian  
 Order: Cryptodeira  
 Family: Kinosternidae

SE-GAP Spp Code: **rSMTU**

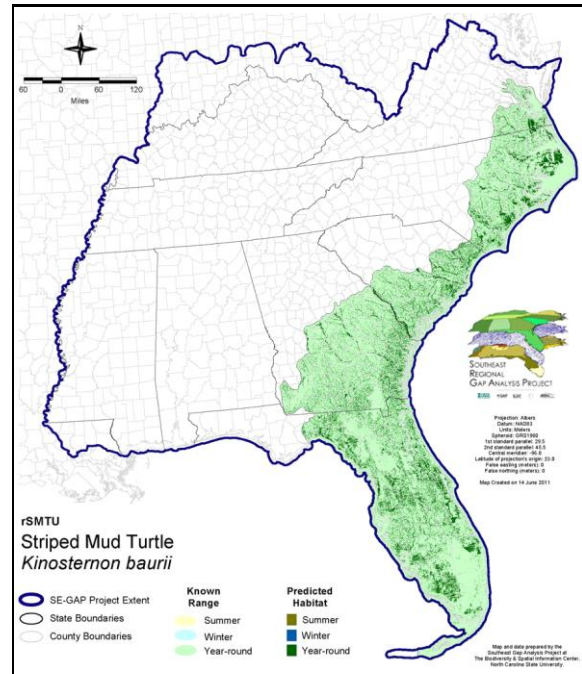
ITIS Species Code: 173765

NatureServe Element Code: ARAAE01010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/rSMTU\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/rSMTU_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: NC (W3)

NS Global Rank: G5

NS State Rank: FL (S5), GA (S4), NC (S3?), SC (SNR), VA (S4)

**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	73,929.9	1	5,246.4	< 1	0.0	0	0.0	0
Status 2	109,044.6	2	9,831.9	< 1	0.0	0	0.0	0
Status 3	696.9	< 1	122,807.6	2	0.0	0	81,330.1	1
Status 4	17.6	< 1	0.0	0	0.0	0	6.5	< 1
Total	183,689.0	3	137,885.9	2	0.0	0	81,336.6	1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	24,980.0	< 1	57.8	< 1	7,048.9	< 1
Status 2	0.0	0	4,432.6	< 1	2,030.2	< 1	7.5	< 1
Status 3	18,252.8	< 1	130,777.4	2	0.0	0	1.5	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	18,252.8	< 1	160,189.9	3	2,088.0	< 1	7,057.9	< 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	643.5	< 1	232,031.5	4	0.0	0
Status 3	0.0	0	318,496.8	5	43,048.6	< 1	86,496.0	1
Status 4	0.0	0	< 0.1	< 1	2,043.8	< 1	0.0	0
Total	0.0	0	319,140.4	5	277,124.0	4	86,496.0	1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	73.4	< 1	0.0	0	0.0	0
Status 2	10,066.5	< 1	27,737.5	< 1	0.0	0	1,341.9	< 1
Status 3	0.0	0	13,821.4	< 1	6,939.0	< 1	53,789.8	< 1
Status 4	0.0	0	0.0	0	187.9	< 1	0.0	0
Total	10,066.5	< 1	41,632.3	< 1	7,126.9	< 1	55,131.7	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	111,336.3 2			
Status 2	0.0	0	0.0	0	397,167.7 6			
Status 3	458.9	< 1	0.0	0	876,916.8 16			
Status 4	4,748,430.1	76	25,036.7	< 1	4,777,748.9 76			
Total	4,748,889.0	76	25,036.7	< 1	6,163,169.7 100			

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: Striped mud turtles inhabit blackwater swamps and rivers, permanent and temporary ponds, small lakes, and ditches. They are generally most abundant in habitats with emergent cypress and tupelo trees, dark waters and organic substrates. Also found in forested floodplain ponds, and wooded streams and lakes where soft substrates are present. They are known to spend much of their time on land (Mitchell 1994), wandering on dry forested lands between aquatic sites and sometimes estivating on land (primarily in the north of range) when water levels are low (Ernst et al. 1972, Iverson 1979, Wygoda 1979). There are also in longleaf pine/turkey oak sandhills bordering hardwood swamp. Females travel to sandhills for nesting (Mushinsky and Wilson 1992).

Eggs are laid in nests dug in sand or decaying vegetation (Ernst and Barbour 1972, Iverson 1979). Sometimes oviposits in alligator nests. Nesting areas in Florida include turkey oak-longleaf pine sandhills adjacent to swamps; may travel up to several hundred meters to nest (Mushinsky and Wilson 1992). After ovipositing, females often burrow underground a few meters from the nest, and then move back to wetland habitat after the next rain (Wilson, unpubl.).

\*\*\*Quoted directly from state habitat notes. Amy Silvano 08jul05

Ecosystem Classifiers: Wetlands, bottomlands, and Longleaf (Scrub/shrub modifiers only), Bare Sand and soil for nesting. Amy Silvano 8jul05

**Hydrography Mask:**

Slow Current Only

Utilizes flowing water features with buffers of 120m from and 60m into selected water features.

Utilizes open water features with buffers of 120m from and 60m into selected water features.

Utilizes wet vegetation features with buffers of 120m from and unlimited into selected vegetation features.

**Selected Map Units:**

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Bare Soil
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
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 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 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 - 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	South Florida Bayhead Swamp
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Hardwood Hammock
Wetlands	South Florida Pond-Apple/Popash Slough
Wetlands	South Florida Wet Marl Prairie
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	Unconsolidated Shore (Lake/River/Pond)

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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.