



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Razorback Musk Turtle

Sternotherus carinatus

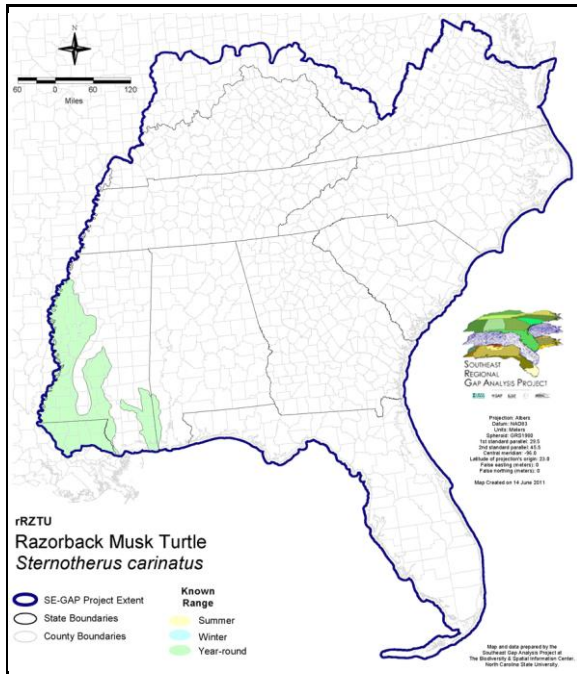
Taxa: Reptilian
 Order: Cryptodeira
 Family: Kinosternidae

SE-GAP Spp Code: **rRZTU**

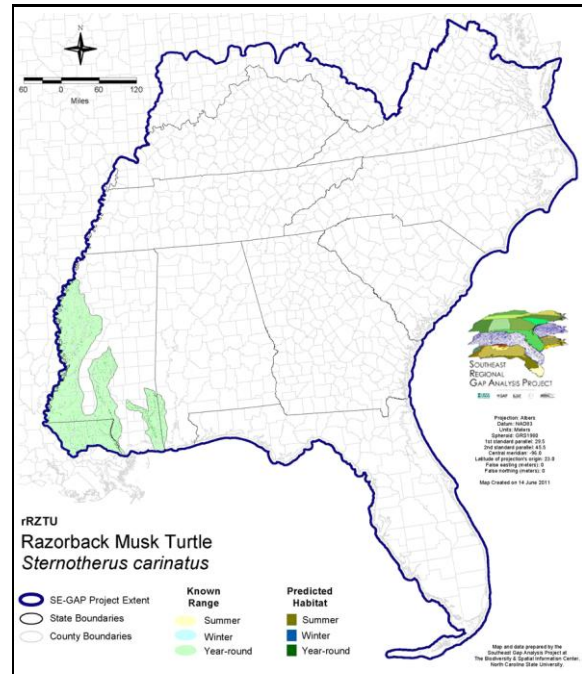
ITIS Species Code: 173759

NatureServe Element Code: ARAAE02010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rRZTU_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

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

NS Global Rank: G5

NS State Rank: AL (S1), AR (S3), LA (S5), MS (S5), OK (S4), TX (S5)

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	678.6	< 1	0.0	0	0.0	0	0.0	0
Status 2	3,503.8	2	20.0	< 1	0.0	0	0.0	0
Status 3	0.0	0	5,917.9	4	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	4,182.4	3	5,937.8	4	0.0	0	0.0	0
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	81.3	< 1	0.0	0	92.8	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	81.3	< 1	0.0	0	92.8	< 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	0.0	0	2,894.6	2	0.0	0
Status 3	0.0	0	93.8	< 1	1,102.4	< 1	0.0	0
Status 4	0.0	0	0.0	0	271.4	< 1	0.0	0
Total	0.0	0	93.8	< 1	4,268.3	3	0.0	0
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	7.6	< 1	0.0	0	0.0	0
Status 2	79.9	< 1	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	982.1	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	79.9	< 1	7.6	< 1	0.0	0	982.1	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	686.2	< 1		
Status 2	0.0	0	0.0	0	6,498.3	4		
Status 3	0.0	0	0.0	0	8,270.2	9		
Status 4	134,795.6	82	7,802.5	5	143,140.8	87		
Total	134,795.6	82	7,802.5	5	158,595.4	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 razorback musk turtles inhabit swamps and slow-moving rivers and streams with little or no current (Ernst et al. 1994, Godwin 2004). They prefer streams with soft bottoms, abundant aquatic vegetation and some debris for basking sites (Wilson 1995, Ernst et al. 1994, Godwin 2004). 'Hibernates in holes under overhanging banks or under rocks on bottom (Ernst and Barbour 1972 in NatureServe 2005). One nest was on a steep bank above a river (see Ernst and Barbour 1972 in NatureServe 2005).

.Amy Silvano 8july05

****Very little literature for this species. Amy Silvano

Ecosystem Classifiers: Primarily aquatic use hydro for range. Terrestrial habitat is selected for nest sites however can select all pixels within hydro buffer. . Amy Silvano 8jul05

Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes flowing water features with buffers of 30m from and unlimited into selected water features.

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Bare Soil
Beach	Unconsolidated Shore (Beach/Dune)
Water	Open Water (Fresh)
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 Small Stream and River Floodplain Forest
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	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Unconsolidated Shore (Lake/River/Pond)

CITATIONS: Ernst, C. H., and R. W. Barbour. 1972. Turtles of the United States. Univ. Press of Kentucky, Lexington. x + 347 pp.

Ernst, C. H., R. W. Barbour, and J. E. Lovich. 1994. Turtles of the United States and Canada. Smithsonian Institution Press, Washington, D.C. xxxviii + 578 pp.

Ernst, C. H.; R. W. Barbour, and J. R. Butler. 1972. Habitat preferences of two Florida turtles, Genus Kinosternon. Transactions of Kentucky Academy of Science. 33:41-42.

Godwin, J.C. 2004. Razorback Musk Turtle, *Sternotherus carinatus*. in R.E. Mirarchi, M.A. Bailey, T.M. Haggerty, and T.L. Best, eds. Alabama Wildlife. Volume 3. Imperiled amphibians, reptiles, birds, and mammals. The University of Alabama Press, Tuscaloosa

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.