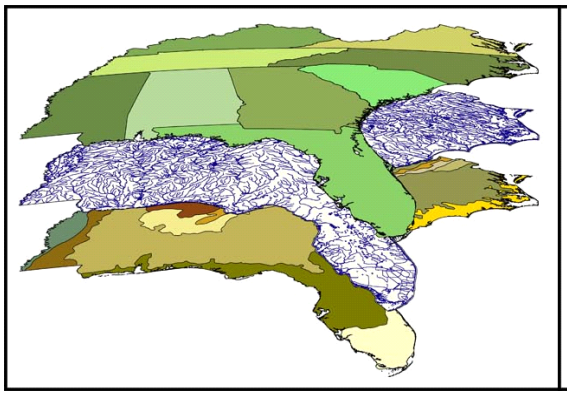


SOUTHEAST GAP ANALYSIS PROJECT

USGS | gap | BaSIC | NARSAL

Species Modeling Report

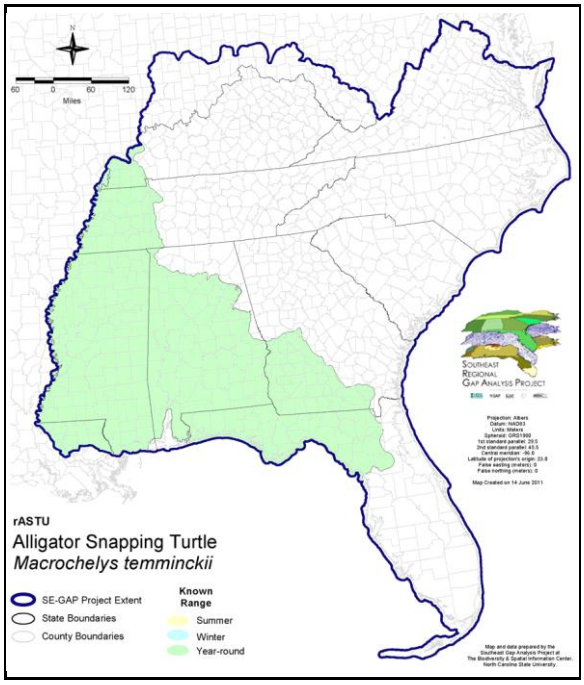
Alligator Snapping Turtle

Macrochelys temminckii

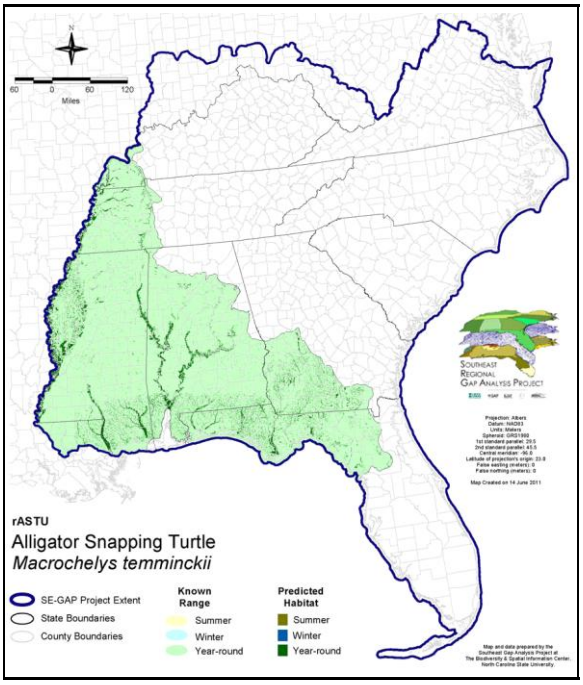
Taxa: Reptilian
Order: Cryptodeira
Family: Chelydridae

SE-GAP Spp Code: **rASTU**
ITIS Species Code: 173755
NatureServe Element Code: ARAAB02010

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_rASTU.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_rASTU.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=rASTU
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rASTU_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (SP), FL (SSC), GA (T), IL (LE), IN (SE), KS (C), KY (T), LA (Restricted Harvest), MS (Non-game species in need of management), OK (Category II), TN (D), TX (T)

NS Global Rank: G3G4

NS State Rank: AL (S3), AR (S3S4), FL (S3), GA (S3), IA (SU), IL (S1), IN (SNA), KS (S1), KY (S2), LA (S3), MO (S2), MS (S3), OK (S2), TN (S2S3), TX (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	5,154.7	< 1	101.6	< 1	0.0	0	0.0	0
Status 2	43,380.3	2	6,654.4	< 1	0.0	0	0.0	0
Status 3	250.6	< 1	52,700.4	2	921.4	< 1	14,771.2	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	48,785.5	2	59,456.4	3	921.4	< 1	14,771.2	< 1

	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	1.3	< 1	499.7	< 1	0.0	0
Status 3	0.0	0	156.5	< 1	0.0	0	979.4	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	157.8	< 1	499.7	< 1	979.4	< 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	100.0	< 1	81,241.7	4	0.0	0
Status 3	2.4	< 1	69,262.9	3	24,343.8	1	13,706.5	< 1
Status 4	0.0	0	0.0	0	3,966.6	< 1	4.1	< 1
Total	2.4	< 1	69,362.9	3	109,552.1	5	13,710.6	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	110.3	< 1	0.0	0	0.0	0
Status 2	454.1	< 1	7,400.6	< 1	0.0	0	119.9	< 1
Status 3	0.0	0	310.2	< 1	319.9	< 1	18,537.2	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	454.1	< 1	7,821.2	< 1	319.9	< 1	18,657.1	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	5,366.6	< 1
Status 2	0.0	0	0.0	0	139,851.9	7
Status 3	0.4	< 1	0.0	0	196,262.7	12
Status 4	1,733,000.7	81	9,986.0	< 1	1,750,923.9	82
Total	1,733,001.0	81	9,986.0	< 1	2,092,405.1	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: Alligator snapping turtles are highly aquatic and are rarely out of water, except when nesting (NatureServe 2005). They commonly occupy slow moving, deep waters of large rivers, sloughs, oxbows, and canals or lakes associated with river impoundments (Dundee & Rossman 1989, NatureServe 2005). They have also been reported to enter swamps, bayous, and ponds near rivers, and shallow brackish marsh pools near larger freshwater rivers (Dundee & Rossman 1989, NatureServe 2005). NatureServe also identifies that this turtle frequently used openings in the flotant beneath cypress trees in Louisiana and in the same region, Harrel et al. (1996) documented a preference for baldcypress forest by subadults; most occupied sites were associated with logs (In NatureServe 2005). Amy Silvano 2jul05

Ecosystem Classifiers: Since species aquatic use hydrology layers to build model. Did not select MU's rather select all open water pixels and forested or shrub/scrub that fall within the hydro buffer. Amy Silvano 2jul05.

Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes flowing water features with buffers of 30m from and 250m into selected water features.

Utilizes open water features with buffers of 30m from and 250m into selected water features.

Utilizes wet vegetation features with buffer of unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
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 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 Pondshore
Wetlands	Atlantic Coastal Plain Xeric River Dune
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 Northern Depression Pondshore
Wetlands	East Gulf Coastal Plain Southern Depression Pondshore
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	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
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

CITATIONS:

Dundee, H. A., and D. A. Rossman. 1989. The amphibians and reptiles of Louisiana. Louisiana State Univ. Press, Baton Rouge.

Harrel, J., C. Allen, and S. Hebert. 1996. Movements and habitat use of subadult alligator snapping turtles in Louisiana. Am. Midl. Nat. 135:60-67.

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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.