



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Barbour's Map Turtle

Graptemys barbouri

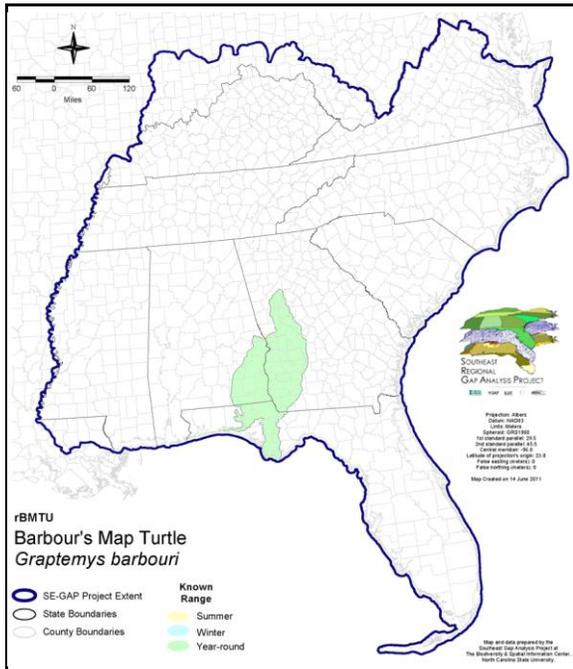
Taxa: Reptilian
Order: Cryptodeira
Family: Emydidae

SE-GAP Spp Code: **rBMTU**

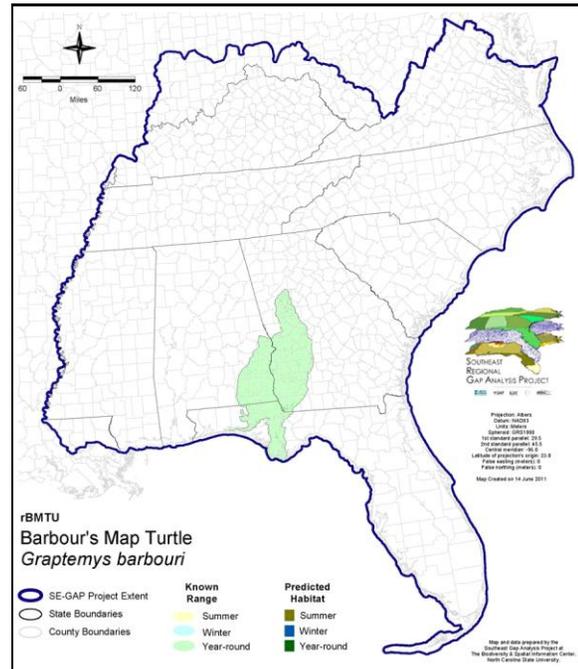
ITIS Species Code: 173791

NatureServe Element Code: ARAAD05010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rBMTU_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (SP), FL (SSC), GA (T)

NS Global Rank: G2

NS State Rank: AL (S2), FL (S2), GA (S2)

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	< 0.1	< 1	0.0	0	0.0	0	0.0	0
Status 2	1.4	< 1	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	0.9	< 1	0.0	0	45.7	3
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	1.4	< 1	0.9	< 1	0.0	0	45.7	3
	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	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	0.0	0	0.0	0	0.0	0
	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	7.7	< 1	0.0	0
Status 3	0.0	0	44.4	3	4.7	< 1	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	44.4	3	12.4	< 1	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	0.0	0	0.0	0	0.0	0
Status 2	1.0	< 1	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	2.4	< 1	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	1.0	< 1	0.0	0	2.4	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	< 0.1	< 1		
Status 2	0.0	0	0.0	0	10.1	< 1		
Status 3	0.0	0	0.0	0	98.1	7		
Status 4	1,229.3	91	18.0	1	1,247.3	92		
Total	1,229.3	91	18.0	1	1,355.6	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: Barbour's map turtle is exclusively fluvial, occupying the Apalachicola, Flint, Chattahoochee, Pea, Choctawhatchee, and Chipola Rivers in Alabama, Georgia and Florida (Godwin 2004, Ernst et al 1994). These map turtles inhabit stretches of rivers with exposed and/or underlying limestone with a considerable amount of snags or fallen tree limbs for basking (Godwin 2004, Ernst et al 1994). They may also utilize riverine swamps and impoundments, floodplain lakes, and sloughs (NatureServe 2005), however these are thought to be sub-optimal habitats (Goodwin 2004). Nesting occurs in both shallow water and on land. Eggs are laid in a cavity just below the water surface or in moist sand along a sandbar or riverbank typically a few feet from the water's edge (Mount 1975, Goodwin 2004). Amy Silvano 6jul05

Ecosystem Classifiers: Since species is aquatic, water is habitat so MU's selected refer to nesting habitat only. These would be selected within the hydro buffer. Amy Silvano 6jul05

Hydrography Mask:

Freshwater Only

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

Utilizes open water features with buffers of 30m from and 120m into selected water features.

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

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Bare Soil
Water	Open Water (Fresh)
Wetlands	Unconsolidated Shore (Lake/River/Pond)

- CITATIONS:** 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.
- Godwin, J.A. 2004. Barbour's Map Turtle, *Gratemys barbouri*, 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.
- Godwin, James C. 2002. Distribution and Status of Barbour's Map Turtle (*Gratemys barbouri*) in the Choctawhatchee River System, Alabama. Unpublished report submitted to the Alabama Department of Conservation and Natural Resources, Division of Wildlife and
- Mount, R. H. 1975. The Reptiles and Amphibians of Alabama. Auburn University Agricultural Experiment Station, Auburn, Alabama. vii + 347 pp.

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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.