



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Alabama Map Turtle

*Graptemys pulchra*

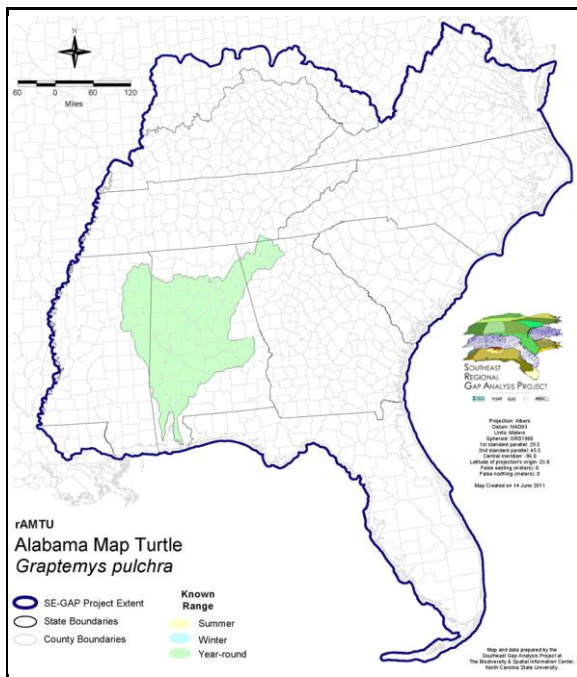
Taxa: Reptilian  
 Order: Cryptodeira  
 Family: Emydidae

SE-GAP Spp Code: **rAMTU**

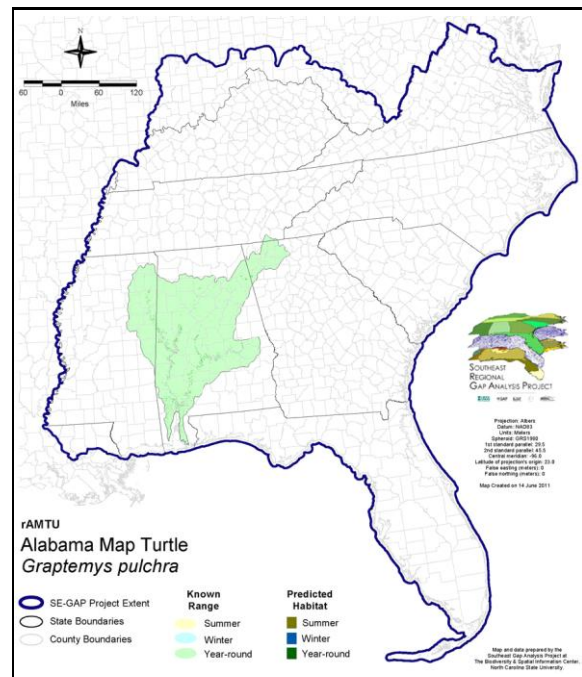
ITIS Species Code: 173801

NatureServe Element Code: ARAAD05090

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/rAMTU\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/rAMTU_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (SP), GA (R), MS (Non-game species in need of management)

NS Global Rank: G4

NS State Rank: AL (S3), GA (S1), MS (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	1.4	< 1	0.0	0	0.0	0	0.0	0
Status 2	73.4	< 1	1.6	< 1	0.0	0	0.0	0
Status 3	0.0	0	44.7	< 1	0.0	0	42.8	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	74.8	< 1	46.4	< 1	0.0	0	42.8	< 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	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	2.0	< 1	0.0	0	0.0	0
Status 2	0.0	0	16.4	< 1	388.3	< 1	0.0	0
Status 3	0.0	0	1.0	< 1	1,463.9	2	0.0	0
Status 4	0.0	0	0.0	0	353.6	< 1	0.0	0
Total	0.0	0	19.4	< 1	2,205.8	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	6.5	< 1	0.0	0	0.0	0
Status 2	0.0	0	4.1	< 1	0.0	0	9.1	< 1
Status 3	0.0	0	68.6	< 1	2.6	< 1	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	79.2	< 1	2.6	< 1	9.1	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	9.8	< 1		
Status 2	0.0	0	0.0	0	492.9	< 1		
Status 3	0.0	0	0.0	0	1,623.7	2		
Status 4	81,878.3	96	551.3	< 1	83,136.8	97		
Total	81,878.3	96	551.3	< 1	85,263.2	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: Alabama map turtles occur throughout the Yellow, Escambia, Conecuh, and Mobile Bay drainages, and possibly the Tallapoosa Drainage (Mount 1975). They inhabit medium-sized creeks and large rivers with deep pools and sandbars and -banks for nesting as well as an abundance of mollusks for feeding (Ernst et al. 1994, Mount 1975). Amy Silvano 7jul05

Ecosystem Classifiers: Aquatic species, only terrestrial systems selected apply to nesting habitat. \*\*\*Width of stream would be a good layer for predicting this species occurrence in rivers and streams (if categorized would include in medium and large streams/rivers). Flow Accumulation may be a good predictor for this species since it needs wider, moving rivers and streams. Probably could set minimum threshold for accumulation, can't find any literature to support and type of slope, threshold etc., but in CP could probably use min of 5-10. Amy Silvano 7jul05

### 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
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	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
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.

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.