



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

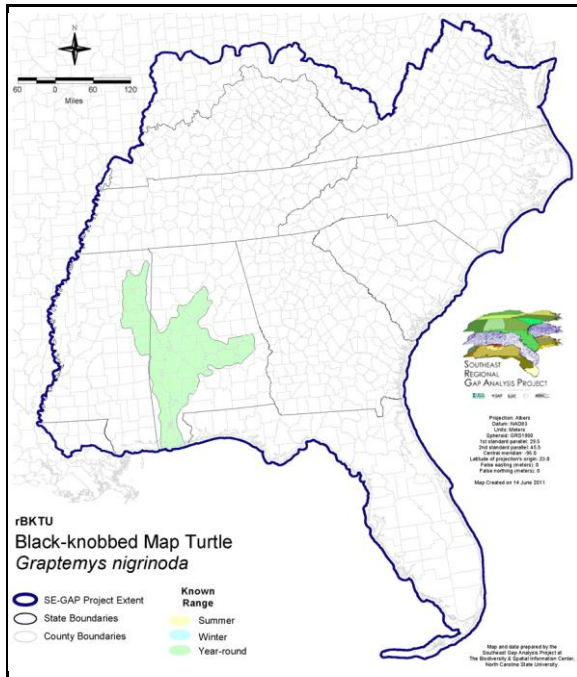
Black-knobbed Map Turtle

Graptemys nigrinoda

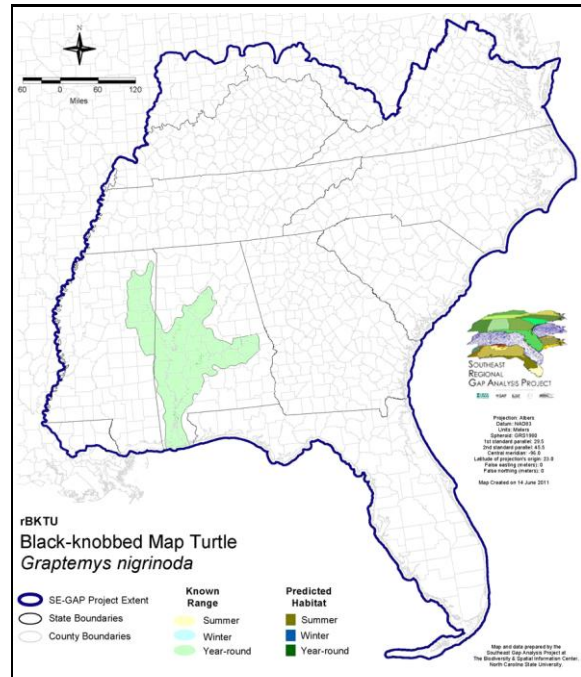
Taxa: Reptilian
 Order: Cryptodeira
 Family: Emydidae

SE-GAP Spp Code: **rBKTU**
 ITIS Species Code: 173797
 NatureServe Element Code: ARAAD05060

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rBKTU_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---
 State Status: AL (SP), MS (LE)
 NS Global Rank: G3
 NS State Rank: AL (S3), 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	6.8	< 1	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	0.6	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	6.8	< 1	0.6	< 1	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	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	0.2	< 1	0.0	0
Status 3	0.0	0	0.9	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	22.1	2	0.0	0
Total	0.0	0	0.9	< 1	22.2	2	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	0.0	0	0.0	0	0.0	0	1.3	< 1
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	1.3	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	6.8	< 1		
Status 2	0.0	0	0.0	0	1.4	< 1		
Status 3	0.0	0	0.0	0	1.5	< 1		
Status 4	1,340.8	93	40.7	3	1,425.6	99		
Total	1,340.8	93	40.7	3	1,435.3	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: Stricktly fluviant, the black-knobbed map turtle occupy large rivers and streams of moderate current with sand and clay-bottoms (Mount 1975, Ernst et al. 1994). Nesting occurs on sandy banks of rivers (Mount 1975) and nest are generally located within 50m of waterline (Dickerson et al. 1999). Amy Silvano 6jul05

****Limited information on species

Ecosystem Classifiers: Aquatic species, only terrestrial systems selected apply to nesting habitat. 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 6jul05

Hydrography Mask:

Freshwater Only

Utilizes flowing water features with buffers of 60m 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	Unconsolidated Shore (Lake/River/Pond)

- CITATIONS:** Dickerson, D. D., Reine, K. J., and Herrmann, K. L. 1999. Map and sawback turtle habitats potentially impacted by USACE reservoir operations. EMRRP Technical Notes Collection (TN EMRRP-SI-03), U.S. Army Engineer Research and Development Center, Vicksburg
- 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.