



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Midland Smooth Softshell

Apalone mutica mutica

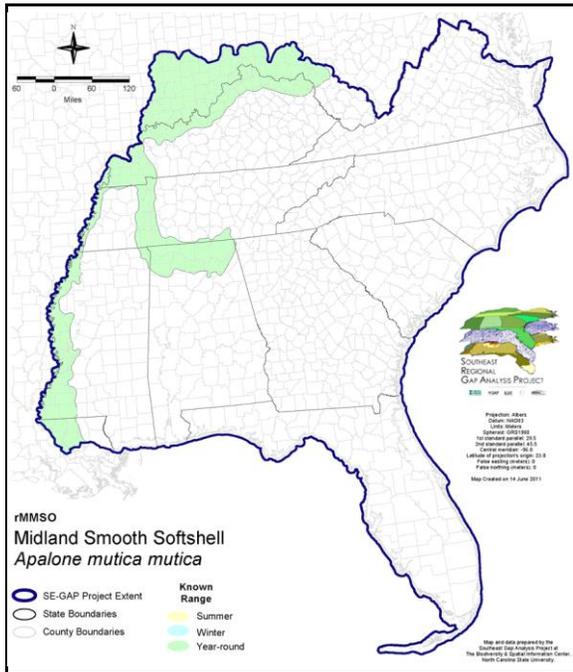
Taxa: Reptilian
Order: Cryptodeira
Family: Trionychidae

SE-GAP Spp Code: **rMMSO**

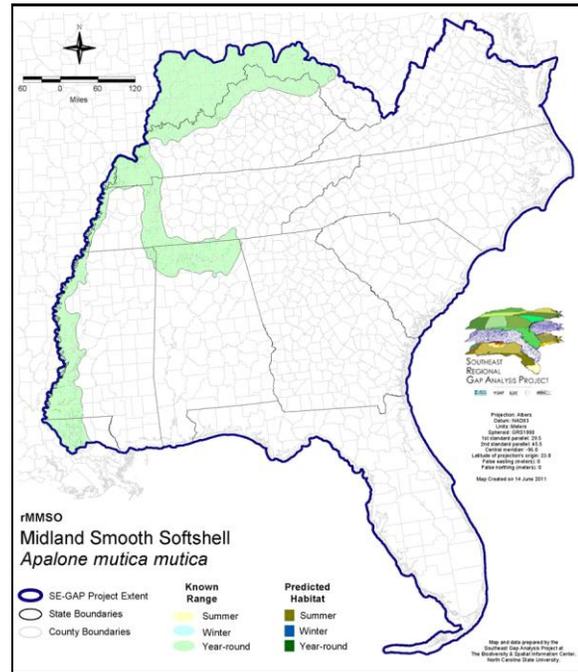
ITIS Species Code: 208679

NatureServe Element Code: ARAAG01022

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rMMSO_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (PSNG), KY (S)

NS Global Rank: G5T5

NS State Rank: AL (SNR), AR (S4), IN (S3), KY (S3), MO (S3S4), PA (SX), WV (S1)

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	992.8	< 1	0.0	0	0.0	0	0.0	0
Status 2	1,631.7	1	312.3	< 1	0.0	0	0.0	0
Status 3	95.9	< 1	2,007.9	2	2,241.4	2	2,529.3	2
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	2,720.3	2	2,320.2	2	2,241.4	2	2,529.3	2
	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	217.5	< 1	0.0	0	6.1	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	217.5	< 1	0.0	0	6.1	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2.9	< 1	1.4	< 1	0.0	0
Status 2	0.0	0	0.0	0	2,076.9	2	0.0	0
Status 3	0.0	0	180.8	< 1	2,434.3	2	9.1	< 1
Status 4	0.0	0	0.0	0	54.2	< 1	0.0	0
Total	0.0	0	183.7	< 1	4,566.9	4	9.1	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	8.5	< 1	0.0	0	0.0	0
Status 2	0.0	0	179.5	< 1	0.0	0	78.1	< 1
Status 3	0.0	0	10.0	< 1	0.0	0	302.6	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	197.9	< 1	0.0	0	380.7	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	1,005.6	< 1		
Status 2	0.0	0	0.0	0	4,278.5	3		
Status 3	0.0	0	0.0	0	10,034.8	9		
Status 4	101,665.4	78	11,218.4	9	112,992.2	87		
Total	101,665.4	78	11,218.4	9	128,311.1	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: Smooth softshells are truly aquatic (Dundee and Rossman 1989). They are only known from riverine habitats with moderate to fast currents (Ernst et al. 1994). However, midland smooth turtles also occur in lakes, impoundments, and shallow bogs (Dundee & Rossman 1989, Ernst et al 1994). Sometimes will be found basking along waters edge, but mostly buries itself in the mud. Amy Silvano 8july05

****limited information regarding this species. Amy Silvano 8july05

Ecosystem Classifiers: Aquatic species, only terrestrial systems selected apply to nesting habitat. Amy Silvano 8jul05

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
Water	Open Water (Fresh)
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Cumberland Riverscour
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 - Herbaceous Modifier
Wetlands	Mississippi River Riparian Forest
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Unconsolidated Shore (Lake/River/Pond)

CITATIONS: Fitch, H.S. and Plummer, M.V., 1975. A preliminary ecological study of the soft-shelled turtle *trionyx-muticus* in the Kansas River USA. Israel Journal of Zoology. 24(1-2). 1975. 28-42

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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.