



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Cottonmouth

Agkistrodon piscivorus

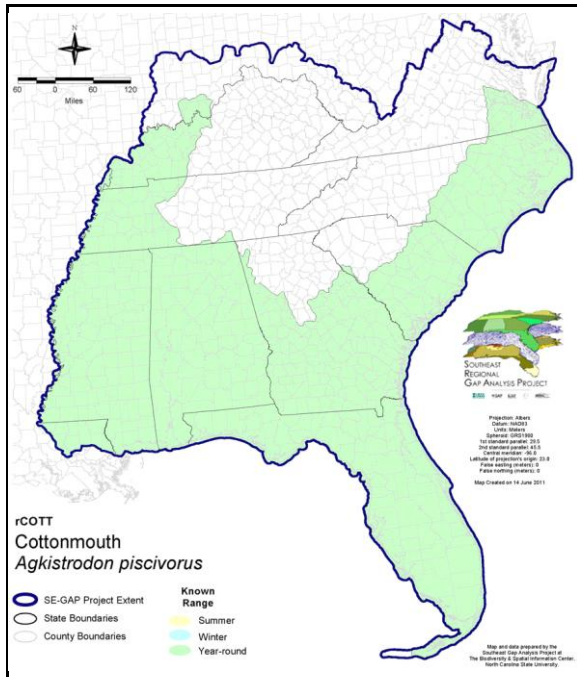
Taxa: Reptilian
Order: Squamata
Family: Viperidae

SE-GAP Spp Code: **rCOTT**

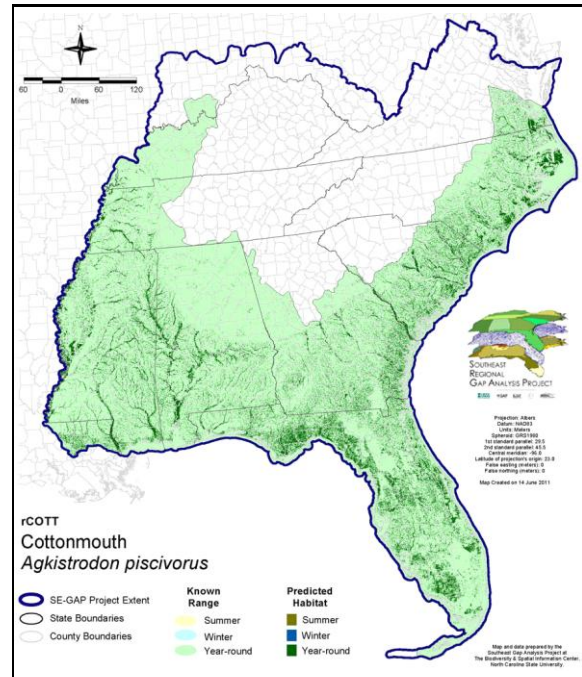
ITIS Species Code: 174299

NatureServe Element Code: ARADE01020

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/rCOTT_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), MS (Non-game species in need of management)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S5), FL (SNR), GA (S5), IL (SNR), IN (SNR), KS (S1), KY (S3S4), LA (S5), MO (SNR), MS (S5), NC (S5), OK (S4), SC (SNR), TN (S5), TX (S5), VA (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	84,159.5	< 1	5,496.2	< 1	0.0	0	0.0	0
Status 2	175,199.0	2	31,207.5	< 1	0.0	0	523.8	< 1
Status 3	845.3	< 1	316,112.6	3	1,102.8	< 1	117,398.3	1
Status 4	26.5	< 1	< 0.1	< 1	0.0	0	6.8	< 1
Total	260,230.2	2	352,816.4	3	1,102.8	< 1	117,928.9	1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	33,773.5	< 1	70.7	< 1	6,900.5	< 1
Status 2	0.0	0	4,522.6	< 1	5,446.3	< 1	36.1	< 1
Status 3	16,073.6	< 1	141,523.8	1	0.0	0	1,952.3	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	16,073.6	< 1	179,819.9	2	5,516.9	< 1	8,888.9	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	132.9	< 1	0.0	0	0.0	0
Status 2	0.0	0	711.1	< 1	360,440.0	3	0.0	0
Status 3	1,750.4	< 1	382,361.0	3	91,773.3	< 1	141,073.2	1
Status 4	0.0	0	< 0.1	< 1	7,884.0	< 1	5.4	< 1
Total	1,750.4	< 1	383,205.1	3	460,097.3	4	141,078.6	1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2,150.1	< 1	0.0	0	0.0	0
Status 2	12,507.9	< 1	42,330.4	< 1	0.0	0	1,332.0	< 1
Status 3	0.0	0	14,650.2	< 1	6,286.3	< 1	73,796.3	< 1
Status 4	0.0	0	0.0	0	797.4	< 1	0.0	0
Total	12,507.9	< 1	59,130.7	< 1	7,083.7	< 1	75,128.3	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	132,683.3 1			
Status 2	0.0	0	0.0	0	634,256.7 6			
Status 3	459.2	< 1	1.0	< 1	1,307,159.5 15			
Status 4	8,666,719.6	78	35,879.4	< 1	8,719,176.7 78			
Total	8,667,178.7	78	35,880.4	< 1	10,793,276.2 100			

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: Cottonmouths are a semiaquatic snake occurring in almost any type of permanently aquatic habitat (Mount 1975) including both fresh and brackish waters. Common habitats include swamps, sloughs, bays, streams, lakes, rivers, cypress ponds, salt marshes and tidal streams (NatureServe 2005, Wilson 1995, Mitchell 1994). Amy Silvano 29Aug05

FL-GAP:

Any freshwater habitats, including many keys (Ashton 1988). # River swamps, tree bordered marshes, and woodland ponds (Carr and Goin 1955). # Near water, including palmetto clumps up to 1/4 mile from water in Everglades region, coastal islands (Allen and Swindell - date 1945?) # Wooded streams, ponds; any lowlands (Cook 1983). # Cypress swamps, along streams, rock pits, and the Everglades. Margins of Everglades ponds, mangrove swamps, and salt marshes. Found in the Keys - Key Vaca and Key West (Duellman and Schwartz 1958). Seahorse Key, Florida has a mean movement between captures of 65 m. Home ranges for males were 0.17 ha, females were 0.14 ha (Macartney et al. 1988).

Ecosystem Classifiers: Aquatic species, accept all MU'S that fall within hydrobuffer in addition to open water. Amy Silvano 29Aug05

Hydrography Mask:

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

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

Utilizes wet vegetation features with buffers of 60m from and unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Freshwater Marsh
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh
Freshwater Tidal Marsh & Wetland	Florida Big Bend Fresh-Oligohaline Tidal Marsh
Water	Open Water (Brackish/Salt)
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 Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
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 Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Northern Pondshore
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	Central Florida Herbaceous Pondshore
Wetlands	Central Florida Herbaceous Seep
Wetlands	East Gulf Coastal Plain Interior Shrub Bog

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 Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Northern Depression Pondshore
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	Floridian Highlands Freshwater Marsh
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	North-Central Appalachian Acidic Swamp
Wetlands	South Florida Bayhead Swamp
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Freshwater Slough and Gator Hole
Wetlands	South Florida Pond-Apple/Popash Slough
Wetlands	South Florida Wet Marl Prairie
Wetlands	South Florida Willow Head
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation

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Compiled: 15 September 2011

This data was compiled and/or developed
by the Southeast GAP Analysis Project at
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