



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

American Beaver

Castor canadensis

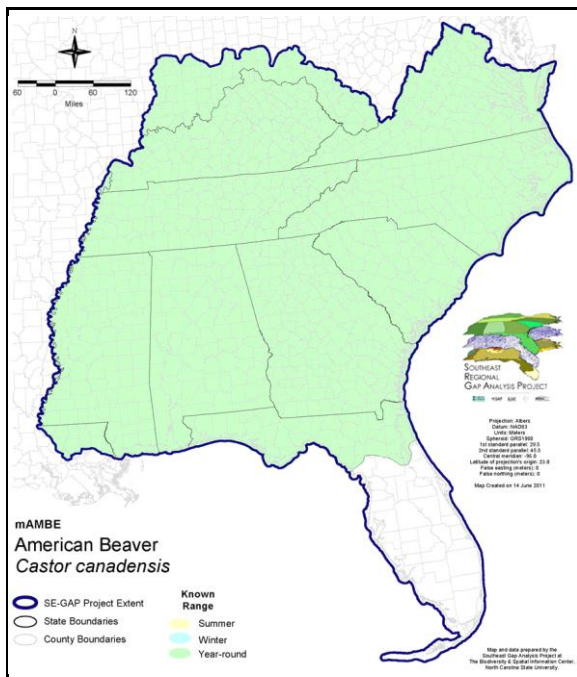
Taxa: Mammalian
 Order: Rodentia
 Family: Castoridae

SE-GAP Spp Code: **mAMBE**

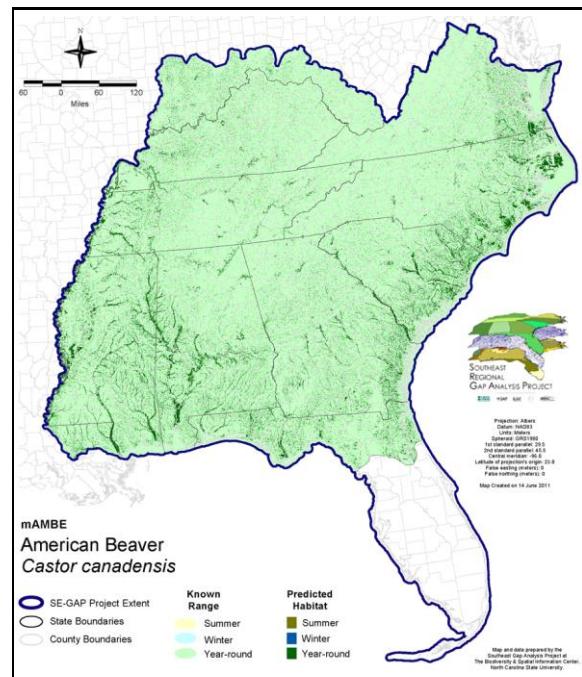
ITIS Species Code: 180212

NatureServe Element Code: AMAFE01010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mAMBE_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (GA, FB), ID (G), KY (N), NV (YES), NY (GS), RI (Not Listed), UT (None), BC (4 (2005)), BC (4 (2005)), QC (Non suivie), SK (NIAC)

NS Global Rank: G5

NS State Rank: AK (S5), AL (S5), AR (S5), AZ (S4), CA (S5), CO (S4), CT (S5), DE (S3), FL (SNR), GA (S5), IA (S5), ID (S5), IL (S5), IN (S4), KS (S5), KY (S5), LA (S5), MA (S5), MD (S5), ME (S5), MI (S5), MN (SNR), MO (SNR), MS (S5), MT (S5), NC (S5), ND (SNR), NE (S5), NH (S5), NJ (S5), NM (S3), NV (S4), NY (S5), OH (SNR), OK (S4), OR (S5), PA (S5), RI (S3S4), SC (SNR), SD (S5), TN (S5), TX (S5), UT (S4), VA (S5), VT (S5), WA (S5), WI (S5), WV (S5), WY (S4), AB (S5), BC (S5), BC (S5), LB (S5), MB (S5), NB (S5), NF (S5), NS (S5), NT (SNR), NU (SNR), ON (S5), PE (S5), QC (S5), SK (S5), YT (S5)

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	63,175.9	< 1	5,944.6	< 1	0.0	0	0.0	0
Status 2	158,362.6	2	21,825.0	< 1	0.0	0	1,725.1	< 1
Status 3	1,338.9	< 1	264,479.0	3	9,455.7	< 1	111,783.2	1
Status 4	23.3	< 1	0.0	0	0.0	0	3.9	< 1
Total	222,900.7	2	292,248.5	3	9,455.7	< 1	113,512.2	1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	14,272.7	< 1	9.4	< 1	0.0	0
Status 2	0.0	0	889.8	< 1	1,294.1	< 1	0.0	0
Status 3	15,467.1	< 1	9,338.6	< 1	0.0	0	1,107.5	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	15,467.1	< 1	24,501.2	< 1	1,303.5	< 1	1,107.5	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	156.5	< 1	7.4	< 1	0.0	0
Status 2	0.0	0	1,313.9	< 1	243,085.1	2	37.7	< 1
Status 3	2,014.5	< 1	110,722.1	1	106,370.9	1	45,985.9	< 1
Status 4	0.0	0	0.0	0	12,171.2	< 1	6.9	< 1
Total	2,014.5	< 1	112,192.5	1	361,634.6	4	46,030.5	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2,107.4	< 1	0.0	0	0.0	0
Status 2	10,373.5	< 1	40,534.7	< 1	3.1	< 1	456.6	< 1
Status 3	0.0	0	928.7	< 1	4,394.0	< 1	24,071.5	< 1
Status 4	0.0	0	0.0	0	951.6	< 1	0.0	0
Total	10,373.5	< 1	43,570.9	< 1	5,348.6	< 1	24,528.1	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	85,673.9	< 1		
Status 2	0.0	0	0.0	0	479,901.2	5		
Status 3	395.4	< 1	0.0	0	707,852.8	9		
Status 4	8,672,047.7	85	23,914.7	< 1	8,721,267.3	85		
Total	8,672,443.1	85	23,914.7	< 1	9,994,695.1	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: Beavers occupy small and medium-sized permanent water bodies in forested areas (Whitaker and Hamilton 1998). All manner of aquatic habitats that can be dammed to form calm pools and ponds are used. They will readily occupy artificial ponds, reservoirs, and canals if food is available. In mountainous areas, beavers typically have the most success at building ponds in valleys and flattened areas. Therefore, populations are more apt to be concentrated at lower elevations (Whitaker and Hamilton 1998; Linzey and Linzey 1971). However, they can be found far up the tributaries of mountain streams (Webster et al. 1985). They generally avoid lakes with strong wave action, fast-moving streams, and greatly fluctuating flow or water levels. In larger rivers beavers use floodplains and backwaters. In the north, they require water that is deep enough such that it does not freeze to the bottom and allows the accumulation of a substantial food pile beneath the ice. Though populations are sporadically distributed, beavers can populate areas quickly and become locally common anywhere except in tidewater habitats (Lee et al. 1982, Webster et al. 1985). They were almost extirpated through trapping before 1900, but they were transplanted in the early 1940s and have increased dramatically. Beavers are noteworthy in their ability to modify their environment, perhaps creating suitable habitat patches for birds and other mammalian species. Beavers build lodges or use burrows in earthen banks (Webster et al. 1985). One or more families may occupy a pond. In the South breeding occurs late October-March and parturition generally occurs late March and early April (Wigley et al. 1983). Litter size ranges from one to nine (3-4 typical). Females normally first give birth on or near their third birthday and may remain productive for up to at least ten years (Stegeman 1954). In most cases, the young disperse from their family group in late winter or early spring at an age of almost two years, before the new kits are born. Dispersal occurs over land and via waterways (Leege 1968). Stacy Smith, 22June05

Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes flowing water features with buffers of 60m from and 500m into selected water features.

Utilizes open water features with buffers of 60m from and 500m 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
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern Piedmont Mesic Forest
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 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 Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Northern Pondshore
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest

Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
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 Northern Depression Pondshore
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 - 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	North-Central Interior and Appalachian Rich Swamp
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	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp

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This data was compiled and/or developed
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