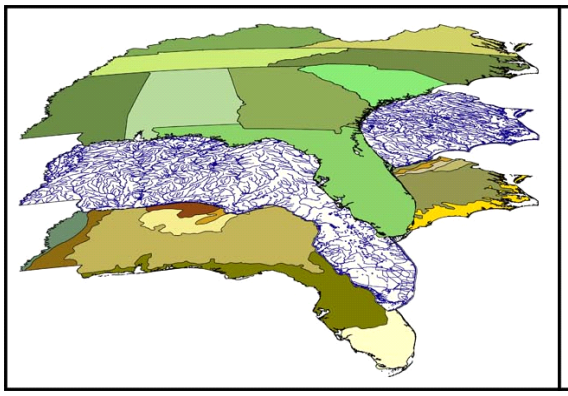


SOUTHEAST GAP ANALYSIS PROJECT

USGS science for a changing world | gap | BaSIC Biodiversity and Spatial Information Center | NARSAL

Species Modeling Report

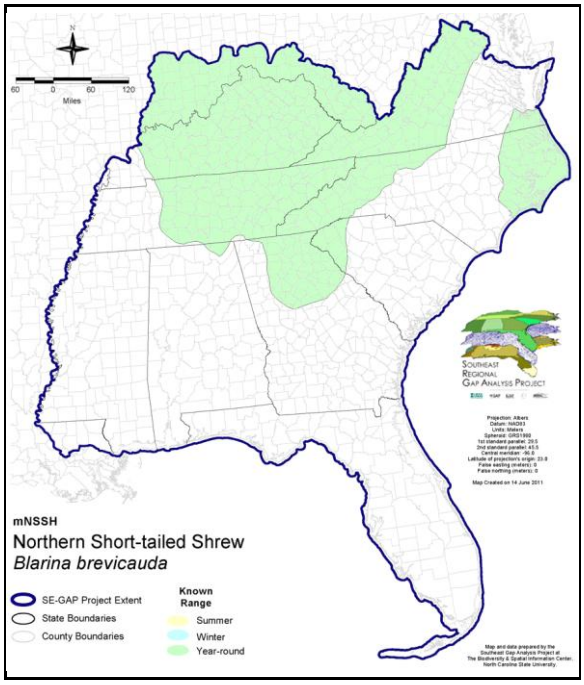
Northern Short-tailed Shrew

Blarina brevicauda

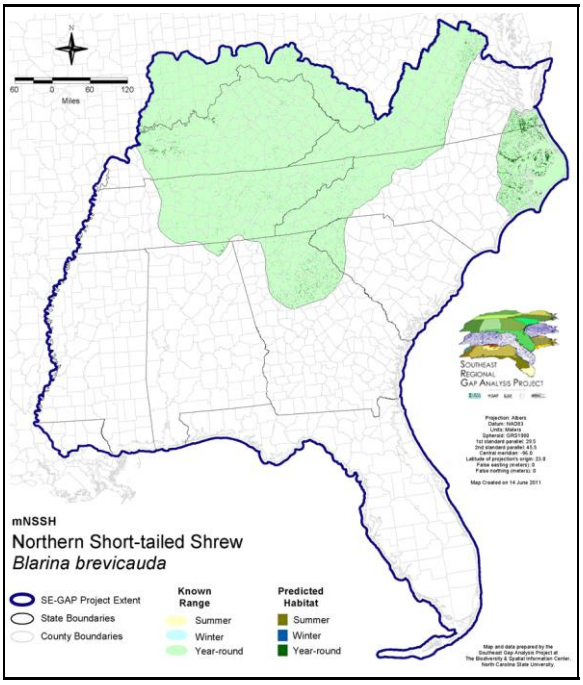
Taxa: Mammalian
Order: Soricomorpha
Family: Soricidae

SE-GAP Spp Code: **mNSSH**
ITIS Species Code: 179967
NatureServe Element Code: AMABA03010

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_mNSSH.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_mNSSH.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=mNSSH
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mNSSH_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), NJ (S), NY (U), RI (Not Listed), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AL (S5), CT (S5), DC (S5), DE (S5), GA (S5), IA (S5), IL (S5), IN (S4), KY (S5), MA (S5), MD (S5), ME (S5), MI (S5), MN (S5), MO (SNR), NC (S5), ND (SNR), NE (S3), NH (S5), NJ (S5), NY (S5), OH (S5), PA (S5), RI (S5), SC (SNR), SD (S5), TN (S5), VA (S5), VT (S5), WI (S5), WV (S5), MB (S5), NB (S5), NS (S5), ON (S5), PE (S5), QC (S5), SK (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	46,785.0	5	253.2	< 1	0.0	0	0.0	0
Status 2	34,255.5	4	1,762.1	< 1	0.0	0	529.9	< 1
Status 3	1,213.4	< 1	21,041.8	2	1,226.0	< 1	21,036.6	2
Status 4	8.5	< 1	0.0	0	0.0	0	11.4	< 1
Total	82,262.3	9	23,057.1	3	1,226.0	< 1	21,578.0	2

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	3,622.7	< 1	255.1	< 1	0.0	0
Status 2	0.0	0	7,851.6	< 1	62.6	< 1	0.0	0
Status 3	922.0	< 1	2,340.9	< 1	0.0	0	4.5	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	922.0	< 1	13,815.2	2	317.7	< 1	4.5	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	2.3	< 1	0.0	0
Status 2	0.0	0	265.3	< 1	16,200.4	2	13.0	< 1
Status 3	133.8	< 1	2,689.4	< 1	21,899.6	2	557.1	< 1
Status 4	0.0	0	0.0	0	783.0	< 1	0.0	0
Total	133.8	< 1	2,954.7	< 1	38,885.2	4	570.1	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	10.8	< 1	0.0	0	0.0	0
Status 2	3,855.8	< 1	6,061.1	< 1	2.8	< 1	0.0	0
Status 3	0.0	0	2.1	< 1	102.1	< 1	169.8	< 1
Status 4	0.0	0	0.0	0	110.2	< 1	0.0	0
Total	3,855.8	< 1	6,073.9	< 1	215.0	< 1	169.8	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	50,928.9	6
Status 2	0.0	0	0.0	0	70,860.1	8
Status 3	0.0	0	0.0	0	73,339.0	10
Status 4	675,873.1	76	1,011.6	< 1	678,572.3	76
Total	675,873.1	76	1,011.6	< 1	873,700.3	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: The northern short-tailed shrew is found in a variety of habitats from salt marshes along the coast to high mountain forests (Whitaker and Hamilton 1998), especially those with a thick layer of leaf litter and humus or a dense mat of herbaceous roots (Webster et al. 1985). They can also be found in bogs, marshes, near backwaters and inlets, hydric hammocks, flatwoods, and salt marshes (Whitaker and Hamilton 1998). Other potential habitats for these shrews include brushy areas, old fields and thickets, provided they are sufficiently moist. This shrew is typically found where soil moisture is capable of maintaining humidity in the shrew's burrow at a consistently high level (Whitaker and Hamilton 1998). Consequently, this shrew is more restricted to moister wooded habitats in the southern portions of its range. They dig tunnels or use existing ones and construct elaborate underground nest. The normal home range of this species probably is about 50 yards in diameter and covers about 0.4 acres (Burt 1940). They mainly breed in early February-March through September with peaks occurring in spring and late summer or early fall. Gestation is three weeks. Litter size is 3-10 (average 4-6) with three or more litters per year. They reach sexual maturity in 1-2 months. Stacy Smith, 12June05

Hydrography Mask:

Utilizes wet vegetation features with buffers of 30m from and unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Developed Open Space
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Central Salt and Brackish Tidal Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Salt and Brackish Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Indian River Lagoon Tidal Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Sea-Level Fen
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Salt Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier

Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest 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 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 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	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Appalachian Seepage Fen
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 and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Wetlands	Western Highland Rim Seepage Fen

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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.