



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

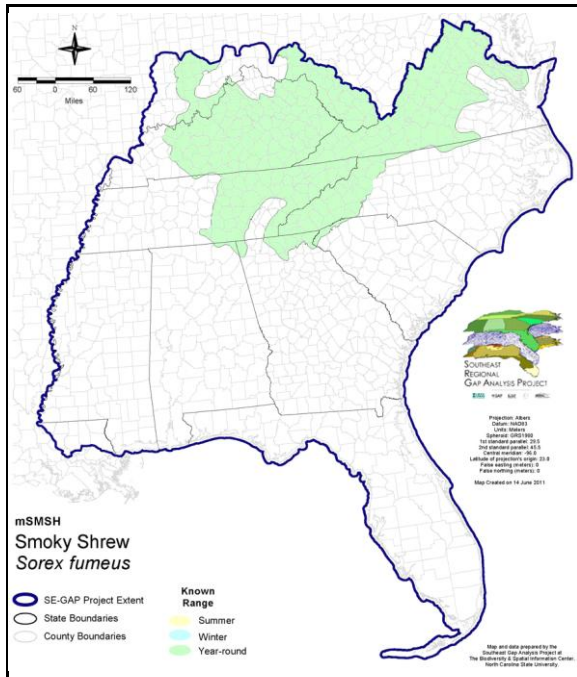
Smoky Shrew

Sorex fumeus

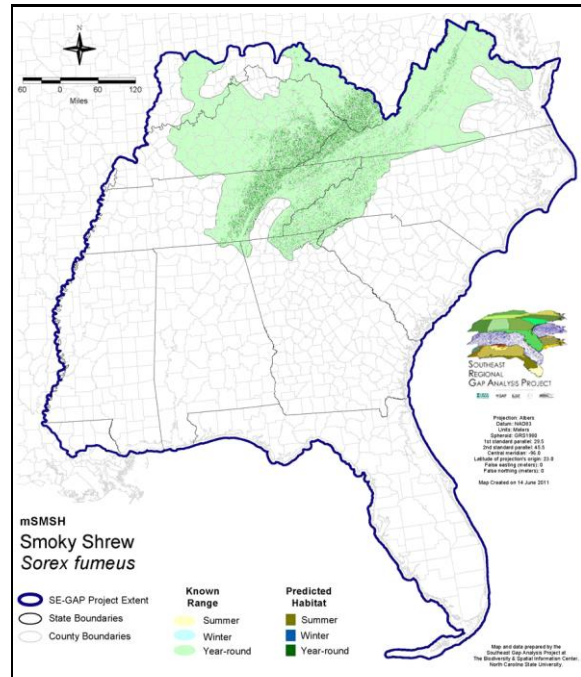
Taxa: Mammalian
 Order: Soricomorpha
 Family: Soricidae

SE-GAP Spp Code: **mSMSh**
 ITIS Species Code: 179943
 NatureServe Element Code: AMABA01180

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mSMSh_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: IN (SSC), KY (N), MD (I), MI (T), MN (SPC), NJ (U), NY (U), RI (Concern), TN (D), QC (Retir0e)

NS Global Rank: G5

NS State Rank: CT (S5), GA (S3?), IN (S2), KY (S5), MA (S5), MD (S2S3), ME (S5), MI (S1), MN (S3), NC (S4), NH (S5), NJ (SU), NY (S5), OH (SNR), PA (S5), RI (S2), SC (S4), TN (S4), VA (S5), VT (S4), WV (S5), NB (S5), NS (S5), ON (S5), PE (S3S4), QC (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	0.0	0	2,849.0	< 1	0.0	0	0.0	0
Status 2	0.0	0	25,145.3	1	0.0	0	0.0	0
Status 3	0.0	0	153,450.4	9	4,403.2	< 1	1,012.0	< 1
Status 4	6.3	< 1	0.0	0	0.0	0	0.0	0
Total	6.3	< 1	181,444.6	10	4,403.2	< 1	1,012.0	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	39,631.4	2	0.0	0	0.0	0
Status 2	0.0	0	3,785.4	< 1	0.0	0	0.0	0
Status 3	40.8	< 1	12,857.2	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	40.8	< 1	56,274.0	3	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	1,092.7	< 1	34,870.4	2	322.2	< 1
Status 3	1,549.9	< 1	4,588.9	< 1	9,115.3	< 1	3,594.7	< 1
Status 4	0.0	0	0.0	0	2,717.6	< 1	0.0	0
Total	1,549.9	< 1	5,681.6	< 1	46,703.3	3	3,916.9	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,736.7	< 1	0.0	0	0.0	0
Status 2	0.0	0	7,009.6	< 1	< 0.1	< 1	0.0	0
Status 3	0.0	0	64.3	< 1	23.2	< 1	0.0	0
Status 4	0.0	0	0.2	< 1	39.6	< 1	0.0	0
Total	0.0	0	8,810.7	< 1	62.9	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	44,217.1 2			
Status 2	0.0	0	0.0	0	72,225.6 4			
Status 3	0.0	0	0.0	0	190,699.7 19			
Status 4	1,305,387.5	74	340.8	< 1	1,311,203.4 74			
Total	1,305,387.5	74	340.8	< 1	1,618,345.9 100			

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: Smoky shrews may be found in cool, moist forested habitats having thick layers of leaf litter for burrowing. They are often found along mountain creeks, but are essentially only restricted to cool, moist habitat conditions (Linzey and Linzey 1971). They seem to prefer mixed stands of hemlock and deciduous hardwoods (Brown 1997) and they seek shelter in thick leaf litter or humus, moss-covered rock talus and decaying logs and stumps (Webster et al. 1985). Within the region, this shrew appears to be most plentiful at mid and high elevations (Linzey and Linzey 1971). Breeding season lasts from March to August and gestation is 3 weeks. Litter size is 2-8 (average 5) with up to 3 litters produced each year. Unlike many shrews, this one reaches sexual maturity after its first winter. Stacy Smith, 12June05

Elevation Mask: > 305m and < 2500m

Hydrography Mask:

Utilizes flowing water features with buffer of 120m from selected water features.

Utilizes open water features with buffer of 120m from selected water features.

Utilizes wet vegetation features with buffers of 120m from and unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Deciduous Plantations
Anthropogenic	Evergreen Plantations
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)
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	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	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Offsite Pine Modifier
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Riparian - Forest 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 Small Stream and Riparian
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Western Highland Rim Seepage Fen

CITATIONS: Baker, Rollin H. 1983. Michigan mammals. Michigan State University Press. 642 pp.

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This data was compiled and/or developed
by the Southeast GAP Analysis Project at
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Center, North Carolina State University.