



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Eastern Spotted Skunk

*Spilogale putorius*

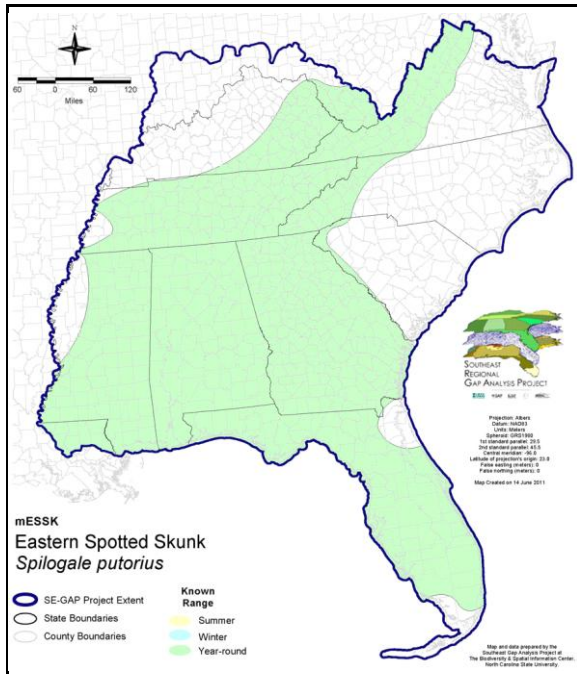
Taxa: Mammalian  
 Order: Carnivora  
 Family: Mephitidae

SE-GAP Spp Code: **mESSK**

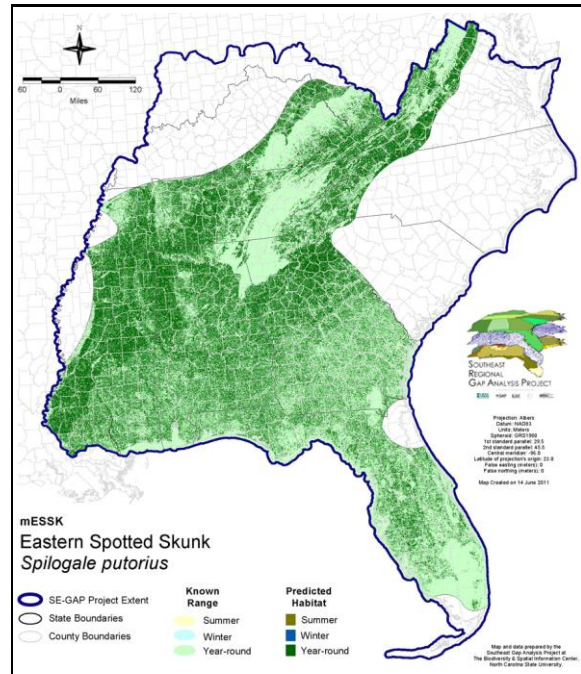
ITIS Species Code: 180570

NatureServe Element Code: AMAJF05010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



Range Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Range\\_mESSK.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_mESSK.pdf)

Predicted Habitat Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Dist\\_mESSK.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_mESSK.pdf)

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/mESSK\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/mESSK_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (FB), IA (E), IN (SX), KS (T), KY (S), MN (THR), NC (W2), ND (Level III), WI (SC/N)

NS Global Rank: G5

NS State Rank: AL (S2S3), AR (S2S3), CO (S2), FL (SNR), GA (S4), IA (S1), IL (SNA), IN (SX), KS (S1), KY (S2S3), LA (S1), MD (S1), MN (S2), MO (SNR), MS (S1), NC (S3), ND (S1), NE (S1), OK (S2), PA (SH), SC (S4), SD (S3), TN (S3), TX (S4), VA (S3S4), WI (SNA), WV (S2S3), WY (S2)

**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	24,602.5	< 1	9,542.2	< 1	0.0	0	0.0	0
Status 2	23,795.6	< 1	108,416.2	< 1	0.0	0	687.1	< 1
Status 3	1,030.0	< 1	680,383.2	2	23,717.3	< 1	193,634.5	< 1
Status 4	33.8	< 1	0.0	0	0.0	0	0.0	0
Total	49,461.8	< 1	798,341.5	2	23,717.3	< 1	194,321.5	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	56,382.8	< 1	0.0	0	2,151.6	< 1
Status 2	0.0	0	3,340.9	< 1	1,330.9	< 1	21.0	< 1
Status 3	939.1	< 1	51,996.2	< 1	0.0	0	2,689.6	< 1
Status 4	0.0	0	0.0	2	0.0	0	0.0	0
Total	939.1	< 1	111,720.1	< 1	1,330.9	< 1	4,862.2	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	592.8	< 1	0.0	0	0.0	0
Status 2	0.0	0	3,578.8	< 1	231,233.9	< 1	218.3	< 1
Status 3	15,725.7	< 1	187,503.8	< 1	55,169.1	< 1	85,626.9	< 1
Status 4	0.0	0	0.0	0	47,890.0	< 1	15.6	< 1
Total	15,725.7	< 1	191,675.4	< 1	334,293.0	< 1	85,860.8	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	4,703.8	< 1	0.0	0	0.0	0
Status 2	1,887.0	< 1	16,710.8	< 1	3.6	< 1	1,523.5	< 1
Status 3	0.0	0	8,723.8	< 1	2,969.7	< 1	56,879.2	< 1
Status 4	0.0	0	0.0	0	1,697.2	< 1	< 0.1	< 1
Total	1,887.0	< 1	30,138.4	< 1	4,670.6	< 1	58,402.8	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	97,975.7 < 1			
Status 2	0.0	0	0.0	0	392,747.6 1			
Status 3	339.1	< 1	< 0.1	< 1	1,367,327.3 6			
Status 4	31,247,596.0	92	23,309.8	< 1	31,368,398.8 93			
Total	31,247,935.1	92	23,309.9	< 1	33,226,449.3 100			

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:** Eastern spotted skunks inhabit bushy, rocky, and wooded areas where they prefer extensive vegetative cover (Kinlaw 1995, Wilson & Ruff 1999). Preferred habitat includes old fallow fields, weedy pastures, field fence rows, brushy or sparsely wooded area as well as open disturbed areas and rocky canyons and outcrops in woodlands and prairies. (Brown 1997, GAP-GAP 2003, NatureServe). Throughout the Appalachians, this species can be found in open forests with thick understory of rhododendron and mountain laurel along streams (Reed & Kenndey 2000) however, they have been reported to avoid densely forested areas and wetlands (Kinlaw 1995, Whitaker & Hamilton 1998). In coastal areas this species is numerous in dense palmetto (*Serenoa repens*) thickets on sandy soils along east coast of Florida, and on adjacent beaches (Kinlaw 1995). Also found in Coastal scrub-xeric plant communities such as palmetto and shrubs (Manaro 1961). Uses scrub habitat at Archbold, found in association with gopher tortoise burrows (Frank and Lips 1989). FL-GAP. Amy Silvano 27jun05

**Ecosystem Classifiers:** Xeric woodlands, Mixed, Hardwood, & Mesic Slope Forest, Glades & Barrens, Montane, & Bald (shrub mods), Evergreen (CP & Shrub mods only), Low Urban, Disturbed, Plantations, Ag/pasture, F/Riparian (excluding Blackwater), prairie, and Rock outcrops. Amy Silvano 27jun05

**Customized Model:** Eastern spotted skunks inhabit bushy, rocky, and wooded areas where they prefer extensive vegetative cover (Kinlaw 1995, Wilson & Ruff 1999). I used edge to get at these habitats. Applied buffer width based on body size/mobility index Amy Silvano 27jun05. \*\*\*\*Kennedy & Reed (2000) indicated that in Appalachians spotted skunks were taken above 430m. Use this elevation in the Appalachian mountains ONLY elsewhere DO NOT restrict with elevation.

**Mask of Forest/Open Ecotone:** Include within 250m of ecotone edge.

**Mask of Woodlands and Shrublands:** Include all woodland and shrubland interiors and 250m buffer from them.

**Selected Map Units:**

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Deciduous Plantations
Anthropogenic	Developed Open Space
Anthropogenic	Low Intensity Developed
Anthropogenic	Pasture/Hay
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)
Bald	Central Appalachian Montane Rocky Bald - Shrub Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Shrub Modifier
Beach	Florida Panhandle Beach Vegetation
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Northern Dune and Maritime Grassland
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Southern Dune and Maritime Grassland
Coastal Dune & Freshwater Wetland	East Gulf Coastal Plain Dune and Coastal Grassland
Coastal Dune & Freshwater Wetland	Southwest Florida Dune and Coastal Grassland
Forest/Woodland	Alabama Ketona Glade and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Appalachian Serpentine Woodland
Forest/Woodland	Appalachian Shale Barrens
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 Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory 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 Alkaline Glade and Woodland
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Forest/Woodland	Central Interior Highlands Calcareous Glade and Barrens
Forest/Woodland	Central Interior Highlands Dry Acidic Glade and Barrens
Forest/Woodland	Cumberland Sandstone Glade and Barrens
Forest/Woodland	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Woodland Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Forest/Woodland	East Gulf Coastal Plain Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
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	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Nashville Basin Limestone Glade
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Forest/Woodland	Southern and Central Appalachian Mafic Glade and Barrens
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 Coastal Plain Dry Upland Hardwood Forest
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 Glade and Barrens
Forest/Woodland	Southern Piedmont Mafic Hardpan Woodland
Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southern Piedmont Northern Triassic Basin Dry Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Herbaceous Modifier
Prairie	East Gulf Coastal Plain Jackson Plain Prairie and Barrens
Prairie	East Gulf Coastal Plain Jackson Prairie and Woodland
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier
Prairie	Florida Dry Prairie
Prairie	Panhandle Florida Limestone Glade
Prairie	Pennyroyal Karst Plain Prairie and Barrens
Prairie	Southern Ridge and Valley Patch Prairie

Prairie	Western Highland Rim Prairie and Barrens
Rock Outcrop	Allegheny-Cumberland Sandstone Box Canyon and Rockhouse
Rock Outcrop	Central Interior Acidic Cliff and Talus
Rock Outcrop	Central Interior Calcareous Cliff and Talus
Rock Outcrop	East Gulf Coastal Plain Dry Chalk Bluff
Rock Outcrop	North-Central Appalachian Acidic Cliff and Talus
Rock Outcrop	North-Central Appalachian Circumneutral Cliff and Talus
Rock Outcrop	Southern Appalachian Granitic Dome
Rock Outcrop	Southern Appalachian Montane Cliff
Rock Outcrop	Southern Appalachian Rocky Summit
Rock Outcrop	Southern Interior Acid Cliff
Rock Outcrop	Southern Interior Calcareous Cliff
Rock Outcrop	Southern Piedmont Cliff
Rock Outcrop	Southern Piedmont Granite Flatrock
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest

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For more information:: SE-GAP Analysis Project / BaSIC  
127 David Clark Labs  
Dept. of Biology, NCSU  
Raleigh, NC 27695-7617  
(919) 513-2853  
[www.basic.ncsu.edu/segap](http://www.basic.ncsu.edu/segap)

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