



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Least Weasel

*Mustela nivalis*

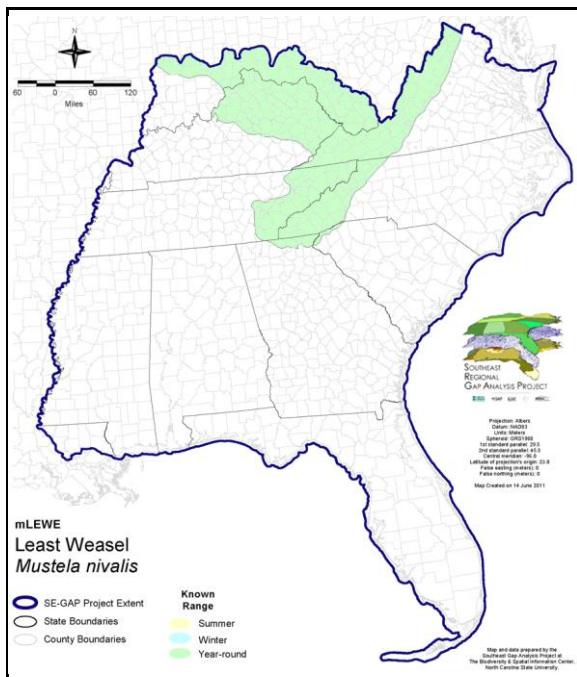
Taxa: Mammalian  
 Order: Carnivora  
 Family: Mustelidae

SE-GAP Spp Code: **mLEWE**

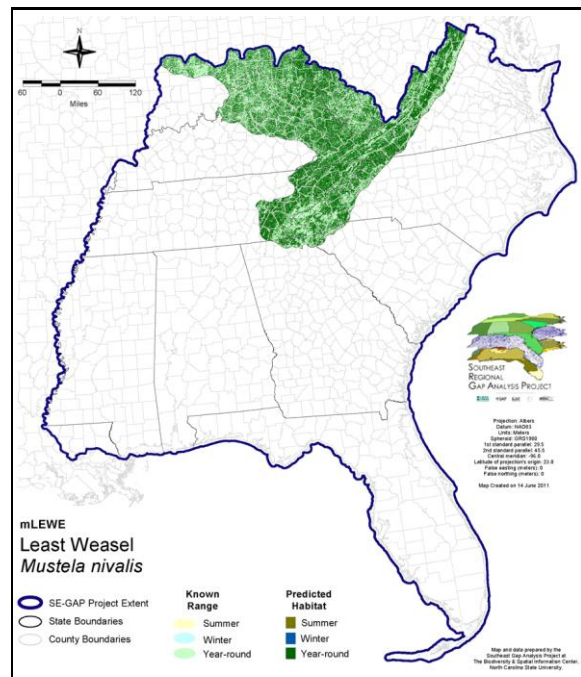
ITIS Species Code: 180554

NatureServe Element Code: AMAJF02020

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/mLEWE\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/mLEWE_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: IN (SSC), KY (S), MD (I), MN (SPC), NC (SR-G), NY (GS), BC (4 (2005)), QC (Susceptible)

NS Global Rank: G5

NS State Rank: AK (S4S5), GA (S1), IA (S3), IL (S3), IN (S2?), KS (S3), KY (S2S3), MD (S2S3), MI (S5), MN (S3), MO (S4), MT (S4), NC (S2), ND (SNR), NE (S5), NY (SH), OH (SNR), PA (S3), SC (SNR), SD (S5), TN (S2), VA (S3), WI (S4), WV (S4), WY (S1), AB (S5), BC (S3S5), LB (S2?), MB (S5), NT (SNR), NU (SNR), ON (SU), QC (S3S4), SK (S5), YT (S4S5)

**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	9,747.5	< 1	0.0	0	0.0	0
Status 2	0.0	0	77,109.1	< 1	0.0	0	0.0	0
Status 3	0.0	0	384,291.9	5	31,592.2	< 1	5,125.4	< 1
Status 4	30.3	< 1	0.0	0	0.0	0	0.0	0
Total	30.3	< 1	471,148.6	6	31,592.2	< 1	5,125.4	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	60,228.8	< 1	0.0	0	0.0	0
Status 2	0.0	0	68.4	< 1	0.0	0	0.0	0
Status 3	6,964.2	< 1	25,528.9	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	6,964.2	< 1	85,826.1	1	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	2,898.0	< 1	24,419.8	< 1	0.0	0
Status 3	9,237.5	< 1	13,831.8	< 1	16,414.5	< 1	2,529.1	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	9,237.5	< 1	16,729.8	< 1	40,834.3	< 1	2,529.1	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,051.0	< 1	0.0	0	0.0	0
Status 2	0.0	0	3,112.7	< 1	1.6	< 1	0.0	0
Status 3	0.0	0	0.0	0	58.9	< 1	0.0	0
Status 4	0.0	0	0.0	0	441.5	< 1	0.0	0
Total	0.0	0	4,163.8	< 1	502.0	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	71,027.4	< 1		
Status 2	0.0	0	0.0	0	107,609.7	1		
Status 3	0.0	0	0.0	0	495,574.3	11		
Status 4	6,768,528.0	86	3,853.0	< 1	6,772,822.6	86		
Total	6,768,528.0	86	3,853.0	< 1	7,447,033.9	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: With few accounts throughout its range, a consensus among authors regarding habitat requirements for this small elusive mustelid does not appear to be established. Whitaker and Hamilton (1998) describes open habitats near water as the least weasel's primary stomping ground. Lowman (1975) indicates the weasel will use deciduous forests and fields. Open woodlands, brushy areas, fencerows, marshes, and cultivated fields are also given as possible habitats (Webster et al. 1985). This weasel will enlarge and occupy the underground tunnels and chambers of its prey (mice and moles) after it has dispatched them or will burrow out a den of its own (Whitaker and Hamilton 1998). It will den in open woodlands, brushy or grassy fields, along fencerows, and beside marshes, streams or cultivated fields (Webster et al. 1985, Whitaker and Hamilton 1998).

Habitat varies geographically and includes open forests, farmlands and cultivated areas, grassy fields and meadows, riparian woodlands, hedgerows, alpine meadows, scrub, steppe and semi-deserts, prairies, coastal dunes, and sometimes rural residential areas; snow cover is not an obstacle; generally avoids deep dense forest and sandy desert (Sheffield & King 1994). Amy Silvano 24jun05

\*\*Sections quoted directly from state hab notes.

Ecosystem classifiers: Woodland species, use interior forest avoid mask or buffer into forested classes. Xeric woodlands, Mixed & Hardwood Forests, Galdes and Barrens, disturbed, Ag, herbaceous wetlands, Riparian. Amy Silvano 24jun05

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	Developed Open Space
Anthropogenic	Low Intensity Developed
Anthropogenic	Pasture/Hay
Anthropogenic	Row Crop
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 - Herbaceous Modifier
Bald	Central Appalachian Montane Rocky Bald - Shrub Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Herbaceous Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Shrub Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Appalachian Serpentine Woodland
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	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
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 Low Mountain Pine Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
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 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
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier
Prairie	Southern Ridge and Valley Patch Prairie
Prairie	Western Highland Rim Prairie and Barrens
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
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 Appalachian Seepage Wetland
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	Western Highland Rim Seepage Fen

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This data was compiled and/or developed  
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