

# SOUTHEAST GAP ANALYSIS PROJECT

## Species Modeling Report

### **Eastern Pipistrelle**

Pipistrellus subflavus

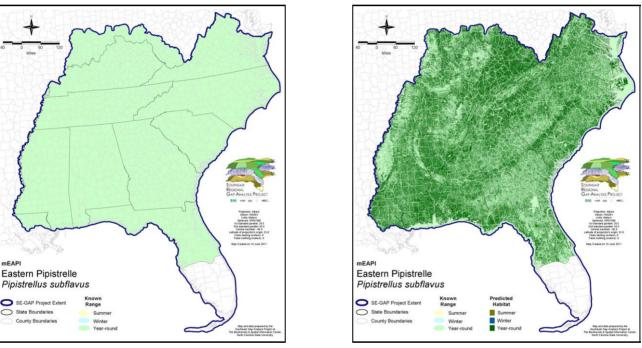
Taxa: Mammalian

- Order: Chiroptera
- Family: Vespertilionidae

#### **KNOWN RANGE:**

SE-GAP Spp Code: **mEAPI** ITIS Species Code: 180025 NatureServe Element Code: AMACC03020

#### PREDICTED HABITAT:



 Range Map Link:
 http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Range\_mEAPI.pdf

 Predicted Habitat Map Link:
 http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Dist\_mEAPI.pdf

 GAP Online Tool Link:
 http://www.gapserve.ncsu.edu/segap/latazip/maps/SE\_Dist\_mEAPI.pdf

 Data Download:
 http://www.basic.ncsu.edu/segap/datazip/region/vert/mEAPI\_se00.zip

#### **PROTECTION STATUS:**

Reported on March 14, 2011

#### Federal Status: ---

State Status: IN (SSC), KY (N), ME (SC), MI (SC), MN (SPC), MS (Non-game species in need of management), NH (SC), NH (SC), NJ (U), NY (U), RI (Not Listed), WI (THR), QC (Susceptible)

#### NS Global Rank: G5

NS State Rank: AL (S5), AR (S5), CO (SNA), CT (S4), DC (S4), DE (S5), FL (SNR), GA (S5), IA (S4), IL (S5), IN (S4), KS (S4), KY (S4S5), LA (S4S5), MA (S3), MD (S5B,S5N), MD (S5B,S5N), ME (SU), MI (S2), MN (S3), MO (SNR), MS (S5), NC (S5), NE (S1), NH (S1N,SUB), NH (S1N,SUB), NJ (SU), NY (S3), OH (SNR), OK (S4), PA (S1), RI (S4), SC (SNR), TN (S5), TX (S5), VA (S5), VT (S2S3), WI (S3S4), WV (S5), NB (S2?), NS (S1?), ON (S3?), QC (S2)

#### SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

	ι	US FWS US Forest Service		Tenn. Valley Author.		US DOD/ACOE		
	ha	%	ha	%	ha	%	ha	%
Status 1	96,428.3	< 1	27,663.8	< 1	0.0	0	0.0	(
Status 2	200,616.0	< 1	281,416.4	< 1	0.0	0	4,697.1	< 1
Status 3	3,328.1	< 1	2,090,367.5	4	59,231.8	< 1	613,481.9	1
Status 4	73.8	< 1	< 0.1	< 1	0.0	0	132.3	< 1
Total	300,446.3	< 1	2,399,447.8	4	59,231.8	< 1	618,311.3	1
	US Dept. of	Energy	US Nat. Park	Service		NOAA	Other Federa	l Lands
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	158,047.1	< 1	144.6	< 1	12,438.1	< 1
Status 2	0.0	0	18,939.0	< 1	7,847.6	< 1	53.6	< 1
Status 3	62,746.4	< 1	105,115.6	< 1	0.0	0	4,756.3	< 1
Status 4	0.0	0	1.0	2	0.0	0	0.0	C
Total	62,746.4	< 1	282,102.9	< 1	7,992.2	< 1	17,248.0	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,506.7	< 1	71.1	< 1	0.0	(
Status 2	0.0	0	11,528.6	< 1	576,101.3	1	1,018.4	< 1
Status 3	21,253.9	< 1	375,736.1	< 1	218,820.7	< 1	281,837.7	< 1
Status 4	0.0	0	< 0.1	< 1	93,738.3	< 1	45.4	< 1
Total	21,253.9	< 1	388,771.4	< 1	888,731.4	2	282,901.5	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	12,513.3	< 1	0.0	0	0.0	C
Status 2	13,525.8	< 1	80,302.7	< 1	5.0	< 1	1,808.7	< 1
Status 3	0.0	0	15,865.9	< 1	17,842.4	< 1	73,594.8	< 1
Status 4	0.0	0	1.0	< 1	2,750.5	< 1	0.0	C
Total	13,525.8	< 1	108,682.9	< 1	20,597.9	< 1	75,403.5	< 1
	Private Land - I	No Res.		Water			Overa	all Total
	ha	%	ha	%			ha	%
Status 1	0.0	0	0.0	0			308,813.1	< 1
Status 2	0.0	0	0.0	3			1,197,860.3	2
Status 3	498.2	< 1	1.0	< 1			3,944,478.2	11
Status 4	48,807,780.8	86	38,590.2	< 1			49,036,778.3	87
Total	48,808,279.1	86	38,591.4	< 1			54,487,930.0	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.

#### Year-round Model:

Habitat Description:

scription: Primarily a forest dwelling bat, maternity colonies are located in hollow trees, but also in secluded places in buildings and in caves (Whitaker and Hamilton 1998). Males probably roost largely in solitude in hollow trees, buildings, rock crevices and caves (Whitaker and Hamilton 1998). Bridges, attics of houses and abandoned buildings have also been used for roosts (Brown 1997) but summer habits are poorly understood (Wilson & Ruff 1999). Pipistrelles, prefers partly open country with large trees and woodland edges and generally avoids deep woods and open fields (NatureServe 2005). Individuals will even find temporary shelter in clumps of leaves or in Spanish moss in the coastal plain (Webster et al. 1985). In FL, summer roost in spanish moss, "drainpipes through bridges", also probably foliage and crevices. Cave use opposite that of M. austroriparius (Jennings 1958). Observed in scrubby flatwoods, over pond, in mesic hammock, and longleaf pine flatwoods (Moore 1949). Forages over waterways and forest edges (Fujita and Kunz 1984). Amy Silvano 16jun05

\*\*\*Direct quotes from compiled state habitat. Amy silvano 16juun05

Ecosystem Classifiers: ubiquitous in most habitats so Excluded only from Emergent wetlands & coastal marshes & wetlands, prairies, Bald, and treeless systems. Amy Silvano 16jun05

Mask of Forest/Open Ecotone: Include within 500m of ecotone edge.

Mask of Woodlands and Shrublands: Include all woodland and shrubland interiors and 500m buffer from them. Hydrography Mask:

Utilizes flowing water features with buffers of unlimited from and 120m into selected water features. Utilizes open water features with buffers of unlimited from and 120m into selected water features. Utilizes wet vegetation features with buffer of unlimited into selected vegetation features.

#### Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Deciduous Plantations
Anthropogenic	Developed Open Space
Anthropogenic	Low Intensity Developed
Anthropogenic	Quarry/Strip Mine/Gravel Pit
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp
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	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Appalachian Serpentine Woodland
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Loblolly Modifier
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 - Open Understory 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 Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood 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 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 Shortleaf Pine-Oak Forest - Pine Modifier Forest/Woodland East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly 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 - Open Understory 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 Maritime Forest Forest/Woodland East Gulf Coastal Plain Northern Dry Upland Hardwood Forest Forest/Woodland East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Offsite Pine Modifier 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 Loess Plain Oak-Hickory Upland - Juniper 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 - Open Understory Modifier Forest/Woodland Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier Forest/Woodland Mississippi Delta Maritime Forest 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 Northern Atlantic Coastal Plain Dry Hardwood Forest Forest/Woodland Ridge and Valley Calcareous Valley Bottom Glade and Woodland Forest/Woodland South Florida Pine Rockland Forest/Woodland South-Central Interior Mesophytic Forest Forest/Woodland Southeast Florida Coastal Strand and Maritime Hammock Forest/Woodland Southeastern Interior Longleaf Pine Woodland 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 Low Mountain Pine Forest Forest/Woodland Southern Appalachian Montane Pine Forest and Woodland Forest/Woodland Southern Coastal Plain Dry Upland Hardwood Forest Forest/Woodland Southern Coastal Plain Oak Dome and Hammock 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 - Loblolly Pine 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 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 Forest/Woodland Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier Forest/Woodland Southwest Florida Coastal Strand and Maritime Hammock Rock Outcrop Allegheny-Cumberland Sandstone Box Canyon and Rockhouse Rock Outcrop Central Interior Acidic Cliff and Talus

F	Rock Outcrop	Central Interior Calcareous Cliff and Talus
F	Rock Outcrop	East Gulf Coastal Plain Dry Chalk Bluff
F	Rock Outcrop	North-Central Appalachian Acidic Cliff and Talus
F	Rock Outcrop	North-Central Appalachian Circumneutral Cliff and Talus
F	Rock Outcrop	Southern Appalachian Granitic Dome
F	Rock Outcrop	Southern Appalachian Montane Cliff
F	Rock Outcrop	Southern Appalachian Rocky Summit
F	Rock Outcrop	Southern Appalachian Spray Cliff
F	Rock Outcrop	Southern Interior Acid Cliff
F	Rock Outcrop	Southern Interior Calcareous Cliff
F	Rock Outcrop	Southern Interior Sinkhole Wall
F	Rock Outcrop	Southern Piedmont Cliff
F	Rock Outcrop	Southern Piedmont Granite Flatrock
	Nater	Open Water (Fresh)
١	Netlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
١	Netlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
	Netlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
	Netlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
	Netlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
	Netlands	Atlantic Coastal Plain Northern Basin Peat Swamp
	Netlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
	Netlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
	Netlands	Atlantic Coastal Plain Peatland Pocosin
	Netlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
	Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
	Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
	Wetlands	Central Appalachian Floodplain - Forest Modifier
	Wetlands	Central Appalachian Riparian - Forest Modifier
	Wetlands	Central Florida Pine Flatwoods
	Wetlands	Cumberland Riverscour
	Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Open Understory Modifier
	Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Scrub/Shrub Understory Modifier
	Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
	Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
	Netlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
	Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
	Netlands	East Gulf Coastal Plain Northern Seepage Swamp
	Netlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
	Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
	Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
	Wetlands	Lower Mississippi River Bottomland Depressions - Forest 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 Florida Willow Head
	Netlands Netlands	South-Central Interior Large Floodplain - Forest Modifier
	Netlands Netlands	South-Central Interior Small Stream and Riparian
	Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
	Netlands Netlands	Southern Coastal Plain Blackwater River Floodplain Forest
	Netlands Netlands	Southern Coastal Plain Hydric Hammock
	Netlands Netlands	Southern Coastal Plain Nonriverine Basin Swamp
	Netlands Netlands	Southern Coastal Plain Nonriverine Cypress Dome
	Netlands Netlands	Southern Coastal Plain Seepage Swamp and Baygall
	Netlands Netlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
1	Netlands	Southern Piedmont Small Floodplain and Riparian Forest

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For more information::	SE-GAP Analysis Project / BaSIC	Compiled: 15 September 2011				
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