



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Big Brown Bat

Eptesicus fuscus

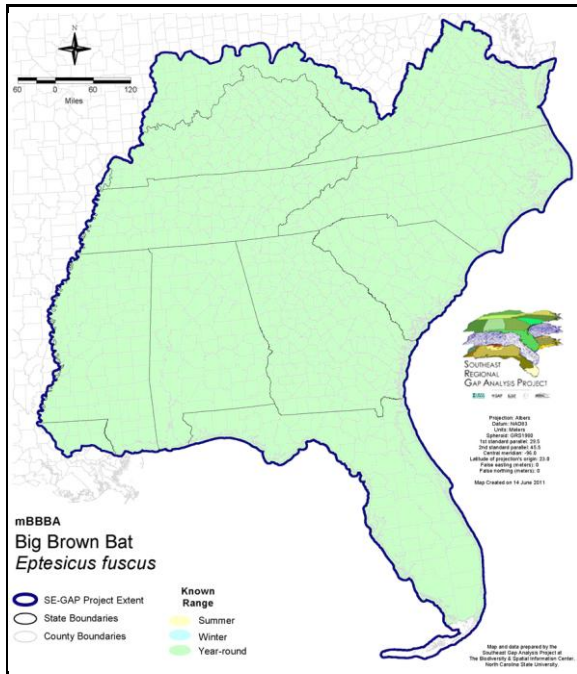
Taxa: Mammalian
 Order: Chiroptera
 Family: Vespertilionidae

SE-GAP Spp Code: **mBBBA**

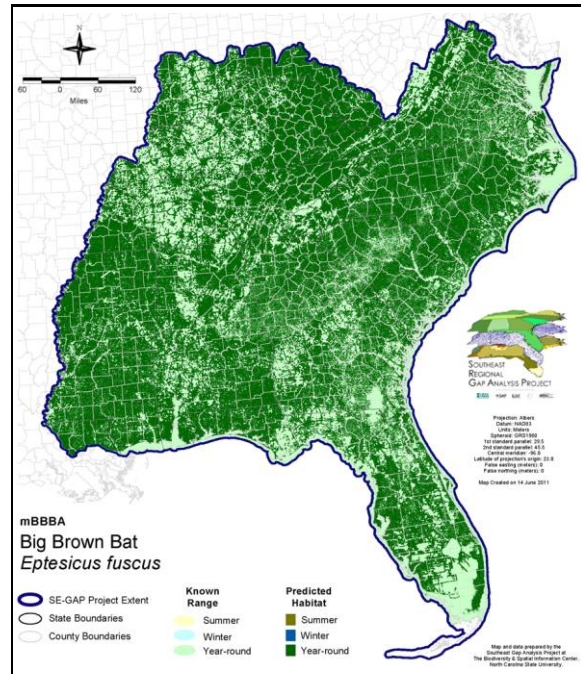
ITIS Species Code: 180008

NatureServe Element Code: AMACC04010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mBBBA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: ID (P), KY (N), MS (Non-game species in need of management), MS (Non-game species in need of management), NJ (S), NY (U), RI (Not Listed), UT (None), WI (THR), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (SNA), AL (S5), AR (S4), AZ (S4S5), CA (S5), CO (S5), CT (S5), DC (S4), DE (S5), FL (S3), GA (S5), IA (S4), ID (S4?), IL (S5), IN (S4), KS (S5), KY (S5), LA (S1S2), MA (S5), MD (S5B,S5N), MD (S5B,S5N), ME (S4), MI (S5), MN (SNR), MO (SNR), MS (S5B,S5N), MS (S5B,S5N), MT (S4), NC (S5), ND (SNR), NE (S5), NH (S5), NJ (S5), NM (S5), NV (S4), NY (S5), OH (SNR), OK (S4), OR (S4), PA (S5), RI (S5), SC (SNR), SD (S5), TN (S5), TX (S5), UT (S4), VA (S5), VT (S4), WA (S5), WI (S4), WV (S5), WY (S5), AB (S4S5), BC (S5), MB (S4S5B), MB (S4S5B), NB (S2?), ON (S5), QC (S4), 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	50,677.0	< 1	9,514.4	< 1	0.0	0	0.0	0
Status 2	146,926.3	< 1	118,103.2	< 1	0.0	0	4,495.1	< 1
Status 3	361.3	< 1	1,477,867.5	2	68,748.2	< 1	705,507.0	< 1
Status 4	60.4	< 1	< 0.1	< 1	0.0	0	524.5	< 1
Total	198,024.9	< 1	1,605,485.3	2	68,748.2	< 1	710,526.6	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	63,948.5	< 1	135.5	< 1	16,871.3	< 1
Status 2	0.0	0	25,219.9	< 1	8,740.8	< 1	32.9	< 1
Status 3	46,236.5	< 1	157,090.4	< 1	0.0	0	8,149.3	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	46,236.5	< 1	246,258.8	< 1	8,876.3	< 1	25,053.5	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,236.8	< 1	0.0	0	0.0	0
Status 2	0.0	0	9,674.7	< 1	449,462.3	< 1	1,436.7	< 1
Status 3	25,117.4	< 1	486,794.7	< 1	181,132.7	< 1	290,590.7	< 1
Status 4	0.0	0	< 0.1	< 1	70,282.0	< 1	46.6	< 1
Total	25,117.4	< 1	497,706.3	< 1	700,876.9	< 1	292,073.9	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	9,895.0	< 1	0.0	0	0.0	0
Status 2	9,794.7	< 1	58,739.5	< 1	7.0	< 1	2,330.6	< 1
Status 3	0.0	0	16,935.7	< 1	28,399.6	< 1	88,590.6	< 1
Status 4	0.0	0	0.0	0	4,290.4	< 1	< 0.1	< 1
Total	9,794.7	< 1	85,570.1	< 1	32,697.0	< 1	90,921.2	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	152,278.5	< 1		
Status 2	0.0	0	0.0	2	834,963.7	1		
Status 3	199.4	< 1	1.1	< 1	3,581,721.9	6		
Status 4	73,826,824.3	92	62,989.7	< 1	74,035,239.8	92		
Total	73,827,023.7	92	62,990.9	< 1	78,604,203.8	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: *Eptesicus fuscus* has very successfully adapted its use of habitat to the human altered landscape. Most maternity colonies found in recent decades have been in buildings and other manmade structures (Whitaker and Hamilton 1998). A few colonies have been located in hollow trees. They use both forested and non-forested habitats when foraging, but appear most frequently to use cultivated fields and other open habitats. Much more abundant in regions dominated by deciduous forest than in coniferous forest areas. They are a generalist forager, over both water and land, edge and non-edge, canopy and no canopy, urban and rural (Kurta and Baker 1990), fields, pastures, and cypress swamps (Layne et al. 1977). Foraging in sand pine scrub, beaches, lakes, and suburbia.

****Compiled quotes directly from state hab notes. Amy Silvano 16jun05

Ecosystem Classifiers: EXCLUDED from Bare soils, quarry/mines, & Evergreen Plantations, coastal, & brackish emergent wetlands, Scrub/shrub, emergent wetlands, Rock outcrops, & Bald. Amy Silvano 16jun05

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	High Intensity Developed
Anthropogenic	Low Intensity Developed
Anthropogenic	Medium Intensity Developed

Selected Secondary Map Units within 1500m of Primary Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Southern Piedmont Mafic Hardpan Woodland
Forest/Woodland	Southeastern Interior Longleaf Pine Woodland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Forest/Woodland	Southern Piedmont Glade and Barrens
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
Forest/Woodland	Nashville Basin Limestone Glade
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Forest/Woodland	Cumberland Sandstone Glade and Barrens
Forest/Woodland	Alabama Ketona Glade and Woodland
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 Mesic Forest
Forest/Woodland	Appalachian Serpentine Woodland
Forest/Woodland	Southern and Central Appalachian Mafic Glade and Barrens
Prairie	Western Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier
Prairie	Pennyroyal Karst Plain Prairie and Barrens
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Southern and Central Appalachian Cove Forest
Prairie	Southern Ridge and Valley Patch Prairie

Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Northern Triassic Basin Dry Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Appalachian Shale Barrens
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Forest/Woodland	Central Appalachian Alkaline Glade and Woodland
Wetlands	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Interior and Appalachian Rich Swamp
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Forest/Woodland	Central Interior Highlands Calcareous Glade and Barrens
Forest/Woodland	Central Interior Highlands Dry Acidic Glade and Barrens
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	South-Central Interior Mesophytic Forest
Prairie	Bluegrass Basin Savanna 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	Florida Peninsula Inland Scrub
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
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 Fall-Line Sandhills Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Northern Dune and Maritime Grassland
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Beach	Florida Panhandle Beach Vegetation
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Southern Dune and Maritime Grassland
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier

Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp
Forest/Woodland	Atlantic Coastal Plain Northern Maritime Forest
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Prairie	East Gulf Coastal Plain Jackson Plain Prairie and Barrens
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
Prairie	Florida Dry Prairie
Wetlands	Central Florida Pine Flatwoods
Beach	Atlantic Coastal Plain Sea Island Beach
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland
Prairie	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Herbaceous Modifier
Forest/Woodland	East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Woodland Modifier
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	South-Central Interior/Upper Coastal Plain Wet Flatwoods
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 Dry Upland Hardwood Forest
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Forest/Woodland	Southern Coastal Plain Oak Dome and Hammock
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 Interior Upland Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
Coastal Dune & Freshwater Wetland	East Gulf Coastal Plain Dune and Coastal Grassland
Wetlands	Southern Coastal Plain Hydric Hammock
Forest/Woodland	East Gulf Coastal Plain Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Maritime Forest
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed 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 - Pine Modifier
Freshwater Tidal Marsh & Wetland	Florida Big Bend Fresh-Oligohaline Tidal Marsh
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Forest/Woodland	Mississippi Delta Maritime Forest
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Northern Basin Peat Swamp
Prairie	Panhandle Florida Limestone Glade
Beach	Atlantic Coastal Plain Southern Beach
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Prairie	East Gulf Coastal Plain Jackson Prairie and Woodland
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest

Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest
Beach	South Florida Shell Hash Beach
Beach	Southeast Florida Beach
Beach	Southwest Florida Beach
Wetlands	South Florida Hardwood Hammock
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Bayhead Swamp
Forest/Woodland	South Florida Pine Rockland
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Wetlands	South Florida Wet Marl Prairie
Wetlands	South Florida Pine Flatwoods
Anthropogenic	Developed Open Space
Wetlands	Unconsolidated Shore (Lake/River/Pond)
Beach	Unconsolidated Shore (Beach/Dune)
Anthropogenic	Deciduous Plantations
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Pasture/Hay
Anthropogenic	Row Crop

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

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