



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Brazilian Free-tailed Bat

*Tadarida brasiliensis*

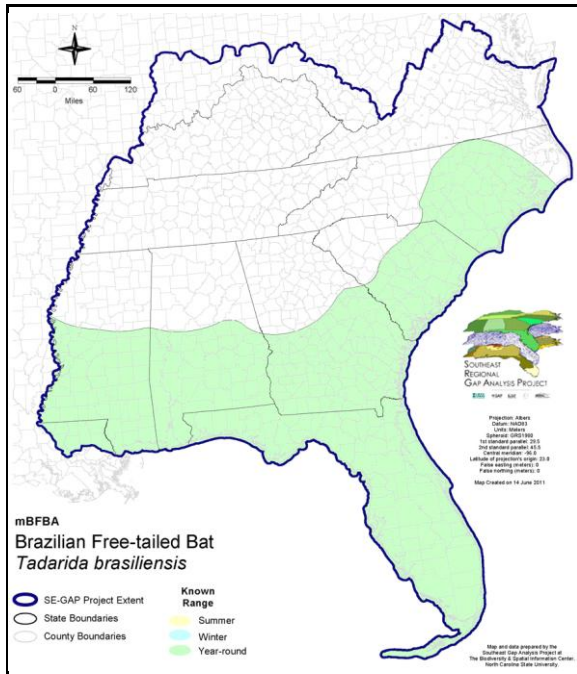
Taxa: Mammalian  
Order: Chiroptera  
Family: Molossidae

SE-GAP Spp Code: **mBFBA**

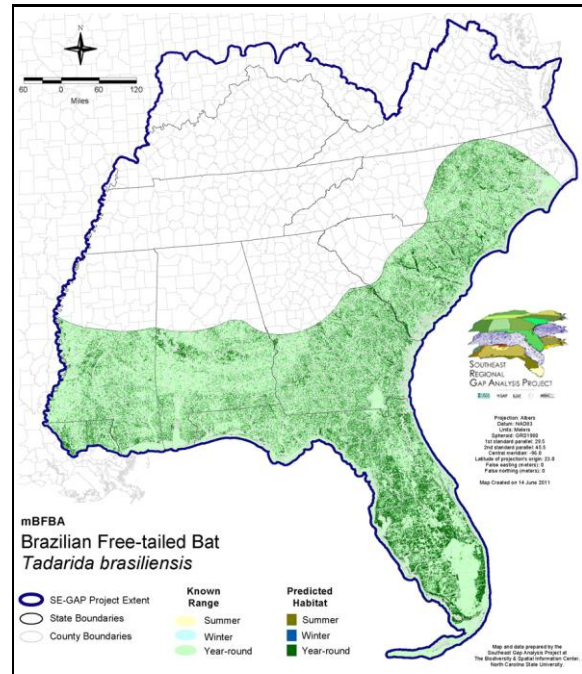
ITIS Species Code: 180088

NatureServe Element Code: AMACD01010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/mBFBA\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/mBFBA_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), MS (Non-game species in need of management), NV (YES), OK (Category II), UT (None)

NS Global Rank: G5

NS State Rank: AL (S3), AR (S4), AZ (S3S4), CA (S4S5), CO (S1), FL (SNR), GA (S4), IL (SNA), KS (SNA), KY (SNA), LA (S4), MS (S5), NC (S4), NE (SNRN), NM (S3), NV (S3S4), OK (S3), OR (S4), SC (SNR), TN (SNA), TX (S5), UT (S4B), VA (SNA), WY (SNA)

**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	38,282.0	< 1	3,632.0	< 1	0.0	0	0.0	0
Status 2	32,506.2	< 1	17,925.5	< 1	0.0	0	12.3	< 1
Status 3	2.5	< 1	130,643.9	< 1	0.0	0	122,074.0	< 1
Status 4	4.8	< 1	0.0	0	0.0	0	0.0	0
Total	70,795.5	< 1	152,201.3	1	0.0	0	122,086.4	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	174,258.5	1	76.3	< 1	3,328.3	< 1
Status 2	0.0	0	3,654.2	< 1	14,503.1	< 1	36.9	< 1
Status 3	15,991.2	< 1	108,809.6	< 1	0.0	0	3,358.4	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	15,991.2	< 1	286,722.4	2	14,579.4	< 1	6,723.6	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	69.8	< 1	0.0	0	0.0	0
Status 2	0.0	0	597.9	< 1	143,410.3	1	0.0	0
Status 3	1,071.0	< 1	243,668.3	2	13,018.5	< 1	95,506.3	< 1
Status 4	0.0	0	< 0.1	< 1	9,992.9	< 1	5.6	< 1
Total	1,071.0	< 1	244,336.0	2	166,421.7	1	95,511.9	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	670.8	< 1	0.0	0	0.0	0
Status 2	1,213.1	< 1	15,351.9	< 1	0.0	0	953.9	< 1
Status 3	0.0	0	9,746.8	< 1	10,150.5	< 1	65,202.2	< 1
Status 4	0.0	0	0.0	0	1,258.4	< 1	< 0.1	< 1
Total	1,213.1	< 1	25,769.5	< 1	11,408.9	< 1	66,156.2	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	220,317.7	2		
Status 2	0.0	0	0.0	0	230,165.3	2		
Status 3	612.9	< 1	0.0	0	819,856.2	7		
Status 4	11,977,817.5	89	32,629.9	< 1	12,031,697.3	90		
Total	11,978,430.4	89	32,629.9	< 1	13,302,036.4	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: Brazilian Free-tailed Bats roost primarily in buildings, or other man-made structures such as culverts, bridges, and bat houses (Kiser 2004, FL-GAP 2003, NatureServe 2005), and bat house. Historically this species has been reported to use the hollows of mangrove and cypress trees (Wilkins 1989), but may now be totally dependent on human-made structures (Kiser 2004). These bats generally feed in open vegetative areas, and have been know to consume large numbers of agricultural pests (Wilson & Ruff 1999). Free-tailed bats will fly long distances from roost to foraging areas, with individuals documented distances over 80 km (NatureServe 2005, Wilson & Ruff 1999). Amy Silvano 22jun05

Ecosystem classifiers: Urban, mangrove, Cypress Domes, Cypress dominated swamps/systems, Riparian/Floodplain (Blackwater systems only). Pasture/Hay, and grassland/herbaceous as AMU for foraging habitat. Amy Silvano 22jun05

### Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	High Intensity Developed
Anthropogenic	Low Intensity Developed
Anthropogenic	Medium Intensity Developed
Anthropogenic	Pasture/Hay
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	South Florida Mangrove Swamp
Brackish Tidal Marsh & Wetland	Southwest Florida Perched Barriers Salt Swamp and Lagoon - Mangrove Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome

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