



Species Modeling Report

Northern Yellow Bat

Lasiurus intermedius

Taxa: Mammalian

Order: Chiroptera

Family: Vespertilionidae

KNOWN RANGE:

MNYBA

State Boun

County Bounda

SE-GAP Spp Code: mNYBA ITIS Species Code: 180019 NatureServe Element Code: AMACC05040

PREDICTED HABITAT:



Range Map Link: <u>http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_mNYBA.pdf</u> Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_mNYBA.pdf GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=mNYBA http://www.basic.ncsu.edu/segap/datazip/region/vert/mNYBA_se00.zip Data Download:

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: MS (Non-game species in need of management), NC (SC), NJ (P)

NS Global Rank: G4G5

NS State Rank: AL (S1), FL (SNR), GA (S2S3), LA (S4), MS (S1), NC (SU), NJ (SNA), SC (SNR), TX (S4), VA (SNA)

SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

		US FWS	US Forest	t Service	Tenn. Valley	y Author.	US DOI	D/ACOE	
	ha	%	ha	%	ha	%	ha	%	
Status 1	53,696.3	< 1	3,715.6	< 1	0.0	0	0.0	0	
Status 2	38,630.0	< 1	28,371.5	< 1	0.0	0	73.1	< 1	
Status 3	2.1	< 1	464,029.7	3	0.0	0	272,941.0	2	
Status 4	6.9	< 1	0.0	0	0.0	0	89.5	< 1	
Total	92,335.3	< 1	496,116.7	3	0.0	0	273,103.6	2	
			I		I		1		
	US Dept. of	f Energy	US Nat. Park	Service		NOAA	Other Federa	al Lands	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	24,035.3	< 1	126.3	< 1	14,200.6	< 1	
Status 2	0.0	0	9,263.9	< 1	11,020.3	< 1	73.2	< 1	
Status 3	619.6	< 1	41,340.3	< 1	0.0	0	3,574.2	< 1	
Status 4	0.0	0	1.0	7	0.0	0	0.0	0	
Total	619.6	< 1	74,640.8	< 1	11,146.6	< 1	17,847.9	< 1	
			I		I				
	Native Am. Reserv. State Park,		State Park/H	ist. Park State WMA/G		ameland	State	State Forest	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	114.7	< 1	0.0	0	0.0	0	
Status 2	0.0	0	1,088.4	< 1	254,227.4	2	0.0	0	
Status 3	9.4	< 1	382,391.5	2	26,654.7	< 1	243,360.9	2	
Status 4	0.0	0	0.0	0	16,838.6	< 1	39.3	< 1	
Total	9.4	< 1	383,594.5	2	297,720.6	2	243,400.2	2	
			I		I		1		
	State Coastal	Reserve	ST Nat.Area/F	Preserve	Other Sta	ate Lands	Private Cons.	Easemt.	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	1,572.6	< 1	0.0	0	0.0	0	
Status 2	4,257.5	< 1	19,316.9	< 1	0.0	0	2,208.3	< 1	
Status 3	0.0	0	12,562.4	< 1	22,634.7	< 1	104,756.2	< 1	
Status 4	0.0	0	0.0	0	284.8	< 1	< 0.1	< 1	
Total	4,257.5	< 1	33,451.8	< 1	22,919.5	< 1	106,964.6	< 1	
			I		I		1		
	Private Land -	No Res.		Water			Over	all Total	
	ha	%	ha	%			ha	%	
Status 1	0.0	0	0.0	0			97,461.3	< 1	
Status 2	0.0	0	0.0	< 1			368,530.6	2	
Status 3	122.0	< 1	1.1	< 1			1,574,999.6	13	
Status 4	13,613,341.1	84	11,245.8	< 1			13,658,678.9	85	
Total	13,613,463.2	84	11,247.0	< 1			15,699,670.4	100	
			1		1				

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:

Tiption: Within the southeast northern yellow bats typically inhabit forested areas near permenant water where they frequent both coniferous and deciduous woodlands (Choate et al. 1994 & Webster et al. 1980). They are strongly associated with Spanish Moss in which they roost and rear their young (Barbour & Davis 1969, Whitaker & Hamilton 1998, Choate et al. 1994 & Webster et al. 1980). Northern yellow bats are most commonly associated with longleaf pine/turkey oak sandhill and live oak hammock (Jennings 1958 cited in Kern 1992), as well as open flatwoods (Layne et al. 1977). They forages 15-20 feet above the ground over open areas and scattered shrubs or trees, or along forest edge, pastures, airports, lake edge, and savannahs (Kern in Humphrey 1992). Amy Silvano 20jun05

***Some direct quotes from State hab notes. Amy Silvano

Ecosystem classifiers: Evergreen, Mixed, hardwood & maritime forests, Tidal wooded swamps, Treed depressional wetlands & flatwoods, Floodplain/Riparian (bottomland oaks, no blackwater systems). All open and scrub/shrub selected as AMU's to represent foraging only areas. Amy Silvano 20jun05

Hydrography Mask:

Utilizes flowing water features with buffer of 2000m from selected water features. Utilizes open water features with buffers of 2000m from and 30m 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
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	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 Northern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
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 Maritime Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Mississippi Delta Maritime Forest
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southern Coastal Plain Dry Upland Hardwood Forest
Forest/Woodland	Southern Coastal Plain Oak Dome and Hammock
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
Water	Open Water (Fresh)
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest

Wetlands	Central Florida Pine Flatwoods
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
Wetlands	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	South Florida Bayhead Swamp
Wetlands	South Florida Hardwood Hammock
Wetlands	South Florida Pine Flatwoods
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Selected Secondary Map Units with	in 1000m of Primary Map Units:
Functional Group	Map Unit Name
Forest/Woodland	Florida Peninsula Inland Scrub
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	Atlantic Coastal Plain Sandhill Seep
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	Central Florida Herbaceous Seep
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	South Florida Wet Marl Prairie
Anthropogenic	Developed Open Space
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Grassland/Herbaceous

CITATIONS: B

Barbour, R. W., and W. H. Davis. 1969. Bats of America. The University of Kentucky Press, Lexington,

Pasture/Hay

Successional Grassland/Herbaceous (Utility Swath)

Kentucky.

Anthropogenic Anthropogenic

Choate, J. R., J. K. Jones, Jr., and C. Jones. 1994. Handbook of mammals of the south-central states. Louisiana State University Press, Baton Rouge. 304 pp.

Jennings, W. L. 1958. The Ecological Ditribution of Bats in Florida. Gainesville, FL: University Press of Florida.

Kern, W.H. 1992. Northern yellow bat. Pages 349-356 in Rare and endangered biota of Florida, Vol. I: Mammals (S.R. Humphrey, ed.). Gainesville, Univ. of Florida Press.

Layne, J.N.; Stallcup, J.A.; Woolfenden, G.E.; McCauley, M.N.; Worley, D.J. 1977. Fish and Wildlife Inventory of the Seven-County Region Included in the Central Florida Phosphate Industry Area-Wide Environmental Impact Study. Volumes I and II. Also avai

Menzel, J. M., M. A. Menzel, W.M. Ford, J. W. Edwards, S. R. Sheffield, J. C. Kilgo, and M. S. Bunch. 2003. The distribution of bats in South Carolina. Southeastern Naturalist, 2(1), pp. 121-152.

Webster, W. D., J. F. Parnell and W. C. Biggs Jr. 1985. Mammals of the Carolinas, Virginia, and Maryland. The University of North Carolina Press, Chapel Hill, NC.

Webster, W.D., Jones Jr, J.K., and Baker, R.J. 1980. Lasiurus intermedius. Mammalian Species. 132:1-

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Whitaker, J.O. Jr. and W.J. Hamilton, Jr. 1998. Mammals of the eastern United States. Cornell Univ. Press, Ithaca, New York. 583 pp.

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 Compiled: 15 September 2011

This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University.