



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Eastern Woodrat

Neotoma floridana

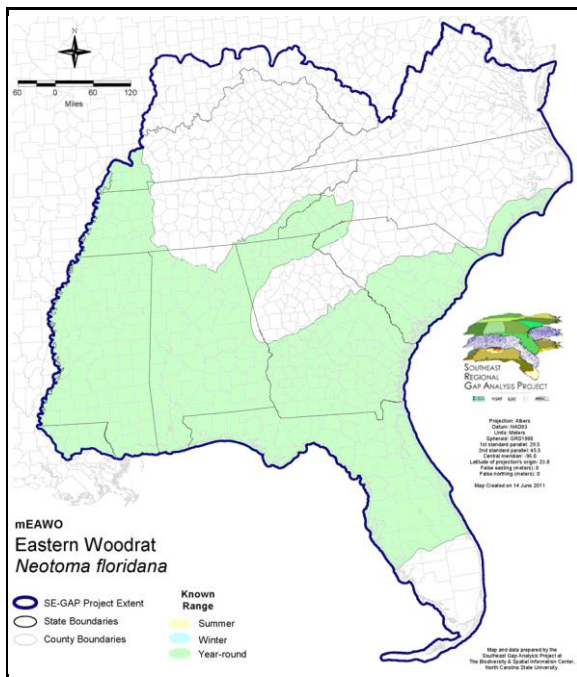
Taxa: Mammalian
 Order: Rodentia
 Family: Cricetidae

SE-GAP Spp Code: **mEAWO**

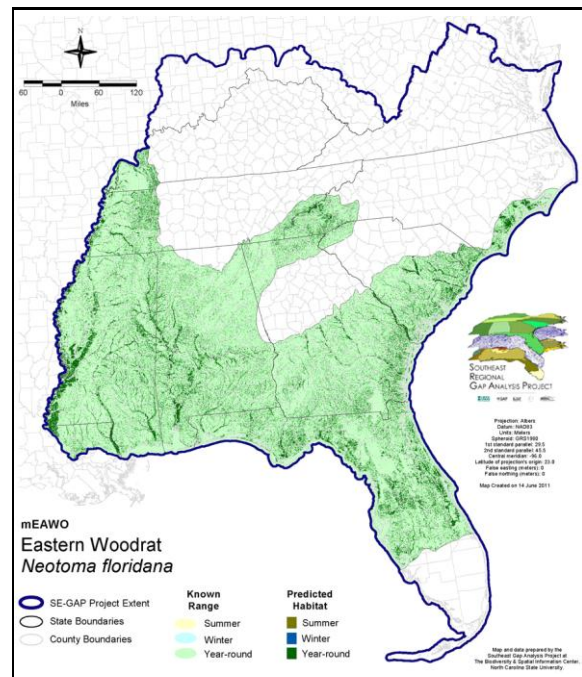
ITIS Species Code: 180372

NatureServe Element Code: AMAFF08010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mEAWO_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: IL (LE), MS (Non-game species in need of management)

NS Global Rank: G5

NS State Rank: AL (S4), AR (S4), CO (S3S4), FL (S5), GA (S5), IL (S1), KS (S4), LA (S4), MO (S3S4), MS (SNR), NC (S3S4), NE (S3), OK (S5), SC (S3S4), TN (SNR), TX (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	25,502.6	< 1	10,371.0	< 1	0.0	0	0.0	0
Status 2	85,246.6	< 1	67,085.9	< 1	0.0	0	545.4	< 1
Status 3	1,480.1	< 1	516,280.5	4	8,052.6	< 1	115,759.1	< 1
Status 4	5.7	< 1	< 0.1	< 1	0.0	0	0.0	0
Total	112,235.0	< 1	593,737.5	5	8,052.6	< 1	116,304.5	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	88,279.3	< 1	74.4	< 1	7,151.2	< 1
Status 2	0.0	0	6,835.9	< 1	5,092.9	< 1	0.5	< 1
Status 3	16,720.6	< 1	6,409.5	< 1	0.0	0	1,139.2	< 1
Status 4	0.0	0	1.0	< 1	0.0	0	0.0	0
Total	16,720.6	< 1	101,526.2	< 1	5,167.4	< 1	8,290.9	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	364.8	< 1	0.0	0	0.0	0
Status 2	0.0	0	4,114.4	< 1	277,531.1	2	0.0	0
Status 3	6,041.2	< 1	328,205.1	3	57,151.4	< 1	102,528.7	< 1
Status 4	0.0	0	< 0.1	< 1	19,188.4	< 1	8.6	< 1
Total	6,041.2	< 1	332,684.4	3	353,870.8	3	102,537.4	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2,051.9	< 1	0.0	0	0.0	0
Status 2	2,046.9	< 1	31,750.5	< 1	0.0	0	1,405.5	< 1
Status 3	0.0	0	14,795.3	< 1	6,241.8	< 1	62,997.2	< 1
Status 4	0.0	0	0.0	0	789.2	< 1	0.0	0
Total	2,046.9	< 1	48,597.7	< 1	7,031.0	< 1	64,402.7	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	133,795.2 1			
Status 2	0.0	0	0.0	< 1	481,655.7 4			
Status 3	470.3	< 1	0.0	0	1,244,272.5 15			
Status 4	9,185,183.3	79	33,770.2	< 1	9,258,129.7 80			
Total	9,185,653.6	79	33,770.3	< 1	11,117,853.1 100			

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: Eastern woodrats may be found in forested habitats. In the mountains, they prefer deciduous forests, particularly where the understory is dense, and often occur in areas with rock outcrops, talus slopes or caves. Other habitats include low, wet areas, ranging from marshes (Svihla and Svihla 1933) to swamps and swamp hammocks (Bangs 1898, Harper 1927, Chamberlain 1928, Hamilton 1953). In the Coastal Plain, woodrats may be abundant in deciduous forests of floodplains, ravines, swamps and of forested areas near marshes (Whitaker and Hamilton 1998). They are very common in the ecotone between hydric and mesic communities (Pearson 1954). Within North Carolina, populations are most common above 3000ft (Clark 1987). It is also associated with rocky places where fissures and crevices provide shelter, but it is less restricted to rocky habitats than the Allegheny wood rat (*Neotoma magister*). Nests have been found in shrub and vine thickets, hollows of trees and stumps, subterranean chambers, barns and abandoned buildings, cave entrances, and among rocks on talus slopes (Clark 1987). They breed all year in Florida and coastal Georgia (Golley 1962, Pearson 1952, Schwartz and Schwartz 1981, Nowak and Paradiso 1983). Gestation probably lasts about 33-39 days (Hamilton 1953). Litter size is usually 2-4 (average 3) (Pearson 1952, Hamilton and Whitaker 1979), with up to 2-3 litter per year. Sexual maturity is reached in less than one year and some females may breed in their first season (Wiley 1980). Adults appear to live at least three years in the wild (Schwartz and Schwartz 1981, Merritt 1987). Mean home range size, using minimum convex polygon was 0.70 ha with no difference between males and females. Male and female home ranges did not overlap. Sixty nine percent of all dens were located at an ecotone (HaySmith 1995). Most foraging occurs less than 75 feet from the woodrat den. Stacy Smith, 17June05

Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Maritime Forest
Forest/Woodland	Atlantic Coastal Plain Southern Maritime Forest
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	East Gulf Coastal Plain Maritime Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
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	Mississippi Delta Maritime Forest
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southwest Florida Coastal Strand and Maritime Hammock
Rock Outcrop	Allegheny-Cumberland Sandstone Box Canyon and Rockhouse
Rock Outcrop	East Gulf Coastal Plain Dry Chalk Bluff
Rock Outcrop	Southern Appalachian Granitic Dome
Rock Outcrop	Southern Appalachian Montane Cliff
Rock Outcrop	Southern Appalachian Rocky Summit
Rock Outcrop	Southern Appalachian Spray Cliff
Rock Outcrop	Southern Interior Acid Cliff
Rock Outcrop	Southern Interior Calcareous Cliff
Rock Outcrop	Southern Interior Sinkhole Wall
Rock Outcrop	Southern Piedmont Cliff
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier

Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
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 Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	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 Florida Herbaceous Seep
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	Floridian Highlands Freshwater Marsh
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	South Florida Hardwood Hammock
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	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Wetlands	Western Highland Rim Seepage Fen

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