



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Cotton Mouse

Peromyscus gossypinus

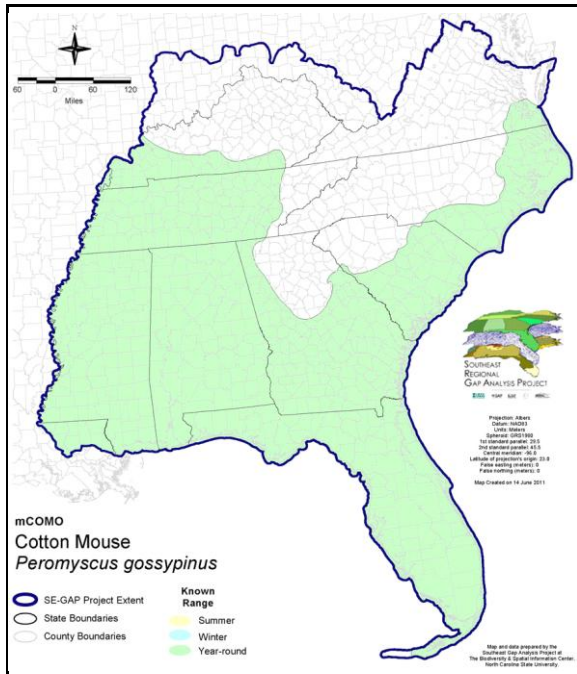
Taxa: Mammalian
Order: Rodentia
Family: Cricetidae

SE-GAP Spp Code: **mCOMO**

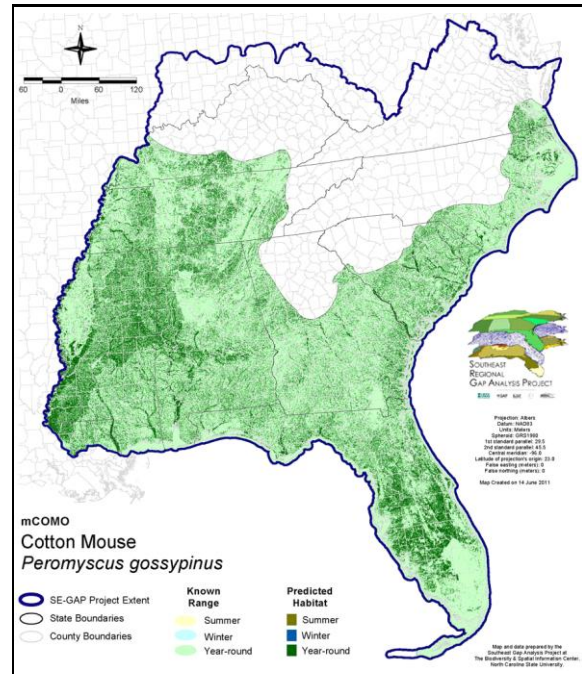
ITIS Species Code: 180279

NatureServe Element Code: AMAFF03080

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mCOMO_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (T), MS (Non-game species in need of management)

NS Global Rank: G5

NS State Rank: AL (S5), AR (S5), FL (S5), GA (S5), IL (SX), KY (S2), LA (S5), MO (S2), MS (S5), NC (S5), OK (S3), SC (SNR), TN (S5), TX (S5), VA (S3)

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	66,053.7	< 1	4,979.1	< 1	0.0	0	0.0	0
Status 2	133,705.6	< 1	35,776.4	< 1	0.0	0	695.2	< 1
Status 3	998.6	< 1	402,116.6	2	13,751.2	< 1	169,739.5	< 1
Status 4	13.0	< 1	< 0.1	< 1	0.0	0	5.2	< 1
Total	200,770.9	< 1	442,872.2	2	13,751.2	< 1	170,439.8	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	22,363.1	< 1	250.6	< 1	14,557.5	< 1
Status 2	0.0	0	16,713.0	< 1	7,799.3	< 1	19.7	< 1
Status 3	27,549.4	< 1	48,629.7	< 1	0.0	0	1,532.2	< 1
Status 4	0.0	0	1.0	7	0.0	0	0.0	0
Total	27,549.4	< 1	87,707.4	< 1	8,049.9	< 1	16,109.4	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	245.3	< 1	3.6	< 1	0.0	0
Status 2	0.0	0	914.6	< 1	315,697.9	1	0.0	0
Status 3	6,310.3	< 1	387,359.3	2	82,724.4	< 1	148,356.1	< 1
Status 4	0.0	0	0.0	0	20,005.7	< 1	8.7	< 1
Total	6,310.3	< 1	388,519.1	2	418,431.6	2	148,364.8	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2,313.5	< 1	0.0	0	0.0	0
Status 2	8,617.1	< 1	40,047.6	< 1	2.7	< 1	1,974.2	< 1
Status 3	0.0	0	14,375.2	< 1	8,433.5	< 1	93,268.2	< 1
Status 4	0.0	0	0.0	0	1,169.6	< 1	< 0.1	< 1
Total	8,617.1	< 1	56,736.2	< 1	9,605.7	< 1	95,242.4	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	110,766.2	< 1		
Status 2	0.0	0	0.0	8	561,963.4	3		
Status 3	417.8	< 1	0.0	0	1,405,561.7	8		
Status 4	19,308,401.2	88	30,145.1	< 1	19,379,743.1	89		
Total	19,308,819.0	88	30,145.3	< 1	21,458,034.5	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: Cotton mice have a preference for wetter habitats, especially bottomland hardwood forests, hammocks, and swamps (Wilson & Ruff 1999). However, this species also occupies a variety of other habitats including margins of cleared fields, old fields, salt savannas, palmetto thickets, dry hammocks, beach dunes, pine flatwoods, mixed pine-hardwood forests, pine-turkey oak, and sand pine scrub (Wolfe and Linzoy 1977, Whitaker and Hamilton 1998). Also in upland situations, rocky outcrops, ledges, cliffs and caves have know to be used (Whitaker and Hamilton 1998). Cotton mice commonly resides in thickets of dense underbrush within the surrounding forest (Whitaker and Hamilton 1998), but shelter and nesting sites can also be found under decaying logs or tree stumps, in hollow trees or tree cavities, in old cabins, in rubble or brush piles, and in ground burrows (Wolfe and Linzoy 1977, Brown 1997, Whitaker and Hamilton 1998).

Amy Silvano

Ecosystem Classifiers: Shcru/shrub Evergreen, Mixed, mesic, and maritime forests, maritime grasslands, flatwoods, swamps, bottomlands (no herb mods), rock outcrops and pasture/hay. Amy Silvano 24jun05

Elevation Mask: < 600m

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Pasture/Hay
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
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Northern Dune and Maritime Grassland
Coastal Dune & Freshwater Wetland	Atlantic Coastal Plain Southern Dune and Maritime Grassland
Coastal Dune & Freshwater Wetland	East Gulf Coastal Plain Dune and Coastal Grassland
Coastal Dune & Freshwater Wetland	Southwest Florida Dune and Coastal Grassland
Forest/Woodland	Atlantic Coastal Plain Central Maritime Forest
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	Central Appalachian Oak and Pine Forest
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
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	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Florida Peninsula Inland Scrub
Forest/Woodland	Mississippi Delta Maritime Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Southeast Florida Coastal Strand and Maritime Hammock
Forest/Woodland	Southern Coastal Plain Oak Dome and Hammock
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed 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 Mesic Forest
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
Rock Outcrop	Central Interior Calcareous Cliff and Talus
Rock Outcrop	East Gulf Coastal Plain Dry Chalk Bluff
Rock Outcrop	Southern Interior Acid Cliff
Rock Outcrop	Southern Interior Calcareous Cliff
Rock Outcrop	Southern Piedmont Cliff
Rock Outcrop	Southern Piedmont Granite Flatrock
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 Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
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	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
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory 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	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 Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp

CITATIONS: Boone, J. L., and J. Laerm. 1993. Cotton mice, *PEROMYSCUS GOSSYPINUS* LeConte (Rodentia:Cricetidae), in the Great Dismal Swamp and surround areas. *Brimleyana* 18:125-129.

Brown, L. N. 1997. A guide to the mammals of the southeastern United States. University of Tennessee Press, Knoxville. xiv + 236 pp.

Davis, W. B. 1978. The mammals of Texas. Texas Parks and Wildlife Dept., Bull. No. 41. 294 pp.

Frank, P. A., and J. N. Layne. 1992. Nests and daytime refugia of cotton mice (*Peromyscus gossypinus*) and golden mice (*Ochrotomys nuttalli*) in south-central Florida. *Am. Midl. Nat.* 127:21-30.

Hall, E. R. 1981. The Mammals of North America. Second edition. 2 Volumes. John Wiley and Sons, New York, New York. 1181 p.

- Handley, C. O., Jr. 1991. Mammals. Pages 539-616 in K. Terwilliger, coordinator. Virginia's endangered species: proceedings of a symposium. McDonald and Woodward Publishing Company, Blacksburg, Virginia.
- Humphrey, S. R. 1988. Density estimates of the endangered Key Largo woodrat and cotton mouse (*NEOTOMA FLORIDANA SMALLI* and *PEROMYSCUS GOSSYPINUS ALLAPATICOLA*), using the nested-grid approach. *J. Mammalogy* 69:524-531.
- Jones, J. K., Jr., et al. 1992. Revised checklist of North American mammals north of Mexico, 1991. *Occas. Pap. Mus., Texas Tech Univ.* (146):1-23.
- King, J. A. (ed.). 1968. Biology of *PEROMYSCUS* (Rodentia). *Am. Soc. Mamm. Spec. Publ. No. 2.* 593 pp.
- Kirkland, G. L., Jr., and J. N. Layne. 1989. Advances in the study of *PEROMYSCUS* (Rodentia). Texas Tech Univ. Press, Lubbock.
- Layne, J.N. 1974. Ecology of small mammals in a flatwoods habitat in north central Florida, with emphasis on the cotton rat (*Sigmodon hispidus*). *Am. Mus. Novitates* (2544):1-48.
- Lee, D. S., L. B. Funderburg Jr., and M. K. Clark. 1982. A distributional survey of North Carolina mammals. Occasional Papers of the North Carolina Biological Survey, No. 1982-10. North Carolina State. Mus. Nat. Hist., Raleigh, North Carolina. 72 pp.
- Lowery, G. H., Jr. 1974. The mammals of Louisiana and its adjacent waters. Louisiana State University Press, Baton Rouge. 565 pp.
- Pounelle, Gilt. 1952. Reproduction/early postnatal development of the cotton mouse, *Peromyscus gossypinus gossypinus*. *J. Mamm.* 33:1-20.
- Schwartz, Charles W., and Elizabeth R. Schwartz. 1981. The wild mammals of Missouri. University of Missouri Press, Columbia. 356 pp.
- 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.
- Whitaker, J.O. Jr. and W.J. Hamilton, Jr. 1998. Mammals of the eastern United States. Cornell Univ. Press, Ithaca, New York. 583 pp.
- Wilson, D. E., and D. M. Reeder (editors). 1993. Mammal Species of the World: a Taxonomic and Geographic Reference. Second Edition. Smithsonian Institution Press, Washington, DC. xviii + 1206 pp.
- Wilson, D.E. and S. Ruff. 1999. The Smithsonian book of North American mammals. Washington, DC, Smithsonian Inst. Press. 750 p.
- Wolfe, J.L. and A.V. Linzoy, 1977. *Peromyscus gossypinus*. *Am. Soc. Mamm., Mammalian Species No. 70.* 5 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

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The Biodiversity and Spatial Information
Center, North Carolina State University.