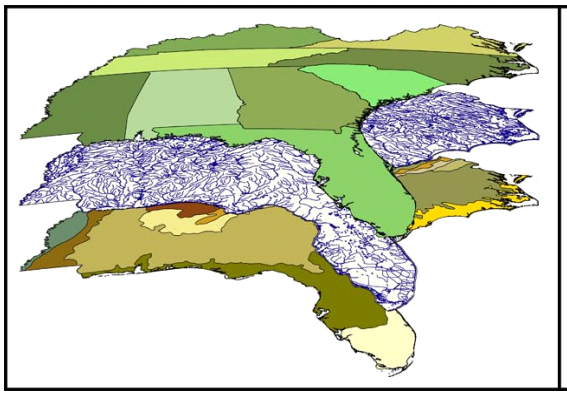


SOUTHEAST GAP ANALYSIS PROJECT

Species Modeling Report

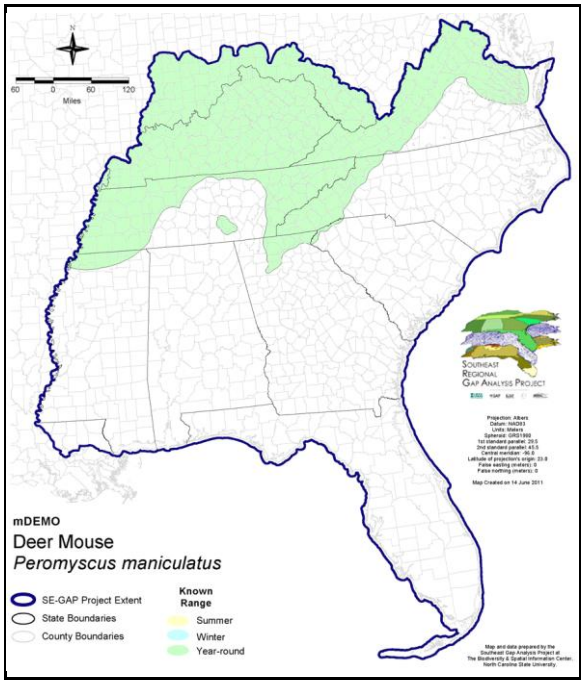
Deer Mouse

Peromyscus maniculatus

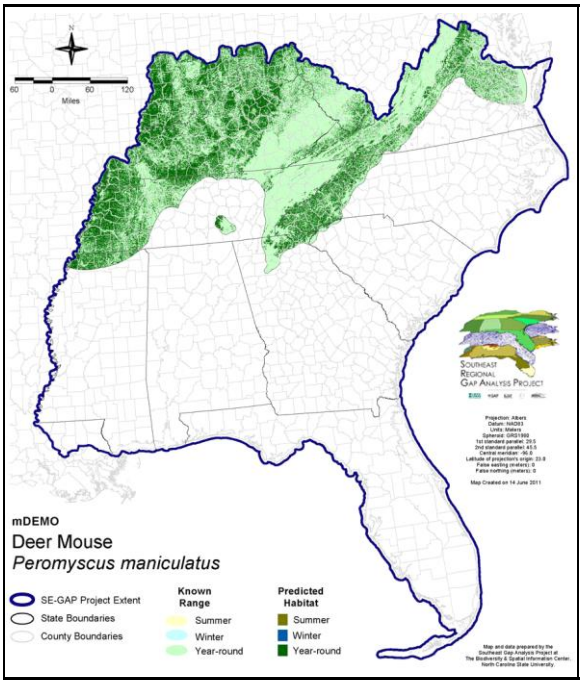
Taxa: Mammalian
Order: Rodentia
Family: Cricetidae

SE-GAP Spp Code: **mDEMO**
ITIS Species Code: 180276
NatureServe Element Code: AMAFF03040

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_mDEMO.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_mDEMO.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=mDEMO
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/mDEMO_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), MS (Non-game species in need of management), NY (U), UT (None), WI (SC/N), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (S4), AR (S5), AZ (S5), CA (S5), CO (S5), CT (S3), GA (S5), IA (S5), ID (S5), IL (S5), IN (S4), KS (S5), KY (S4), MA (S5), MD (S5), ME (S5), MI (S5), MN (SNR), MO (SNR), MS (SNR), MT (S5), NC (S5), ND (SNR), NE (S5), NH (S5), NJ (SU), NM (S5), NV (S5), NY (S5), OH (SNR), OK (S5), OR (S5), PA (S5), SC (SNR), SD (S5), TN (S5), TX (S5), UT (S5), VA (S5), VT (S5), WA (S5), WI (S3?), WV (S5), WY (S5), AB (S5), BC (S5), LB (S5), MB (S5), NB (S5), NF (SNA), NS (S5), NT (SNR), ON (S5), PE (S5), QC (S5), SK (S5), YT (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	584.6	< 1	17,318.5	< 1	0.0	0	0.0	0
Status 2	5,425.2	< 1	104,400.8	1	0.0	0	45.4	< 1
Status 3	306.8	< 1	555,671.0	5	970.4	< 1	35,520.8	< 1
Status 4	12.2	< 1	0.0	0	0.0	0	4.7	< 1
Total	6,328.8	< 1	677,390.3	7	970.4	< 1	35,570.8	< 1

	US Dept. of Energy		US Nat. Park Service			NOAA	Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	143,586.1	1	0.0	0	0.0	0
Status 2	0.0	0	3,895.5	< 1	16.5	< 1	0.0	0
Status 3	0.0	0	21,179.3	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	168,660.9	2	16.5	< 1	0.0	0

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	5,644.0	< 1	65,211.7	< 1	17.9	< 1
Status 3	11,743.1	< 1	13,244.7	< 1	12,791.8	< 1	5,207.8	< 1
Status 4	0.0	0	0.0	0	2,488.3	< 1	0.0	0
Total	11,743.1	< 1	18,888.7	< 1	80,491.8	< 1	5,225.7	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,853.0	< 1	0.0	0	0.0	0
Status 2	0.0	0	7,251.9	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	1,239.7	< 1	37.1	< 1
Status 4	0.0	0	0.0	0	170.1	< 1	0.0	0
Total	0.0	0	9,104.9	< 1	1,409.8	< 1	37.1	< 1

	Private Land - No Res.		Water			Overall Total	
	ha	%	ha	%		ha	%
Status 1	0.0	0	0.0	0		163,342.2	2
Status 2	0.0	0	0.0	0		191,908.8	2
Status 3	0.0	0	0.0	0		657,912.3	12
Status 4	8,621,219.0	85	5,982.3	< 1		8,632,352.7	85
Total	8,621,219.0	85	5,982.3	< 1		9,645,516.0	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: Deer Mice use a wide variety of upland and riparian habitats from open areas and brushlands to coniferous and deciduous forests. The range of this species extends southward from general forested habitats in the northeastern United States and Canada to the southeastern limit of its breeding range in the southern Appalachians, where, in North Carolina, it occurs on mountain slopes and peaks and in some foothill locations (Lee et al. 1982, Brown 1997).

Within the southern Appalachian region, the species is largely associated with cool, moist mixed conifer and deciduous forests or conifer forests (Brown 1997, Whitaker and Hamilton 1998), and also with deciduous forests which contain evergreen shrub thickets (Webster et al. 1985). Rocky, mossy conditions or areas with numerous downed and decaying logs and stumps are favorable nesting and denning sites (Webster et al. 1985).

P. m. bairdii prefers open weedfield, abandoned cropland, grasslands, sandy areas and any place cleared of trees (Barbour & Davis 1974, Whitaker & Hamilton 1998). --P.m. nubiterrae uses woodland, mixed woods, conifers, hardwoods. It is found in all habitats in higher mountian elevation and restricted to dense forests of birch, beech, and maple where forest floor stays cool and moist - farther down mountians (Barbout & Davis 1974). Amy Silvano 24jun05

HAND MODELING: Two separate models should be run for this species and then merged due to segregation of habitat usage by subsppecies P.m. nubiterrea and P.m. bairdii. ***For P.m. nubiterrae: run model within Allegheny-Cumberland Mountain and Appalachian Regions regions of range only, use landform and elevation restrictors on forested/woodland ecosystems, DO NOT include prairie, any Antropogenic, glade or uncosolidated shore classes in this model. Could not find documenting source for elevation parameters listed by NC-GAP & GA-GAP, Ky-GAP 820m & slope affinity (Barbour & Davis 1974). ****For P.m. bairdii (Prairie deer mouse) run model in Interior Plateau and Coastal Plain portions of range only. DO NOT include any Forested or Woodland ecosystems in model or landform and elevation parameters, use only open, disturbed, prairie ecosystems. ****Merge separate models together for final perdicted distribution of deer mouse. Amy Silvano 24jun05

Ecosystem Classifiers: hardwood, Mixed, evergreen mesic, cove, montane forests & Riparian within Moutianous regions of Allegheny-Cumberland Mountains and Appalachian Mountians for P.m. nubiterrea. Glades & Barrens, All disturbed, Ag, unconsolidated shore, and prairie within Interior low plateau & Coastal Plain for P.m. bairdii. Amy Silvano 24jun05

Customized Model: Hand Modeling: Two separate models should be run for this species and then merged due to segregation of habitat usage by subsppecies P.m. nubiterrea and P.m. bairdii. ***For P.m. nubiterrae: run model within Allegheny-Cumberland Mountain and Appalachian Regions regions of range only, use landform and elevation restrictors on forested/woodland ecosystems, DO NOT include prairie, any anthropogenic, glade or uncosolidated shore classes in this model. Could not find documenting source for elevation parameters listed by NC-GAP & GA-GAP, Ky-GAP 820m & slope affinity (Barbour & Davis 1974). ****For P.m. bairdii (Prairie deer mouse) run model in Interior Plateau and Coastal Plain portions of range only. DO NOT include any Forested or Woodland ecosystems in model or landform and elevation parameters, use only open, disturbed, prairie ecosystems. ****Merge separate models together for final predicted distribution of deer mouse. Amy Silvano 24jun05

Elevation Mask: > 600m and < 2500m

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Bare Sand
Anthropogenic	Bare Soil
Anthropogenic	Developed Open Space
Anthropogenic	Pasture/Hay
Anthropogenic	Row Crop
Anthropogenic	Successional Grassland/Herbaceous
Anthropogenic	Successional Grassland/Herbaceous (Other)

Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)
Anthropogenic	Successional Shrub/Scrub (Clear Cut)
Anthropogenic	Successional Shrub/Scrub (Other)
Anthropogenic	Successional Shrub/Scrub (Utility Swath)
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Interior Highlands Calcareous Glade and Barrens
Forest/Woodland	Central Interior Highlands Dry Acidic Glade and Barrens
Forest/Woodland	Nashville Basin Limestone Glade
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southeastern Interior Longleaf Pine Woodland
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood 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	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	East Gulf Coastal Plain Jackson Plain 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
Prairie	Western Highland Rim Prairie and Barrens
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Unconsolidated Shore (Lake/River/Pond)

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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.