

Level 4 Potential Conservation Area (PCA) Report

Name Manitou Forest

Site Code S.USCOHP*28267

IDENTIFIERS

Site ID 2757 Site Class PCA
Site Alias None

Network of Conservation Areas (NCA)

<u>NCA Site ID</u>	<u>NCA Site Code</u>	<u>NCA Site Name</u>
-		No Data

LOCATORS

Nation United States Latitude 390547N
State Colorado Longitude 1050542W

Quad Code Quad Name
39105-A1 Mount Deception

County
Teller (CO)

Watershed Code Watershed Name
10190002 Upper South Platte

SITE DESCRIPTION

Minimum Elevation	7,680.00 Feet	2,340.86 Meters
Maximum Elevation	7,880.00 Feet	2,401.82 Meters

Site Description

The Manitou Forest site is a valley site within the lower montane foothills zone in the northeast region of Teller County. The site encompasses montane grassland at lower elevation relative to the surrounding area and lies along the east bank of Trout Creek. Habitat of the site is characterized by large open areas of grasslands containing native bunchgrasses and dominated by Arizona fescue - mountain muhly (*Festuca arizonica* - *Muhlenbergia montana*). The narrow riparian area just outside the site along Trout Creek is dominated by willow shrubs and herbaceous vegetation. Uplands surrounding the site mainly include communities of ponderosa pine (*Pinus ponderosa*) woodland, but there are areas with sparse Douglas-fir (*Pseudotsuga menziesii*). The soils of the site along Trout Creek are deep, which is characteristic of the valley grasslands of the region. These deep valley soils provide perfect habitat for Gunnison's prairie dogs (*Cynomys gunnisoni*), three colonies of which inhabit the site. This complex of Gunnison's prairie dog occupies portions of the species range located in south-central Colorado and north-central New Mexico that the U. S. Fish and Wildlife Service designated as a candidate population for listing under the Endangered Species Act because threats within this part of the species range are significant and imminent (USFWS 2008). Local hydrology of the site is driven by soil characteristics, precipitation and infiltration. The natural hydrologic regime has been altered in the past by changes to vegetation and soil induced by grazing. Geology is dominated by sandstone formations of all ages (Tweto 1979).

Key Environmental Factors

The presence of Gunnison's prairie dogs at this site is attributable to the occurrence of unfragmented native montane grassland that has experienced only moderate disturbance. Ecological processes including climate, fire disturbance, and Gunnison's prairie dog (*Cynomys gunnisoni*) activity are key determinants of floristic characteristics of the site.

Climate Description

This site at an average elevation of approximately 7,780 feet experiences its coldest temperatures in January with an average maximum of 40.27 °F and a minimum of 13.21 °F. Warmest temperatures occur in July with an average maximum of 81.09 °F and an average minimum of 50.07 °F. Annual average maximum precipitation is 21.2 inches. July and August are the wettest months of the year with 2.88 and 3.19 inches of precipitation respectively. The driest months are December, January and February with 0.79, 0.56 and 0.74 inches of precipitation respectively. March through June and September through November have an intermediate amount of precipitation (Prism 2010).

Land Use History

No Data

Cultural Features

No Data

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SITE DESIGN

Site Map Y - Yes Mapped Date 01/04/2011

Designer Sovell, J.R.

Boundary Justification

The boundary encompasses the entire extent of the prairie dog complex, surrounding montane grassland, and the (mostly) unoccupied space among these colonies. The site is bounded on all sides by land that is unsuitable for use by prairie dogs because it is much too hilly and wooded. The boundary also includes unoccupied habitat outside of the edge of the prairie dog complex and is intended to allow for suitable areas into which the population can expand.

Primary Area 282.72 Acres 114.41 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

This site was drawn for an extant occurrence of the Gunnison's prairie dog (*Cynomys gunnisoni*). This occurrence is within the montane portion of the species population range, which occupies south-central Colorado and north-central New Mexico. The montane population of the Gunnison prairie dog is considered globally imperiled (G5T2) and is designated as a candidate population by the U. S. Fish and Wildlife Service under the Endangered Species Act.

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

No Data

Natural Hazard Comments

No Data

Exotics Comments

Portions of the montane grassland at this site include alien grasses including Kentucky bluegrass (*Poa pratensis*), smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*), and common timothy (*Phleum pratense*).

Offsite

No Data

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

Element	State Scientific Name	State Common Name	Global Rank	State Rank	Driving Site Rank
44176	<i>Cynomys gunnisoni</i> pop. 1	Gunnison's Prairie Dog - Montane Population	G5T2	S2	Yes

REFERENCES

Reference ID	Full Citation
198660	Culver, D.R., D. Malone, and A. Shaw. 2011. CNHP Final Report: Survey of Critical Biological Resources in Teller County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
198649	Prism Climate Group (Web Page). Accessed 2010. Spatial Climate Analysis. http://www.prism.oregonstate.edu/
192747	Tweto, O. 1979. Geologic Map of Colorado, 1:500,000. United States Geological Survey, Department of Interior, and Geologic Survey of Colorado, Denver, CO.
198679	U.S. Fish and Wildlife Service (USFWS). 2008. Endangered and Threatened Wildlife and Plants; 12-month Finding on a Petition To List the Gunnison's Prairie Dog as Threatened or Endangered. Federal Register 73(24): 6660-6684.

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ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 01/04/2011

Version Author Sovell, J.R.

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