

Level 4 Potential Conservation Area (PCA) Report

Name West Point

Site Code S.USCOHP*27122

IDENTIFIERS

Site ID 2483 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 370732N
State Colorado Longitude 1034428W

<u>Quad Code</u>	<u>Quad Name</u>
37103-A6	Pine Canyon
37103-A7	Branson SE
37103-B6	Miners Peak
37103-B7	Box Ranch

County

Las Animas (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
11040001	Cimarron headwaters
11020010	Purgatoire

SITE DESCRIPTION

Minimum Elevation	5,760.00	Feet	1,755.65	Meters
Maximum Elevation	6,800.00	Feet	2,072.64	Meters

Site Description

West Point occupies the mesa top, cliff band, side slopes, and lower alluvial slopes on the narrow western end of the Mesa de Maya. The flat mesa top supports a xeric tallgrass and mixed grass community mosaic including big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), blue grama (*Bouteloua gracilis*), galletta (*Pleuraphis jamesii*), prairie junegrass (*Koeleria macrantha*), and western wheatgrass (*Pascopyrum smithii*). The eroding layers of calcareous shale (Niobrara, Carlile, Graneros) and limestone (Greenhorn) exposed on the side slopes are dominated by sparse juniper woodlands and oak shrublands. The lower alluvial slopes are dominated by juniper woodlands and grasslands of mid and short grass species.

Key Environmental Factors

The top of the Mesa de Maya is formed by a basaltic caprock that resists erosion and has maintained the mesa while the surrounding landscape has been eroded away. Beneath this caprock layer are several layers of very calcareous shales and limestone (Tweto 1979). These calcareous shales and limestones heavily influence soil characteristics and hence vegetation. Soil types include the Richfield series and the Travissilla series. The Richfield series is described as very deep, well drained soils that formed in calcareous loess on tableland plains (SCS 1994). The Travissilla series is the basaltic outcrops that occur near the margin of the mesa top.

Climate Description

The Mesa de Maya is the tallest topographic feature in the area and likely receives more precipitation and experiences cooler annual temperatures than the surrounding high plains. Site specific data is not available for the top and side slopes of the Mesa de Maya and therefore values collected from the surrounding area are presented here. The climate on the southeastern plains that surround the site is semiarid and is typical of the high plains of southeastern Colorado where approximately 13 inches of precipitation is received annually. Most precipitation occurs between April and September, with May typically being the wettest month. Annually, climate of the area is characterized by cold winters and hot summers with winter temperatures as low as zero on at least several days and temperatures of over 100 °F occurring on many days in July and August (HPRCC 2008).

Land Use History

Land use in the area, and on the mesa, has historically been dominated by ranching of sheep and cattle since the mid 1800's (Friedman 1985). The several ranches that make up the ownership of the mesa continue cattle

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ranching as the sole land use.

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Cultural Features

Rock art found on and around the periphery of the mesa indicates that humans have historically occupied the area.

SITE DESIGN

Site Map Y - Yes Mapped Date 04/02/2008
Designer Stevens, J.E.

Boundary Justification

The boundary is drawn to contain the elements and the geological features that support them, and to protect the substrates from direct physical disturbance. The mesa top, rim rock, and upper erosional slopes are important to maintaining the habitat for the Rocky Mountain bladderpod (*Lesquerella calcicola*), xeric tall grass community, and other communities. Maintaining rates of erosion and surface disturbance within the natural range of variation will prevent degradation of the characteristics that support continued viability of the elements.

Primary Area 4,257.38 Acres 1,722.91 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The site includes a mixture of significant rare plants and plant communities. There is an excellent (A-ranked) occurrence of the globally vulnerable (G3/S3) Rocky Mountain bladderpod (*Lesquerella calcicola*) and an excellent (A-ranked) occurrence of the state imperiled (G4/S1) James' beard-tongue (*Penstemon jamesii*). Significant community occurrences include a good (B-ranked) example of the globally vulnerable (G3/S3) Great Plains mixed grass prairie (*Hesperostipa neomexicana*), a good (B-ranked) occurrence of the state rare (G4/S3) foothills pinon - juniper woodland (*Juniperus monosperma* / *Hesperostipa neomexicana*), a fair (C-ranked) occurrence of the globally imperiled (G2/S2) xeric tallgrass prairie (*Andropogon gerardii* - *Schizachyrium scoparium*) and an unranked occurrence of scarp woodlands (*Juniperus scopulorum* / *Cercocarpus montanus* - *Rhus trilobata*) whose global imperilment rank is unknown (GU/SU) at this time.

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

The current livestock grazing regimes appear compatible with the continued viability of the biological resources.

Natural Hazard Comments

No Data

Exotics Comments

No Data

Offsite

Additional occurrences of James' beard-tongue have been documented approximately one mile to the southeast of the site. Other undocumented occurrences likely occur on similar habitats nearby, but additional field work is necessary to verify their existence.

Information Needs

The xeric tallgrass prairie (*Andropogon gerardii* - *Schizachyrium scoparium*) and scarp woodland (*Juniperus scopulorum* / *Cercocarpus montanus* - *Rhus trilobata*) occurrences were not visited in 2007 due to inclement weather. Further surveys are needed to verify extent and quality of these occurrences.

ASSOCIATED ELEMENTS OF BIODIVERSITY

Element State ID	State Scientific Name	State Common Name	Global Rank	State Rank	Driving Site Rank
21031	<i>Lesquerella calcicola</i>	Rocky Mountain bladderpod	G3	S3	Yes
24856	<i>Juniperus scopulorum</i> / <i>Cercocarpus montanus</i> Woodland	Foothills Pinyon-Juniper Woodlands/Scarp Woodlands	G2	S2	No

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24870	<i>Andropogon gerardii</i> - <i>Schizachyrium scoparium</i> Western Great Plains Herbaceous Vegetation	Xeric Tallgrass Prairie	G2?	S2	No
22673	<i>Hesperostipa neomexicana</i> Herbaceous Vegetation	Great Plains Mixed Grass Prairie	G3	S3	Yes
24700	<i>Juniperus monosperma</i> / <i>Hesperostipa</i> <i>neomexicana</i> Woodland	Foothills Pinyon-Juniper Woodlands	G4	S3	No
20356	<i>Penstemon jamesii</i>	James' beard-tongue	G4	S1	No

REFERENCES

Reference ID	Full Citation
195120	Friedman, Paul D. 1985. Final Report of History and Oral History Studies of the Fort Carson Pinon Canyon Maneuver Area, Las Animas, Colorado. USDI. National Park Service, Interagency Archaeological Services Branch, Rocky Mountain Regional Office, Denver, CO.
195121	HPRCC. 2008. High Plains Regional Climate Center Web Page. Based on data from automated weather stations operated by Colorado for southeastern Colorado area. High Plains Regional Climate Center Web Page: < http://www.hprcc.unl.edu >
195097	Stevens, J., J. Sovell, D. Culver, K. Decker, L. Grunau, A. Lavender, and C. Gaughan. 2008. Final Report: Southeastern Colorado Survey of Critical Biological Resources 2007. Colorado Natural Heritage Program, Fort Collins, CO.
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.
193653	U.S. Department of Agriculture, Soil Conservation Service. 1994. State Soil Geographic (STATSGO) database for Colorado. Fort Worth, TX.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date	04/02/2008
Version Author	Stevens, J.E.

Disclaimer

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