

Level 4 Potential Conservation Area (PCA) Report

Name Jesus Mesa

Site Code S.USCOHP*1263

IDENTIFIERS

Site ID 511 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 370210N
State Colorado Longitude 1032635W

Quad Code Quad Name

37103-A4 Jesus Canyon
37103-A5 Cobert Mesa North
37103-A3 Dennis Canyon

County

Las Animas (CO)

Watershed Code Watershed Name

11040001 Cimarron headwaters

SITE DESCRIPTION

Minimum Elevation 5,000.00 Feet 1,524.00 Meters
Maximum Elevation 5,900.00 Feet 1,798.00 Meters

Site Description

Jesus Mesa is a southward extension of Mesa de Maya. It is distinguished from the Mesa de Maya by the 500 ft cliffs of Jesus Canyon on the east and the broad Cobert Canyon to the west. The top of the mesa is an extensive, flat, short- to mid- grass prairie wherein exists a large playa. The edges of the basalt-capped mesa form broken cliffs which quickly become more gradually sloped grasslands and shrublands. The largely inaccessible slopes are covered with a rich grassland or shrubland community. Jesus Canyon is a rugged canyon with permanent pools of water containing fishes. The head of this canyon is extremely rugged and heavily vegetated.

Key Environmental Factors

The dominant ecological process is the presence of water, especially in flash flooding. Wind and livestock grazing also play a significant role.

Climate Description

Patterns of rainfall dominate the climatic factors of this site. Rainfall is sporadic with most occurring during the summer "monsoon" and during the winter snow season. Dry thunderstorms are common in the summer and consequently fire evidence is also common. Winters are cool to cold with high winds common.

Land Use History

Indigenous peoples have utilized the Mesa de Maya area for at least 5,000 years. Indian relics have been identified throughout the area. In the late 18th and early 19th centuries, the Spanish (Mexican) citizens colonized the lands around the Mesa. Evidence of their adobe homes are prevalent. With the immigration of Americans into the area came small scale farming on homesteads. Finally, with drought and economic difficulties, farming abated and livestock production began. Today, livestock grazing (mostly cattle) is the sole use of the area.

Cultural Features

Numerous historic and archaeological sites occur on Jesus Mesa. Poorly studied, these sites are easily located and observed. The time period covered is early indigenous to the homesteading period.

SITE DESIGN

Site Map P - Partial Mapped Date 09/30/1995
Designer Pague, C.A.

Boundary Justification

The boundary includes the entire mesa and its slopes down to where they begin leveling out. The site also includes Jesus Canyon. The boundary onto the Mesa de Maya goes beyond the headwaters of Jesus Creek

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to include a significant buffer toward the mesa's peak.

Primary Area 14,850.08 Acres 6,009.64 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

The site supports a good (B-ranked) occurrence of a globally imperiled (G2?/S2) xeric tallgrass prairie (*Andropogon gerardii* - *Schizachyrium scoparium*). In addition, there are multiple excellent (A-ranked) and good (B-ranked) quality occurrences of globally vulnerable and state rare communities and plants.

Other Values Rank V2 - High values

Other Values Comments

The ranch is large enough to have high open space values and to contain significant populations (probably viable) of many common species of plants and animals. Wildlife is abundant and varied at this site.

LAND MANAGEMENT ISSUES

Land Use Comments

The current land use is for livestock grazing and supporting hay production. No hay production occurs on Jesus Mesa. Grazing is restricted to areas where water development occurs or where natural water persists. Cattle tanks are present in several places, but the main water development is that of windmill pumps. There are two roads cut onto the mesa, one from Jesus Canyon and the other, the main road, from Cobert Canyon.

Natural Hazard Comments

Steep cliffs and broken rock occur on the slopes of the mesas. Rattlesnakes are seen but are not more common than elsewhere. The roads can be rutted and have numerous fallen rocks on them, particularly after a hard rain. The roads can be quite slick after rains.

Exotics Comments

Some cheatgrass and Japanese brome occur; however, the density is very low. Most of the other weeds are merely native increasers. Most exotics are in areas which have been traditionally grazed hard by cattle.

Offsite

The adjacent landscape is similarly utilized for livestock production for many miles around. Small amounts of hay production occurs along the Dry Cimarron River. Fences are complex and some are locked. There is a elk-ranching operation adjacent to the site.

Information Needs

An understanding of fire impacts on the landscape ecology would be useful. More inventory for state-rare elements is warranted, but most importantly is the inventory of natural community variety and condition. Comparisons with other similar occurrences elsewhere are needed. Some of this is occurring with a planning exercise of the entire Mesa de May area. That effort is being led by Oklahoma.

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global</u>	<u>State</u>	<u>Driving</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Rank</u>	<u>Rank</u>	<u>Site Rank</u>
20884	<i>Cheilanthes standleyi</i>	Standley's cloak fern	G4	S1	No
18269	<i>Sarcostemma crispum</i>	twinevine	G4G5	S1	No
20818	<i>Nolina texana</i>	Texas beargrass	G5	S1	No
18708	<i>Asclepias macrotis</i>	long-hood milkweed	G4	S2	No
20884	<i>Cheilanthes standleyi</i>	Standley's cloak fern	G4	S1	No
23003	<i>Sapindus drummondii</i>	soapberry	G5T5	S1	No
24870	<i>Andropogon gerardii</i> - <i>Schizachyrium scoparium</i> Western Great Plains Herbaceous Vegetation	Xeric Tallgrass Prairie	G2?	S2	Yes
24991	<i>Bouteloua eriopoda</i> - <i>Pleuraphis jamesii</i> Herbaceous Vegetation	Shortgrass Prairie	G3	SU	No
24967	<i>Schizachyrium scoparium</i> - <i>Bouteloua curtipendula</i> Western Great Plains Herbaceous Vegetation	Great Plains Mixed Grass Prairies (Sandstone/Gravel Breaks)	G3	S2	No
19849	<i>Nolina texana</i> Shrubland	Desert Shrubland	GU	S1	No
40630	<i>Cercocarpus montanus</i> / <i>Hesperostipa neomexicana</i> Shrubland	Foothills Shrubland	G2G3	S2S3	No

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REFERENCES

Reference ID

Full Citation

198519

Rondeau, R.J., J.R. Sovell, J.E. Stevens, D. Clark and L. Grunau. 2010. Final Report: Southeast Colorado Survey of Critical Biological Resources 2009. Addendum to the 2007 Survey. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 09/30/1995

Version Author Pague, C.A.

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