

Level 4 Potential Conservation Area (PCA) Report

Name Smith Hollow

Site Code S.USCOHP*27055

IDENTIFIERS

Site ID 2472 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 373355N
State Colorado Longitude 1042613W

Quad Code Quad Name
37104-E4 Little Dome

County

Las Animas (CO)

Watershed Code Watershed Name
11020007 Apishapa

SITE DESCRIPTION

Minimum Elevation	5,560.00 Feet	1,694.69 Meters
Maximum Elevation	5,760.00 Feet	1,755.65 Meters

Site Description

The topography of Smith Hollow and the surrounding area is striking and includes hills covered in juniper woodland that are imbedded in lower elevation areas of shortgrass prairie. There is a drainage at lower elevation that flows through the shortgrass prairie with rabbitbrush (*Chrysothamnus*), grasses, and forbs. There are three developed livestock ponds within the drainage that attract numerous species of butterfly. Within the juniper, the understory includes a great deal of rock and bare ground with sideoats gramma (*Bouteloua curtipendula*), other grasses, and numerous forbs including buckwheat (*Eriogonum* spp.), which are the hostplants for the Colorado blue butterfly (*Euphilotes rita coloradensis*) that inhabits the site. Buckwheat also occurs within the drainage. Occupation of the area dates back 100's of years and the site is currently used for ranching. Vegetation is approximately 20% pinon - juniper, 20% grassland or mixed grasses/forbs/cacti, 20% shrubland or shrubs with the rest covered in bare ground and rocks.

Key Environmental Factors

The Colorado blue is reported to inhabit undisturbed prairies, implying a lack of tolerance for disturbance. Prairie habitat within the range of the butterfly has been widely altered and remnants are threatened by suburban development, weed invasion, removal of livestock, and agricultural conversion. The larval host plant actually depends on some level of grazing to prevent competition from more aggressive plants.

Climate Description

The climate is semi-arid with precipitation averaging about 14 inches per year. About half of the yearly precipitation is received during the months of May through August. Winter average minimum temperatures are in the range of 16-20 °F, and summer average maximum temperatures in July and August are near or above 90 °F (HPRCC 2008).

Land Use History

The area has been inhabited by people for as long as 5,000 years, particularly areas further east within the Purgatoire Canyon. Apparently many native tribes lived in or visited the area. The site is within the vicinity of the Santa Fe Trail and by the early 1840s traders and Spanish emigres colonized the canyons and brought ranching to the area. Ranching was the dominant force until 1909 when dry-land-farming homesteaders fenced the land. The 1920s and 1930s brought the "Dust Bowl" and many abandoned their homes, leaving the area to sheep and cattle ranchers. While sheep grazing was discontinued in the 1950s, livestock continued to dominate. The creation of the Pinon Canyon Maneuver Site in the 1980s meant the end of grazing over a large portion of the area, while private lands continue to be grazed (Friedman 1985).

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 03/26/2008

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Designer Sovell, J.R.

Boundary Justification

The boundary is intended to adequately protect areas currently occupied by Colorado blue (*Euphilotes rita coloradensis*) as well as adjacent areas of suitable habitat which have potential for colonization. The long-term persistence of *E. rita coloradensis* populations will be favored by the protection of an area larger than the area occupied by the occurrence in any one year. Habitat heterogeneity may be related to long-term persistence in butterflies, a habitat component that is enhanced by a large protected area. Within this site, numerous terrace benches, low ridges, and drainages support a mosaic of habitat patches which have potential for *E. rita coloradensis* colonization.

Primary Area 477.67 Acres 193.31 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

The site supports a good (B-ranked) occurrence of the globally imperiled (G3G4T2T3/S2) butterfly, Colorado blue (*Euphilotes rita coloradensis*).

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

Ranching is the current use of the land and cattle grazing currently occurs within the site. There are three developed cattle ponds within the drainage that makes up a portion of this site and these ponds attract numerous butterflies to them.

Natural Hazard Comments

The juniper uplands include steep slopes and cliffs and safety should be considered when hiking within these areas.

Exotics Comments

Tamarisk (*Tamarix pentandra*) occurs at the cattle ponds, but is not a threat to the viability of the Colorado blue population.

Offsite

No Data

Information Needs

Additional information on the size of the Colorado blue populations would assist with management of the population.

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>
18074	<i>Euphilotes rita coloradensis</i>	Colorado Blue	G3G4T2T3	S2	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
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.

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ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 03/26/2008

Version Author Sovell, J.R.

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