

# Level 4 Potential Conservation Area (PCA) Report

Name South and Averson Canyons

Site Code S.USCOHP\*28118

## IDENTIFIERS

Site ID 2696 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 374503N  
State Colorado Longitude 1042002W

### Quad Code Quad Name

37104-F3	Jones Lake Spring
37104-F4	South Rattlesnake Butte
37104-G4	North Rattlesnake Butte
37104-G3	Myers Canyon

### County

Las Animas (CO)

### Watershed Code Watershed Name

11020007	Apishapa
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## SITE DESCRIPTION

Minimum Elevation	5,240.00	Feet	1,597.15	Meters
Maximum Elevation	5,980.00	Feet	1,822.70	Meters

### Site Description

The topography of South and Averson Canyons is striking with red rock cliffs and deep canyon walls. Human occupation of the area dates back 100's of years and the site is currently used for ranching. The site includes the canyons as well as the juniper woodland that extends from the canyon rim for a few 100 meters out onto the escarpment. Within the juniper, the understory includes a great deal of rock and bare ground with sideoats grama (*Bouteloua curtipendula*), other grasses, and numerous forbs. There is a shrub intermediate layer of mountain mahogany (*Cercocarpus montanus*) both on the escarpment and the steep sides of the canyon. The ground cover also includes pasture sage (*Artemisia frigida*), broom snakeweed (*Gutierrezia sarothrae*), and cactus (*Opuntia*). The shrub layer and juniper forest create suitable habitat for the rare triploid Colorado checkered whiptail (*Aspidoscelis neotesselata*). Vegetation is approximately 20% 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 juniper woodland is the key environmental characteristic for the triploid Colorado checkered whiptail. Maintaining the ecological integrity of the woodland is important for this lizard. Changes to the fire regime that cause increases in fire frequency, resulting in reduced cover of junipers, would be detrimental to the whiptail.

### 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 homesteaders partaking in dryland farming 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, cattle ranching continues to dominate the landscape. 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).

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## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 01/26/2010

Designer Sovell, J.R.

## Boundary Justification

The boundary includes South and Averson Canyons, their slopes, and most of the juniper woodland in the vicinity. The boundary is intended to adequately protect areas currently harboring the triploid Colorado checkered whiptail as well as adjacent areas of suitable habitat that are also probably occupied by the whiptail. Ecological processes that begin outside of the boundary are critical to the long-term ecological health of the site. Boundary was refined using Landsat ETM+ satellite imagery and 25m Colorado Vegetation Classification data (CDOW 2001-2003).

Primary Area 8,919.01 Acres 3,609.41 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

## Biodiversity Significance Comments

The site contains a good (B-ranked) occurrence of the globally imperiled (G2G3/S2) triploid Colorado checkered whiptail (*Aspidoscelis neotesselata*) and an excellent (A-ranked) occurrence of a state imperiled (GU/S1) *Rhus trilobata* - *Philadelphus microphyllus* shrubland.

Other Values Rank V4 - No known values

## 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.

## Natural Hazard Comments

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

## Exotics Comments

No Data

## Offsite

No Data

## Information Needs

Additional surveys are needed throughout the area to determine the distributional extent of the triploid Colorado checkered whiptail. More information on the dynamics of juniper (*Juniperus monosperma*) woodlands and how they are affected by fire suppression are needed.

## 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>
20191	<i>Aspidoscelis neotesselata</i>	Triploid Colorado Checkered Whiptail	G2G3	S2	Yes
24931	<i>Rhus trilobata</i> - <i>Philadelphus microphyllus</i> Shrubland	Skunkbush-Little Leaf Mock Orange Shrubland	GU	S1	No

## REFERENCES

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<u>Reference ID</u>	<u>Full Citation</u>
193570	Colorado Division of Wildlife. 2001-2003. Basinwide Vegetation Classification. Online at <a href="http://www.ndis.nrel.colostate.edu">http://www.ndis.nrel.colostate.edu</a> .
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: < <a href="http://www.hprcc.unl.edu">http://www.hprcc.unl.edu</a> >
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 01/26/2010

Version Author Sovell, J.R.

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