

Level 4 Potential Conservation Area (PCA) Report

Name East Paradox Creek

Site Code S.USWRO1*361

IDENTIFIERS

Site ID 66 Site Class PCA
Site Alias Paradox Valley

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 381938N
State Colorado Longitude 1085006W

Quad Code Quad Name

38108-C7 Davis Mesa
38108-D7 Red Canyon

County

Montrose (CO)

Watershed Code Watershed Name

14030004 Lower Dolores
14030002 Upper Dolores
14030003 San Miguel

SITE DESCRIPTION

Minimum Elevation	5,100.00	Feet	1,554.48	Meters
Maximum Elevation	6,900.00	Feet	2,103.12	Meters

Site Description

The East Paradox Creek site is located west of Naturita, Colorado north of Highway 90 as it travels through Paradox Valley. Geologic formations are Hermosa, Moenkopi, Cutler, Kayenta, Chinle, and Quaternary alluviums. The site is underlain by four different soil compositions including the Mikim composition (ustic torriorthents, fine-loamy, mesic, mixed calcareous soils); Palmer composition (ustollic haplargids, coarse-loamy, mixed, mesic soils); and the Zyme composition (ustic torriorthents, clayey, montmorillonitic calcareous, mesic shallow soils). Dark red soils that are apparently derived from the Chinle Formation provide the habitat of the Payson lupine. The dominant vegetation in the upper part of the site is pinon - juniper woodland, grading into big sagebrush and grassland at the lower part. Parallel drainages run down from the cliffs, with openings of a very high quality needle-and-thread grassland between them. An excellent occurrence of the Payson lupine is found in the pinon and juniper woodland at the base of steep sandstone cliffs. The plants occur on soils derived from the Chinle Formation, on the bottoms and sides of the washes. These soils are notably different from those at the other major location of the lupine near Naturita. Growing with the lupine, and often farther downstream in the washes are very large populations of the Paradox breadroot. Although some areas have been degraded and have significant amounts of cheatgrass, the drainages with the lupine and breadroot are free of exotic species. Native species that are associated with the rare plants include wallflower, yellow cat's-eye, rock cress, three-awn, twin bladderpod, snakeweed, Easter daisy, and prickly-pear cactus. There are well developed cryptogamic crusts between plants. This area has a number of occurrences of animal species with conservation significance the rarest of which are the roundtail chub and flannelmouth sucker. Nesting Peregrine Falcons also occur at this site. A pair of adult falcons has consistently fledged young throughout the 1990's, including 1999. Also within this site are populations of the Plateau striped whiptail.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

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SITE DESIGN

Site Map P - Partial

Mapped Date 02/07/2000

Designer Lyon, M.J.

Boundary Justification

The boundary encompasses both the lower elevation shrublands and the higher pinon - juniper community on the north side of Paradox Valley, the river itself containing the chub and sucker populations, as well as the cliff faces that provide nesting habitat for Peregrine Falcons. It encompasses the known occupied sites of Payson lupine and Paradox breadroot, while allowing adequate additional habitat for these species to move or expand over time. The site does not allow for all of the needs such as foraging area for the bird species.

Primary Area 7,856.66 Acres

3,179.49 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

The East Paradox Creek site has the world's best occurrence known of Payson lupine (*Lupinus crassus*), a plant that is globally imperiled (G2/S2), and known only from Colorado. It also contains a good (B-ranked) occurrence of needle-and-thread Great Basin herbaceous vegetation. In addition, there are two excellent (A-ranked) occurrences of the Paradox breadroot (*Pediomelum aromaticum*), a plant that is considered to be globally vulnerable and rare in Colorado (G3/S2). Cold desert shrublands with fourwing saltbush and galleta were found to be in good condition on lower slopes in the site, while mesic western slope pinon - juniper woodlands with Utah serviceberry were in fair condition. Both of these plant communities are of unknown status in Colorado, and need more research. A fair occurrence of another grassland plant association with blue grama and galleta was interspersed with the shrub community. American Peregrine Falcons were also documented at the site.

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

No Data

Offsite

No Data

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
18466	<i>Lupinus crassus</i>	Payson lupine	G2	S2	Yes
24857	<i>Hesperostipa comata</i> Great Basin Herbaceous Vegetation	Western Slope Grasslands	G2G4	S2	No
24556	<i>Pinus edulis</i> - (<i>Juniperus monosperma</i> , <i>Juniperus osteosperma</i>) / <i>Hesperostipa comata</i> Woodland	Xeric Western Slope Pinyon-Juniper Woodlands	G2?	S2	No
18115	<i>Pediomelum aromaticum</i>	Paradox breadroot	G3	S2	No
24511	<i>Bouteloua gracilis</i> - <i>Pleuraphis jamesii</i> Herbaceous Vegetation	Shortgrass Prairie	G2G4	S3	No
24984	<i>Juniperus osteosperma</i> Woodland	Mesic Western Slope Pinyon-Juniper Woodlands	G5	SU	No
18584	<i>Aspidoscelis velox</i>	Plateau Striped Whiptail	G5	S4	No
24857	<i>Hesperostipa comata</i> Great Basin Herbaceous Vegetation	Western Slope Grasslands	G2G4	S2	No
21725	<i>Falco peregrinus anatum</i>	American Peregrine Falcon	G4T4	S2B	No

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24943 *Atriplex canescens* / *Pleuraphis jamesii* Shortgrass Prairie G3G4 SU No
Shrubland

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
192792	Lyon, P. and J. Sovell. 2000. Final Report: A Natural Heritage Assessment, San Miguel and Western Montrose Counties, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

Original site design by Loar, A.M. 1996-09-25.

VERSION

Version Date	02/07/2000
Version Author	Lyon, M.J.

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