

Level 4 Potential Conservation Area (PCA) Report

Name Owl Canyon

Site Code S.USCOHP*1370

IDENTIFIERS

Site ID 1410 Site Class PCA
Site Alias Pinyon Canyon

Network of Conservation Areas (NCA)

<u>NCA Site ID</u>	<u>NCA Site Code</u>	<u>NCA Site Name</u>
456	S.USCOHP7*3230	Laramie Foothills

LOCATORS

Nation United States Latitude 404701N
State Colorado Longitude 1051030W

Quad Code Quad Name

40105-G2 Livermore

County

Larimer (CO)

Watershed Code Watershed Name

10190007 Cache La Poudre

SITE DESCRIPTION

Minimum Elevation	5,840.00	Feet	1,780.03	Meters
Maximum Elevation	6,200.00	Feet	1,889.76	Meters

Site Description

The site is comprised of a pinon pine (*Pinus edulis*) grove occurring on a sandstone hogback underlain by limestone. The tree layer of vegetation is dominated by pinon pine and Rocky Mountain juniper (*Juniperus scopulorum*) with mountain mahogany (*Cercocarpus montanus*) common in the understory. This pinon grove is disjunct from the primary geographic range, being 150 miles north of the northernmost continuous pinon stand east of the continental divide. The site is adjacent to a ponderosa pine ecological system and forms a mosaic with lower montane/foothills shrubland ecological system dominated by mountain mahogany and foothills grassland openings with needle and thread grass (*Stipa comata-Bouteloua gracilis*) plant association. Active mining occurs to the east and south of the site and has greatly reduced the total acreage of the natural community. The state rare purple cliff-brake fern has been found on cliffs within the pinon grove. Two historical plant element occurrence records are known from Owl Canyon, Rocky Mountain phacelia (*Phacelia denticulata*, last observed 1949) and prairie goldenrod (*Unamia alba*, last observed 1918). A globally imperiled tortricid moth (*Decodes stevensi*), was documented at Owl Canyon in 1977; 163 individuals were trapped inadvertently during a pheromone trapping study designed to study another group of moths. This is the only time this moth has been documented anywhere and nothing is known about its biology, distribution, or abundance. The general area is quite scenic and has been discovered by the growing population of the Colorado Front Range. The regional economy and developing transportation infrastructure has led to increased development with many surrounding ranches being divided into 35-acre parcels. This is particularly noticeable today on Owl Canyon Road.

Key Environmental Factors

The key climatic processes that effect this site includes a dry climate (i.e. the area is in a rain shadow of the Rocky Mountains), cool summers, cold winters, and modest amounts of snow. There are severe thunderstorms and winds in appropriate seasons.

Climate Description

Summers are cool and winters cold, but even in winter there are many warm days. Winds are regularly strong and sometimes severe. Downslope winds often reach greater than 80 mph at any season. Precipitation is low and mostly occurs as thunderstorms and occasional large snowfalls.

Land Use History

The plains and foothills between Ft. Collins, Colorado and Laramie, Wyoming were used by Native Americans for at least 5,000 years. Buffalo wallows and jumps are not uncommon, suggesting that bison and other ungulates were common in the area. No doubt, French and American trappers conducted their business from at least the early 19th century (Lavender 1954). The road from Laramie to Denver was a popular travel route and probably facilitated the early removal of native grazing animals and indigenous peoples. Although the Cheyenne tribes frequented the area until the middle 19th century, by the late 1800's, ranching was the primary land use. Livestock operations continue as the dominant landscape use today. Mining is a common

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activity. At this site the limestone ridges produce excellent parent material and extensive surface mining has resulted. The general area is quite scenic and has been discovered by the growing population of the Colorado Front Range. The regional economy and developing transportation infrastructure has led to increased development with many surrounding ranches being divided into 35 acre parcels. This is particularly noticeable today on Owl Canyon Road.

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 01/25/2005

Designer Neid, S.L.

Boundary Justification

Includes the natural community occurrences and all adjacent slopes west to Highway 287. The entire State Natural Area is included within.

Primary Area 1,593.43 Acres

644.84 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The site contains a good to fair (BC-ranked) occurrence of a globally imperiled (G2/S2) foothills shrubland, mountain mahogany/needle-and-thread grass (*Cercocarpus montanus*/*Stipa comata*) shrubland. The site also supports the most northern occurrence of pinon pine/mountain mahogany (*Pinus edulis*/*Cercocarpus montanus*) woodland in the arid west and a fair (C-ranked) occurrence of a globally secure (G5) grassland, needle and thread grass-blue grama (*Stipa comata*/*Bouteloua gracilis*).

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

Much of the site is designated by the Colorado Natural Areas Program as a State Natural Area. There is little onsite activity; however, adjacent landuses are more problematic. The limestone operation south and east of the site (on the opposite side of the hogback) is extensive. The owners/managers have been cooperative in the protection of the western slope, but continue to expand the mining operation.

Natural Hazard Comments

There are cliffs and loose rocks at this site. In addition, rattlesnakes are regularly observed in this habitat.

Exotics Comments

No Data

Offsite

U. S. Highway 287 borders the western edge of the site. A large mining operation exists on the east side of the hogback. The entire site is surrounded by private lands

Information Needs

No Data

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>
24531	<i>Cercocarpus montanus</i> / <i>Hesperostipa comata</i> Shrubland	Mixed Foothill Shrublands	G2	S2	Yes
24787	<i>Stipa comata</i> - <i>Bouteloua gracilis</i> Herbaceous Vegetation	Montane Grasslands	G5	S2S3	No
24830	<i>Pinus edulis</i> - <i>Juniperus</i> spp. / <i>Cercocarpus</i> <i>montanus</i> Woodland	Mesic Western Slope Pinyon-Juniper Woodlands	G5	S4	No

REFERENCES

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Full Citation

192692	Doyle, G.A., S.L. Neid and R.J. Rondeau. 2005. Final Report: Survey of Critical Biological Resources, Larimer County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
192829	Lavender, David. 1954. Bent's Fort. Doublday and Company, Inc., Garden City, NY.
192766	Stevens, R.E., C. Sartwell, T.W. Koerber, J.A. Powell, G.E. Daterman, and L.L. Sower. 1985. Forest Tortricids trapped using Eucosma and Rhyacionia synthetic sex attractants. Journal of the Lepidopterists' Society. 39(1), 1985, 26-32.

ADDITIONAL TOPICS

Additional Topics

Original site design by Pague, C.A. 1996-01-12.

VERSION

Version Date 01/25/2005

Version Author Neid, S.L.

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