

Level 4 Potential Conservation Area (PCA) Report

Name Lykins Gulch

Site Code S.USCOHP*580

IDENTIFIERS

Site ID 955 Site Class PCA
Site Alias Potato Hill

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 400946N
State Colorado Longitude 1051550W

Quad Code Quad Name

40105-B2 Hygiene
40105-B3 Lyons

County

Watershed Code Watershed Name

10190005 St. Vrain

SITE DESCRIPTION

Minimum Elevation	5,280.00 Feet	1,609.34 Meters
Maximum Elevation	6,496.00 Feet	1,979.98 Meters

Site Description

This site contains the native grassland areas on slopes of the dissected, rolling hills below the foothills east of the North Foothills Highway west of Longmont. It is generally within the broad, flat Denver Basin where it abuts the foothills in northern Boulder County. Landforms are generally benches, terraces, and pediments with various erosional downcutting from ephemeral tributary streams of Lykins Gulch. The underlying bedrock of the area is Pierre shale. Surficial exposures of Pierre shale are interspersed among a mosaic of Quaternary alluvium gravel deposits. The various Quaternary gravels include Verdos Alluvium that formed as a broad veneer over the flat shale pediments and more recent (Pleistocene and Holocene) terrace deposits within the drainage systems. Soils are clays and clay loams as well as gravelly or cobbly clay or sandy loams, reflecting their bedrock origins. Grasslands dominate the landscape although the native expression is fragmented by agricultural fields and pockets of low-intensity residential development. The needle-and-thread (*Hesperostipa comata*) Colorado Front Range grassland forms the matrix expression in this landscape and has inclusions of New Mexico feathergrass (*Hesperostipa neomexicana*) grassland and small areas of mountain mahogany (*Cercocarpus montanus*) shrubland embedded within it. The needle-and-thread grassland is generally dominated by needle-and-thread or codominated with blue wildrye (*Elymus glaucus*). Additional graminoids are numerous and include native bluegrass (*Poa agassizensis*), squirreltail (*Elymus elymoides*), junegrass (*Koeleria macrantha*), Indian ricegrass (*Achnatherum hymenoides*), blue grama (*Bouteloua gracilis*), sideoats grama (*Bouteloua curtipendula*), and little bluestem (*Schizachyrium scoparium*). Forbs are very diverse and include wild onion (*Allium textile*), larkspur (*Delphinium nuttalianum*), little sunflower (*Helianthus pumilus*), scurfpea (*Psoraleidium tenuifolium*), buckwheat (*Eriogonum brevicaulis*), Drummond's milkvetch (*Astragalus drummondii*), mariposa lily (*Calochortus gunnisonii*), sweetvetch (*Hedysarum boreale*), blazing star (*Liatris punctata*), purple prairie clover (*Dalea purpurea*), and many others. There are bands of shrubs that follow contours, especially just below north-facing slope crests. Shrub species include skunkbush (*Rhus trilobata*), serviceberry (*Amelanchier utahensis*), prickly rose (*Rosa sayi*), and Parry rabbitbrush (*Chrysothamnus parryi*). New Mexico feathergrass occurs on slope crests having less graminoid diversity, but similar forb composition. Drainages have riparian vegetation including cottonwood (*Populus deltoides*) and willows (*Salix* species) over sedges and pasture grasses. Exposures of Pierre shale tend to be sparsely vegetated. Bell's twinpod (*Physaria bellii*) and wavy-leaf stickleaf (*Nuttallia sinuata*) occur in several shale barrens areas throughout the site.

Key Environmental Factors

Mosaic of shale outcrops (Pierre and Niobrara) and Quaternary alluvium deposits. Piedmont zone.

Climate Description

No Data

Level 4 Potential Conservation Area (PCA) Report

Name Lykins Gulch

Site Code S.USCOHP*580

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map P - Partial

Mapped Date 10/17/2008

Designer Neid, S.L. and S.S. Panjabi

Boundary Justification

The boundary includes the full extent of the occurrences, some adjacent potential habitat and some representation of the local mosaic of plant communities.

Primary Area 1,434.18 Acres

580.40 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

This site includes a good (B-ranked) and a fair to poor (CD-ranked) occurrence of a globally imperiled (G2G3/S2S3) plant species, Bell's twinpod (*Physaria bellii*), which is restricted to the Front Range of Colorado. The habitat for this species is quickly being developed throughout its range. There is also a good to fair (BC-ranked) occurrence of the globally critically imperiled (G1G2/S1S2) *Hesperostipa comata* Great Plains mixed grass prairie. A healthy population of wavy-leaf stickleaf (*Nuttallia sinuata*), a globally rare (G3/S2) plant, was documented here but this annual tends to be mobile from year to year and, while significant, is not the focus of this particular 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>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>			
23937	<i>Physaria bellii</i>	Bell's twinpod	G2G3	S2S3	No
22673	<i>Hesperostipa neomexicana</i> Herbaceous Vegetation	Great Plains Mixed Grass Prairie	G3	S3	No
23937	<i>Physaria bellii</i>	Bell's twinpod	G2G3	S2S3	Yes
24703	<i>Hesperostipa comata</i> Colorado Front Range Herbaceous Vegetation	Great Plains Mixed Grass Prairie	G1G2	S1S2	Yes

REFERENCES

Reference ID

Full Citation

195190

Neid, S., J. Lemly, K. Decker and D. Culver. 2009. Final Report: Survey of Critical Biological Resources in Boulder County 2007-2008. Colorado Natural Heritage Program, Fort Collins, CO.

Level 4 Potential Conservation Area (PCA) Report

Name Lykins Gulch

Site Code S.USCOHP*580

ADDITIONAL TOPICS

Additional Topics

Original site design by Pague, C.A. 1994-09-12.

VERSION

Version Date 10/17/2008

Version Author Neid, S.L.

Disclaimer

These data are a product and property of Colorado State University, Colorado Natural Heritage Program (CNHP). These data are strictly "on loan" and should be considered "works in progress". Data maintained in the Colorado Natural Heritage Program database are an integral part of ongoing research at CSU and reflect the observations of many scientists, institutions and our current state of knowledge. These data are acquired from various sources, with varying levels of accuracy, and are continually being updated and revised. Many areas have never been surveyed and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. These data should not be regarded as a substitute for on-site surveys required for environmental assessments. Absence of evidence is NOT evidence of absence. Absence of any data does not mean that other resources of special concern do not occur, but rather CNHP files do not currently contain information to document this presence. CNHP is not responsible for whether other, non-CNHP data providers have secured landowner permission for data collected.

These data are provided for non-commercial purposes only. Under no circumstances are data to be distributed in any fashion to outside parties. To ensure accurate application of data, tabular and narrative components must be evaluated in conjunction with spatial components. Failure to do so constitutes a misuse of the data. The Colorado Natural Heritage Program shall have no liability or responsibility to the data users, or any other person or entity with respect to liability, loss, or damage caused or alleged to be caused directly or indirectly by the data, including but not limited to any interruption of service, loss of business, anticipatory profits or indirect, special, or consequential damages resulting from the use of operation of the data. Data users hereby agree to hold CNHP, Colorado State University, and the State of Colorado harmless from any claim, demand, cause of action, loss, damage or expense from or related to data users use of or reliance on the data, regardless of the cause or nature thereof, and even in the event that such cause is attributable to the negligence or misconduct of CNHP.

These data are provided on an as-is basis, as-available basis without warranties of any kind, expressed or implied, INCLUDING (BUT NOT LIMITED TO) WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Although CNHP maintains high standards of data quality control, CNHP, Colorado State University, and the State of Colorado further expressly disclaim any warranty that the data are error-free or current as of the date supplied