

Level 4 Potential Conservation Area (PCA) Report

Name Point of Rocks

Site Code S.USCOFO*30

IDENTIFIERS

Site ID 1311 Site Class PCA

Site Alias Point of Rocks Macrosite

Network of Conservation Areas (NCA)

<u>NCA Site ID</u>	<u>NCA Site Code</u>	<u>NCA Site Name</u>
1198	S.USVAHQ*484	Western High Plains

LOCATORS

Nation United States Latitude 402631N
 State Colorado Longitude 1042252W

Quad Code Quad Name

40104-D4	Barnesville
40104-D3	Point of Rocks
40104-C3	Dearfield
40104-C4	Hardin
40104-D5	Kersey
40104-E3	Fosston
40104-E4	Cornish
40104-D2	Greasewood Lake

County

Weld (CO)

Watershed Code Watershed Name

10190003	Middle South Platte-Cherry Creek
10190009	Crow

SITE DESCRIPTION

Minimum Elevation - Feet - Meters
 Maximum Elevation - Feet - Meters

Site Description

The Point of Rocks site is one of the last remaining sites offering horizon-to-horizon vistas of relatively pristine prairie. The site occurs on Pleistocene eolian soils on the Colorado piedmont about 40 miles east of the foothills of the Southern Rocky Mountains. The topography is rolling sandhills believed to have been deposited near the end of the Pleistocene glaciation. Steeper dune areas are present in the southern part. The site preserves high quality examples of sandhills flora, especially sandhills prairie and sandsage prairie. This flora is believed typical of the flora in the presettlement sandhills. Introduced species are minimal. The dominant grasses of the sandhills region are sand bluestem (*Andropogon hallii*), prairie sandreed (*Calamovilfa longifolia*), and needle-and-threadgrass (*Hesperostipa comata*). Sand bluestem and prairie sandreed reach heights of four feet or more. Other common grasses include ring muhly (*Muhlenbergia pungens*), indian ricegrass (*Oryzopsis hymenoides*), sand dropseed (*Sporobolus cryptandrus*), and six-weeks fescue (*Vulpia octoflora*). Sandsage (*Artemisia filifolia*) is the dominant shrub. Lesser amounts of leadplant (*Amorpha canescens*), sand cherry (*Prunus besseyi*), and yucca (*Yucca glauca*) occur. Many species of wildflowers are present. Common flowers include sand verbena (*Abronia fragrans*), painted milkvetch (*Astragalus ceramicus*), prairie larkspur (*Delphinium virescens*), fringed puccoon (*Lithospermum incisum*), bush morningglory (*Ipomoea leptophylla*), and spiderwort (*Tradescantia occidentalis*). The fauna is greatly changed from presettlement times. Most large herbivores and carnivores are gone (bison, elk, grizzly bear, wolves). Antelope are now the only large, native ungulate present. Coyotes are frequent and the rancher reports recently seeing tracks of mountain lion. Prairie-chickens have been reintroduced by the Colorado Division of Wildlife. The site is bordered on the north by Weld County Road 68. On the south it extends nearly to the South Platte River. The western boundary is about two miles east of Crow Creek. The ranch extends east about 8 miles. Except for infrequently travelled ranch roads, there are no roads on the site. A large part of the sandhills region has been used only for winter grazing, allowing plants to complete most of their yearly growing season without being grazed. There are no other known winter-only grazed sandhills sites. There are no flowing streams on the site. Windmills provide water for cattle. Several buffalo wallows hold water for varying periods.

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Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

The site is currently used for ranching. Parts of the ranch have been in the same family for over 80 years.

Cultural Features

No Data

SITE DESIGN

Site Map P - Partial

Mapped Date 09/12/1994

Designer Pague, C.A.

Boundary Justification

The boundary includes all of the high quality, winter-range sandhills on the ranch. Also included are significant area of summer-grazed rangeland in lesser condition. Loamy sand and sandhills in buffer areas are of variable quality. Significant buffer areas are needed for this site due to its proximity (about 11 miles) to a major metropolitan area (Greeley, CO). The northern boundary of the site is WCR 68. This will probably eventually become a major east-west route as the area is developed. The area along WCR 68 could easily be developed into ranchettes with a change in ownership. This threat is not imminent because there are no utilities along the road and most of it is owned by a family. From this road south to the high quality sandhills prairies is about two miles. The intervening area is a mixture of winter and summer-grazed rangeland of variable quality. The southern boundary is near the South Platte River and includes land belonging to National Hog Farms. Part of this area includes steep dunes not present on the ranch. The southern boundary provides a buffer of an earlier seral stage varying from very good condition to overgrazed. The buffer width varies from one to two miles. This does not include any of the South Platte River riparian zone. The riparian area is probably in poor condition but it has not been surveyed. The western boundary approaches the western extent of the rangeland. Plowed agricultural land begins a short distance west. The eastern boundary is the eastern extent of the ranch. It is bordered by one or more miles of plowed agricultural land. Part of the border is rangeland.

Primary Area 88,050.35 Acres

35,632.86 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

Sandhills vegetation was once common in Colorado southeast of the South Platte River. Plowing, conversion to center-pivot irrigation, and overgrazing have degraded or destroyed most of this habitat. High quality sandhills plant associations are extremely rare. The site is one of the outstanding examples of sandhills vegetation remaining in Colorado. The size of the proposed preserve is large enough to allow the natural, geomorphic, dune-building processes to proceed. It is also large enough to replicate natural processes such as fire and large herbivore grazing (bison, elk, antelope). Two plant associations of special concern are intermingled on the site. This is believed to be the best remaining example of the following plant associations in Colorado: 1) the sandsage / sand bluestem prairie (*Artemisia filifolia* / *Andropogon hallii*) is globally vulnerable (G3?/S2). The occurrence of this association is very large and in good condition (B-ranked) and 2) the prairie sandreed - sand bluestem prairie (*Andropogon hallii* - *Calamovilfa longifolia*) is state imperiled (G4G5/S2). This plant association is very rare or local throughout its range, found in a locally restricted range, or susceptible to factors making it vulnerable to extinction. This occurrence is in good condition (B-ranked) but its extent has not been documented.

Other Values Rank No Data

Other Values Comments

The site is large enough that natural geomorphic and biological processes can proceed. Other succession stages are present including indian ricegrass - lemon scurfs loose sand grassland downwind of old blowouts. (*Oryzopsis hymenoides* - *Psoraleidium* (*Psoralea*) lanceolata loose sand grassland). Additional areas of prairie on loamier soils are included in the site boundary. These add species diversity while functioning as a buffer against disturbances on adjacent land. Several plant species on the site are uncommon and infrequently collected in Colorado. Prairie turnip (*Psoralea esculenta*) is known in Colorado mostly from around the Pawnee Buttes area to the north but occurs on the Wells Ranch. *Psoralea digitata* occurs towards the

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southern part of the ranch and is also infrequent in Colorado. *Psoralea hypogaea* and *Lithospermum croceum* are found within one mile of the site and may be present. Both are infrequent species of eastern Colorado. Greater Prairie-chickens (*Tympanuchus cupido pinnatus*) were reintroduced on the Wells Ranch several years ago. This species is rare in Colorado. It is not known if they have remained on the ranch (1995). Northern Harriers (*Circus cyaneus*) were observed hunting on the site in August, 1995. It is unknown if they breed on site. No inventory for insects is known. The high quality indicates it could be habitat for the Wiest's sphinx moth (*Euproserpinus weisti*).

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</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>
24742	<i>Andropogon hallii</i> - <i>Calamovilfa longifolia</i> Herbaceous Vegetation	Northern Sandhill Prairie	G4G5	S2	No
24668	<i>Artemisia filifolia</i> / <i>Andropogon hallii</i> Shrubland	Northern Sandhill Prairie	G3?	S2	Yes
23410	<i>Tympanuchus cupido pinnatus</i>	Greater Prairie Chicken	G4T4	S3	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
-	No Data

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date	09/12/1994
Version Author	Pague, C.A.

Disclaimer

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