

# Level 4 Potential Conservation Area (PCA) Report

Name Elephant Rocks

Site Code S.USWRO1\*1423

## IDENTIFIERS

Site ID 1435 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 374448N  
State Colorado Longitude 1061850W

<u>Quad Code</u>	<u>Quad Name</u>
37106-G3	Twin Mountains SE
37106-F3	Del Norte

### County

Saguache (CO)  
Rio Grande (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
13010003	San Luis
13010004	Saguache

## SITE DESCRIPTION

<b>Minimum Elevation</b>	7,800.00	<b>Feet</b>	2,377.00	<b>Meters</b>
<b>Maximum Elevation</b>	8,000.00	<b>Feet</b>	2,438.00	<b>Meters</b>

### Site Description

The Elephant Rocks site lies at the base of the San Juan foothills on the Saguache-Rio Grande County line. It is comprised of a complex of volcanic boulders, rock outcrops, and shrublands separating the prairie of the valley floor from the San Juan Mountains. The vegetation among the boulders is sparse piñon pine-juniper open woodland (*Pinus edulis*-*Juniperus monosperma*). Numerous native grasses and forbs occupy pockets of soil between the boulders and in crevices, including blue grama (*Bouteloua gracilis*), Fendler's poa (*Poa fendleriana*), and mountain muhly (*Muhlenbergia montana*). These grasses usually dominate the intermittent streams that separate the boulder outcrops as well. Slender spiderflower is found along a permanent stream that drains from Shaw Springs. This is a newly documented population, first documented during the 1999 inventory. The stream and Shaw Springs are located on private land. The landowner, in partnership with local natural resource agencies, recently constructed a series of wetland cells along the course of the stream in order to enhance and create wildlife habitat. This activity resulted in the establishment of a medium-sized population of slender spiderflower. The plants were located along the periphery of each wetland cell and along the banks of the stream. The plants were more robust in their appearance than any other population located during this study. Although the hydrological source of the site is natural, human-induced disturbance modified the local soils creating a welcoming environment for slender spiderflower. Seeds carried by birds or possibly a remnant seed bank likely explain the proliferation of this species in such a short time frame. The vulnerable rock-loving neoparrya, a forb in the carrot family, is found between crevices in rocks and on small flat pockets of soils between boulders. Overhanging boulders often protect the plant. The area surrounding the boulders are dominated by rabbitbrush (*Chrysothamnus nauseosus*), greasewood (*Sarcobatus vermiculatus*), and a grassland of blue grama, Indian rice grass (*Oryzopsis hymenoides*), and squirrel tail (*Elymus elymoides*). The silky pocket mouse (*Perognathus flavus sanluisi*), a San Luis Valley endemic, was found in the shrub and grassland habitat. Much of this site is part of a state-designated natural area. It receives some recreation, including hunting and camping. Certain areas have trash piles at the base of the rocks.

### Key Environmental Factors

No Data

### Climate Description

No Data

### Land Use History

No Data

# Level 4 Potential Conservation Area (PCA) Report

Name Elephant Rocks

Site Code S.USWRO1\*1423

## Cultural Features

No Data

### SITE DESIGN

Site Map Y - Yes

Mapped Date 03/02/2000

Designer Rondeau, R.J.

## Boundary Justification

This boundary encompasses an area in which direct impacts to the elements, such as trampling or other surface disturbance, should be avoided and provides suitable habitat where additional individuals can become established over time. The boundary also encompasses Shaw Springs to ensure the hydrological source necessary for the viability of the slender spiderflower is protected. This boundary is drawn to 1) protect the occurrences from direct impacts such as trampling or other surface disturbances; and 2) provide suitable habitat where additional individuals can become established over time. The site was drawn by referencing the 1988 1:40,000 NAPP color infrared photograph, the 7.5 min. quadrangles and satellite imagery.

Primary Area 893.94 Acres

361.77 Hectares

### SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

The Elephant Rocks site supports a fair example of a wetland plant imperiled on a global scale, one good and two fair examples of plants vulnerable on a global scale, and an excellent example of a San Luis Valley endemic pocket mouse subspecies. This site supports a medium-sized population of the rock-loving neoparrya, a south-central Colorado endemic plant. This species is only known from ten sites in five counties. In addition there is a globally rare milkvetch an uncommon fern, and the San Luis Valley endemic subspecies of silky pocket mouse at this site. The Elephant Rocks site supports a medium-sized population of the rock-loving neoparrya. This herb is restricted to south-central Colorado and known from 10 sites in five counties. This population has an estimated 2000 individuals. In addition to the rock-loving neoparrya, a rare milkvetch (*Astragalus cerussatus*) and a silky pocket mouse subspecies population are found here. The milkvetch occurs in northern New Mexico and southern Colorado on rocky slopes. Less than 20 occurrences have been located throughout its range. The silky pocket mouse is a subspecies restricted to the San Luis Valley and is rare within its range. A small occurrence of the grass fern (*Asplenium septentrionale*) at this site represents the southern most extension of this uncommon fern, and is a new county record for Saguache.

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

Future Research Needs: We know that the rock-loving neoparrya requires soils of volcanic origin and that it thrives on north-facing slopes within the 7 to 9,000 foot elevation band. These criteria are met throughout the San Juan foothills, yet the plant is rarely present. Future studies are needed to help understand what other factors are limiting this plant to these few sites. John Schwarz of the BLM has been performing inventory and status checks on the Elephant Rocks population of neoparrya.

### 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>

Copyright © 2011. Colorado State University. Colorado Natural Heritage Program. All Rights Reserved.

# Level 4 Potential Conservation Area (PCA) Report

Name	Elephant Rocks		Site Code	S.USWRO1*1423	
22904	<i>Aletes lithophilus</i>	rock-loving neoparrya	G3	S3	Yes
18080	<i>Cleome multicaulis</i>	slender spiderflower	G2G3	S2S3	No
17332	<i>Perognathus flavus sanluisi</i>	Silky Pocket Mouse Subsp	G5T3	S3	No

## REFERENCES

Reference ID	Full Citation
165924	Kettler, S., J. Rocchio, R. Schorr, J. Burt. 2000. Biological Inventory of Rio Grande and Conejos Counties, Colorado. Unpublished report prepared for The Nature Conservancy. 234 pp.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date	03/02/2000
Version Author	Rondeau, R.J.

## 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