

Level 4 Potential Conservation Area (PCA) Report

Name Boone Creek

Site Code S.USCOHP*22036

IDENTIFIERS

Site ID 461 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 381844N
State Colorado Longitude 1041832W

Quad Code Quad Name
38104-C3 North Avondale

County
Pueblo (CO)

Watershed Code Watershed Name
11020005 Upper Arkansas-Lake Meredith

SITE DESCRIPTION

Minimum Elevation 4,600.00 Feet 1,402.00 Meters
Maximum Elevation 4,770.00 Feet 1,454.00 Meters

Site Description

The Boone Creek Site contains over 1,550 acres (627 ha) of greasewood-alkali sacaton shrubland (*Sarcobatus vermiculatus*/*Sporobolus airoides*) occurring within a mosaic of shortgrass and sandsage prairie. The greasewood-alkali sacaton occurrence is a linear system occupying a wide shallow drainage associated with Boone Creek. Only after heavy rains will surface water be present; an alkaline salt crust occurs on the soil surface where water ponds after floods. Other vegetation occurring within the shrubland include rabbitbrush (*Chrysothamnus nauseosus*), cholla (*Cylindropuntia imbricata*), blue grama (*Bouteloua gracilis*), and galleta grass (*Hilaria jamesii*). On average, there is about 25 percent bare ground. Small mammal trapping in the greasewood shrublands at Boone Creek resulted in the following species: deer mouse (*Peromyscus maniculatus*), kangaroo rat (*Dipodomys ordii*), western harvest mouse (*Reithrodontomys megalotis*), northern grasshopper mouse (*Onychomys leucogaster*), hispid cotton rat (*Sigmodon hispidus*), and woodrat (*Neotoma* sp.) (Colorado Natural Heritage Program 2001b). Four globally common species of tiger beetles present in the alkaline flats include *Cicindela circumpicta johnsonii*, *C. fulgida*, *C. nigrocoerulea*, and *C. punctulata* (P. Pineda, pers. comm., CSU). Another significant ecological feature within the site is a bermed spring pond adjacent to Boone Creek. Vegetation around the pond includes cattail (*Typha* sp.) and bulrush (*Scirpus acutus*), surrounded by salt flats with saltgrass (*Distichlis spicata*), Baltic rush (*Juncus balticus*), and foxtail barley (*Hordeum jubatum*). The spring and surrounding area has been invaded by non-native plant species including tamarisk (*Tamarix ramosissima*) and kochia (*Bassia sieversiana*). Wildlife using the spring includes native species (e.g., tiger salamander (*Ambystoma tigrinum*), painted turtle (*Chrysemys picta*), plains garter snake (*Thamnophis radix*), Red-winged Blackbird, Killdeer, damselflies and dragonflies) and non-native (e.g., bullfrogs (*Rana catesbeiana*)) (J. Gionfriddo, pers. comm. Colorado NHP). The land history of the depot property is complex. From at least the early 1900's to 1941, the depot property was a mixture of private and state owned parcels with ranching as the primary use. In 1941, the Department of Defense acquired the land and by 1942 had built a munitions storage facility. In 1994, all but a small portion of the munitions was removed. Ammunition storage bunkers and a network of roads have been constructed through about half of the greasewood occurrence. The bunkers alter the composition and more weeds occur within this portion of the occurrence. Grazing has been excluded from the bunker portion of the occurrence since 1942 and grazing was excluded from the remainder of the occurrence in 1998.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

No Data

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Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 06/15/2001

Designer Doyle, G.A.

Boundary Justification

The boundary encompasses most of the greasewood occurrence and a portion of the surrounding shortgrass and sandsage prairie. The northern boundary of the site is the G-Block on PCD, where chemical munitions are stored.

Primary Area 3,705.62 Acres

1,499.62 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

This site contains a fair example (C-ranked) of a globally vulnerable (G3? S2) greasewood-alkali sacaton community (*Sarcobatus vermiculatus*-*Sporobolus airoides*).

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>			
24486	<i>Sarcobatus vermiculatus</i> / <i>Sporobolus airoides</i> Sparse Vegetation	Saline Bottomland Shrublands	G3?	S2	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
169085	Doyle, G.A. 2000. Colorado Natural Heritage Program Field Survey of Wetland and Riparian Areas in Pueblo and El Paso Counties.
162855	Doyle, G.A., J. Gionfriddo, D. Anderson, and D. Culver. 2000. Final Report: Survey of Critical Wetlands and Riparian Areas in El Paso and Pueblo Counties, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 09/16/2003

Version Author Spackman, S.C.

Disclaimer

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