The topography of Smith Hollow and the surrounding area is striking and includes hills covered in juniper woodland that are imbedded in lower elevation areas of shortgrass prairie. There is a drainage at lower elevation that flows through the shortgrass prairie with rabbitbrush (Chrysothamnus), grasses, and forbs. There are three developed livestock ponds within the drainage that attract numerous species of butterfly. Within the juniper, the understory includes a great deal of rock and bare ground with sideoats gramma (Bouteloua curtipendula), other grasses, and numerous forbs including buckwheat (Eriogonum spp.), which are the hostplants for the Colorado blue butterfly (Euphilotes rita coloradensis) that inhabits the site. Buckwheat also occurs within the drainage. Occupation of the area dates back 100's of years and the site is currently used for ranching. Vegetation is approximately 20% pinon - juniper, 20% grassland or mixed grasses/forbs/cacti, 20% shrubland or shrubs with the rest covered in bare ground and rocks.

Key Environmental Factors
The Colorado blue is reported to inhabit undisturbed prairies, implying a lack of tolerance for disturbance. Prairie habitat within the range of the butterfly has been widely altered and remnants are threatened by suburban development, weed invasion, removal of livestock, and agricultural conversion. The larval host plant actually depends on some level of grazing to prevent competition from more aggressive plants.

Climate Description
The climate is semi-arid with precipitation averaging about 14 inches per year. About half of the yearly precipitation is received during the months of May through August. Winter average minimum temperatures are in the range of 16-20 °F, and summer average maximum temperatures in July and August are near or above 90 °F (HPRCC 2008).

Land Use History
The area has been inhabited by people for as long as 5,000 years, particularly areas further east within the Purgatoire Canyon. Apparently many native tribes lived in or visited the area. The site is within the vicinity of the Santa Fe Trail and by the early 1840s traders and Spanish emigres colonized the canyons and brought ranching to the area. Ranching was the dominant force until 1909 when dry-land-farming homesteaders fenced the land. The 1920s and 1930s brought the "Dust Bowl" and many abandoned their homes, leaving the area to sheep and cattle ranchers. While sheep grazing was discontinued in the 1950s, livestock continued to dominate. The creation of the Pinon Canyon Maneuver Site in the 1980s meant the end of grazing over a large portion of the area, while private lands continue to be grazed (Friedman 1985).

Cultural Features
No Data

Minimum Elevation: 5,560.00 Feet, 1,694.69 Meters
Maximum Elevation: 5,760.00 Feet, 1,755.65 Meters

Boundary Justification
The boundary is intended to adequately protect areas currently occupied by Colorado blue (Euphilotes rita coloradensis) as well as adjacent areas of suitable habitat which have potential for colonization. The long-term persistence of E. rita coloradensis populations will be favored by the protection of an area larger than the area occupied by the occurrence in any one year. Habitat heterogeneity may be related to long-term
Level 4 Potential Conservation Area (PCA) Report

Name  Smith Hollow  Site Code  S.USCOHP*27055

Persistence in butterflies, a habitat component that is enhanced by a large protected area. Within this site, numerous terrace benches, low ridges, and drainages support a mosaic of habitat patches which have potential for *E. rita coloradensis* colonization.

<table>
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<tr>
<th>Primary Area</th>
<th>477.67 Acres</th>
<th>193.31 Hectares</th>
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**SITE SIGNIFICANCE**

**Biodiversity Significance Rank**  B2: Very High Biodiversity Significance

**Biodiversity Significance Comments**

The site supports a good (B-ranked) occurrence of the globally imperiled (G3G4T2T3/S2) butterfly, *Colorado blue* (*Euphilotes rita coloradensis*).

**Other Values Rank**  No Data

**Other Values Comments**

No Data

**ASSOCIATED ELEMENTS OF BIODIVERSITY**

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<th>Element</th>
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<td>G3G4T2T3</td>
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**LAND MANAGEMENT ISSUES**

**Land Use Comments**

Ranching is the current use of the land and cattle grazing currently occurs within the site. There are three developed cattle ponds within the drainage that makes up a portion of this site and these ponds attract numerous butterflies to them.

**Natural Hazard Comments**

The juniper uplands include steep slopes and cliffs and safety should be considered when hiking within these areas.

**Exotics Comments**

*Tamarisk* (*Tamarix pentandra*) occurs at the cattle ponds, but is not a threat to the viability of the *Colorado blue* population.

**Offsite**

No Data

**Information Needs**

Additional information on the size of the *Colorado blue* populations would assist with management of the population.

**REFERENCES**

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<th>Full Citation</th>
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**ADDITIONAL TOPICS**

No Data

**LOCATORS**

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