

## Cercocarpus montanus / Bouteloua curtipendula Shrubland

COMMON NAME	Mountain mahogany/Side-oats grama Shrubland
SYNONYM	Cercocarpus Shrubland
TNC SYSTEM	Terrestrial
PHYSIOGNOMIC CLASS	Shrubland
PHYSIOGNOMIC SUBCLASS	Deciduous shrubland
PHYSIOGNOMIC GROUP	Cold-deciduous shrubland
FORMATION	Temperate cold-deciduous shrubland
ALLIANCE	<i>Cercocarpus montanus</i> Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

### RANGE

This community is found on slopes in New Mexico, Nebraska, the Black Hills of South Dakota and Wyoming and on some of the lower mountain slopes of eastern Wyoming. It is found on slopes below ponderosa pine forests and above herbaceous communities.

#### *Scotts Bluff National Monument*

This community is located on the north face of the South Bluff, with most of it on either side of Sentinel Rock. This community is better developed elsewhere in the Wildcat Hills.

### ENVIRONMENTAL DESCRIPTION

#### *Globally*

This community is almost exclusively found on slopes. These slopes are 20-40% with a variety of aspects. Drought stress is severe due to relatively little precipitation, moderate to steep slopes, and thin, poorly developed soils. Soils are loams and clay-loams. The parent material is sandstone or limestone.

#### *Scotts Bluff National Monument*

*Cercocarpus montanus/Bouteloua curtipendula* Shrubland is on steep (25-35%) eroding middle slopes of the South Bluff, just below the cliffs. Soils are loose and poorly developed to nearly absent.

USFWS WETLAND SYSTEM Not applicable

### MOST ABUNDANT SPECIES

#### *Globally*

<u>Strata</u>	<u>Species</u>
Short shrub	<i>Cercocarpus montanus</i> , <i>Rhus trilobata</i> var. <i>trilobata</i>
Herbaceous	<i>Bouteloua curtipendula</i>

**USGS-NPS Vegetation Mapping Program**  
**Scotts Bluff National Monument**

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*Scotts Bluff National Monument*

Strata            Species

Short shrub        *Cercocarpus montanus*

Herbaceous        *Artemisia frigida, Bromus japonicus, Elymus lanceolatus* ssp. *lanceolatus*.

DIAGNOSTIC SPECIES

*Globally*

*Bouteloua curtipendula, Cercocarpus montanus*

*Scotts Bluff National Monument*

*Artemisia frigida, Cercocarpus montanus*

VEGETATION DESCRIPTION

Throughout its range, this community is a shrub-steppe community. Its physiognomy is similar to the chaparral of California. Vegetation cover is sparse to moderate. The dominant shrubs are evenly spaced with herbaceous species occurring in between individual shrubs. The dominant species, *Cercocarpus montanus*, is approximately 2 meters tall. *Rhus trilobata* var. *trilobata*, the other common shrub species, also grows to 2 meters. The herbaceous species rarely grow taller than 1 meter. *Bouteloua curtipendula* is the most abundant herbaceous species. *Aristida purpurea* var. *longiseta* and *Artemisia frigida* are typical smaller shrubs. Common herbaceous species are the forbs *Aster oblongifolius*, *Hedeoma hispida*, and the grass *Oryzopsis hymenoides*.

*Scotts Bluff National Monument*

This community is defined solely on the predominance of *Cercocarpus montanus*. *Rhus aromatica* is sometimes present. The herbaceous understory is quite variable though usually disturbed. The exotics *Bromus* spp. are often dominant.

OTHER NOTEWORTHY SPECIES    Information not available.

CONSERVATION RANK    G5

RANK JUSTIFICATION    Information not available.

COMMENTS

This community is too poorly developed at Scotts Bluff NM to provide a definitive description. West of Sentinel Rock, *Cercocarpus montanus* is found mostly in *Pinus ponderosa*/*Juniperus scopulorum* Woodland. The *Cercocarpus montanus*/*Bouteloua curtipendula* Shrubland seems confined to slopes not favorable for tree growth. This appears to be a somewhat disturbance-oriented community.

REFERENCES

Hoffman, G. R. and R. A. Alexander. 1987. Forest Vegetation of the Black Hills National Forest of South Dakota and Wyoming: A Habitat Type Classification. Research paper RM-276. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 48 pp.

Johnston, B. C. 1987. Plant Associations of Region Two. R-2-ECOL-87-2. USDA Forest Service Rocky Mountain Region, Lakewood, CO. 429 pp.