

Netleaf Hackberry/ Bluebunch Wheatgrass Wet Scrub



Parks & Open Space

5201 St. Vrain Rd., Longmont CO 80504 303-678-6200 BoulderCountyOpenSpace.org



Netleaf Hackberry/ Bluebunch Wheatgrass Complex

Photo by BCPOS Staff

Community Description

Scientific Name: *Celtis reticulata* / *Pseudoroegneria spicata* wet scrub.
CNHP Ranking: G2G3/S1

Biotic: In rocky sites with poor soils, netleaf hackberry trees tend to be shorter and bushier, resembling tall shrubs. Bluebunch wheatgrass is the dominant herbaceous layer, but invasive cheatgrass usually replaces it. In Boulder County, bluebunch wheatgrass could also be replaced by Montana wheatgrass (*Elymus albicans*).

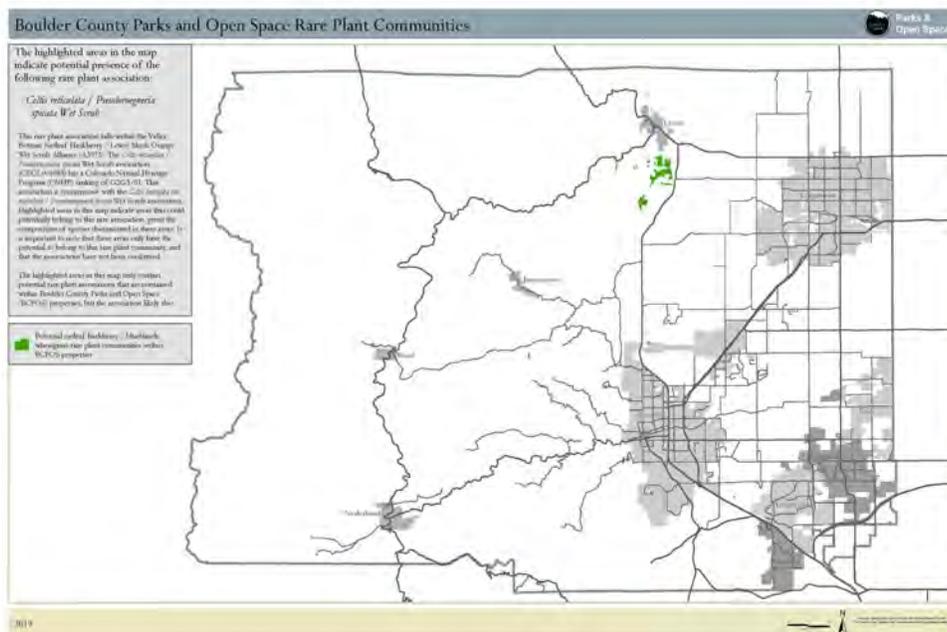
Abiotic: This rare community is often associated with rocky outcrops or in valley bottoms or riparian margins. Usually occurs on southern aspects, and soils are typically poorly developed.

Vital processes: Fire is typically infrequent in these communities since they occur in areas with high rock cover or in wet valleys. Local populations of the hackberry butterfly are dependent upon netleaf hackberry trees.

Background

The netleaf hackberry / bluebunch wheatgrass association is a native, rare wet scrub community found within Boulder County. It is a woodland association with a typically open canopy of netleaf hackberry and an herbaceous layer dominated by perennial bluebunch wheatgrass. Most known stands are disturbed with significant cover of invasive annual grasses like cheatgrass.

Distribution & Range



Threats

Invasive Species: Few high-quality stands of this community are known because of invasive species, like cheatgrass, that may completely replace bluebunch wheatgrass. Although established, mature netleaf hackberry trees can withstand the presence of cheatgrass, germination of new plants is likely to decrease. Diffuse and spotted knapweed are also detrimental to bluebunch wheatgrass populations.

Overgrazing: Overgrazed stands of this community lead to the loss of multi-aged populations of netleaf hackberry and lack of new recruitment. Post-fire grazing often kills sprouting hackberry.

Loss/Alteration of Vital Processes: A reduction or increase in fire frequency can have adverse effects on this community's health.

Climate Change: Although both netleaf hackberry and bluebunch wheatgrass have some natural resilience to hotter temperatures, long-term changes in the climate can lead to increased fire frequency and severity, which this community is not well-adapted to withstand. Increased fire regimes are likely to precede invasive grasses outcompeting the native plants of this community.



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Management Considerations

Coordinate management actions with

BCPOS: Potential locations can be reported to BCPOS to help with planning and conservation. BCPOS can help with:

- ***Documentation:*** If stands are identified, landowners should map or monitor these areas with BCPOS.
- ***Agriculture/grazing:*** Grazing by livestock should be excluded from stands.
- ***Restoration:*** BCPOS can guide restoration efforts, which could entail the use of herbicide treatment and re-introducing native species that are known to occur in these communities.
- ***Invasive Plant Management:*** If possible, mechanical removal of invasive species is ideal (i.e., hand-pulling or using hand tools to remove invasive species).
- ***Fire Management:*** BCPOS can help determine if fire management would be an effective tool to fight invasive species.



Photo by BCPOS Staff

2021

The areas displayed in this map indicate known and potential locations of the following significant natural community in Boulder County:

Celtis reticulata /
Pseudoroegneria spicata

Wet Scrub



Netleaf Hackberry/
Bluebunch Wheatgrass Wet Scrub

The Netleaf Hackberry/Bluebunch Wheatgrass Wet Scrub plant community is a native woodland community with a typically open canopy of netleaf hackberry and with an herbaceous layer dominated by perennial bluebunch wheatgrass, found usually in rocky outcrops or valley bottoms. It is critically imperiled (S1) in Colorado as the herbaceous layer is replaced by invasive cheatgrass.

This map shows only known occurrences of this community that exist within BCPOS property, and where there is a potential for the community to occur county-wide.

	Known Location
	Potential Location

