

Pascopyrum smithii Herbaceous Vegetation

COMMON NAME	Western Wheatgrass Herbaceous Vegetation
SYNONYM	Mixed prairie
TNC SYSTEM	Terrestrial
PHYSIOGNOMIC CLASS	Herbaceous
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland
FORMATION	Medium-tall sod temperate or subpolar grassland
ALLIANCE	<i>Pascopyrum smithii</i> Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

RANGE

This community is found in Montana, Wyoming, Colorado, Idaho, Utah, western Nebraska, and southern Saskatchewan.

Scotts Bluff National Monument

It is on level plains, mostly eastward from the Mitchell Pass area. It is also scattered elsewhere in the Monument.

ENVIRONMENTAL DESCRIPTION

Globally

This community occurs on flat to gently sloping topography, often in ravines. Soils are clay, clay loam, and silt loam. It is sometimes found on alluvial fans of small streams. The soils are deep (40-100 cm) and well developed.

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This community is on nearly level slopes in silty loam soils at the base of escarpments and in the bottoms of wide ravines.

USFWS WETLAND SYSTEM Not applicable

MOST ABUNDANT SPECIES

Globally

<u>Strata</u>	<u>Species</u>
Herbaceous	<i>Pascopyrum smithii</i>

USGS-NPS Vegetation Mapping Program
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Strata

Species

Herbaceous *Bouteloua curtipendula*, *Bromus* spp., *Schizachyrium scoparium*, *Stipa comata*, *Nassella viridula*, *Pascopyrum smithii*

DIAGNOSTIC SPECIES

Globally

Pascopyrum smithii

Scotts Bluff National Monument

Pascopyrum smithii, *Nassella viridula*

VEGETATION DESCRIPTION

This is a midgrass community. Shrubs are rare. The dominant species grow to approximately 1 meter. *Pascopyrum smithii* is the only constant dominant species and may have 50% cover. Other species such as *Koeleria macrantha* and *Poa* spp. may be locally abundant. Many other species common in midgrass prairies are also found in this community. These include *Artemisia ludoviciana*, *Bouteloua gracilis*, *Stipa comata*, and *Nassella viridula*.

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This community is commonly dominated by *Pascopyrum smithii*. In some places *Bouteloua curtipendula* and *Schizachyrium scoparium* are more common, particularly in areas that are less well-drained. *Nassella viridula* and *Koeleria macrantha* are common constituents. Shrubs typical of ravine bottoms, including *Rhus aromatica* and *Symphoricarpos occidentalis*, may be scattered in this community. *Krascheninnikovia lanata* is probably more widespread, although it is never common. Forb diversity is low. Many of the common forbs are exotic and native species that do best on disturbed sites. Among these are *Chenopodium pratericola*, *Conyza canadensis*, *Lactuca serriola*, and *Sisymbrium altissimum*.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G3G4

RANK JUSTIFICATION Information not available.

COMMENTS

Globally

This community is very similar to several others that include *Pascopyrum smithii* and needs to be better defined.

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This community intergrades with *Stipa comata-Bouteloua gracilis-Carex filifolia* Herbaceous Vegetation and with *Symphoricarpos occidentalis* Shrubland. *Pascopyrum smithii* Herbaceous Vegetation also resembles some of the disturbed areas which have been seeded to wheatgrass, such as area 3 in the disturbed areas description. *Pascopyrum smithii* Herbaceous Vegetation seems to be restricted to silty soils though *Stipa comata-Bouteloua gracilis-Carex filifolia* Herbaceous Vegetation may also be on these soils. Disturbed *Stipa comata-Bouteloua gracilis-Carex filifolia* Herbaceous Vegetation may resemble this community, particularly north of the Monument.

REFERENCES

Aldous, A. E. 1924. Types of Vegetation in the Semiarid Portion of the United States and Their Economic Significance. *Journal of Agricultural Research* 28(2):99-123.

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