

Andropogon gerardii - Calamagrostis Canadensis - Helianthus grosseserratus
Herbaceous Vegetation

COMMON NAME	Big Bluestem-Canada Bluejoint-Sawtooth Sunflower Herbaceous Vegetation
SYNONYM	Floodplain Meadow
TNC SYSTEM	Terrestrial
PHYSIOGNOMIC CLASS	Herbaceous
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland
FORMATION	Tall sod temperate grassland
ALLIANCE	<i>Andropogon gerardii</i> -(<i>Calamagrostis canadensis</i> , <i>Panicum virgatum</i>) Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

RANGE

This community is found in Nebraska, Minnesota, Wisconsin, Illinois, Indiana, Michigan, Missouri, Iowa, Arkansas, Oklahoma, and Kentucky.

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This community is restricted to floodplain terraces along the North Platte River on the north side of the Monument. It is widespread along the river.

ENVIRONMENTAL DESCRIPTION

Globally

This community occurs in headwaters of streams, depressions of terraces, and along floodplains of larger streams and rivers. Standing water is common in the spring and after heavy rains. The water table is usually near the surface. Soils are deep sandy loams, silt loams, or clay loams. They are typically poorly drained. The parent material can be loess, glacial till, or alluvium.

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It occupies level ground in the floodplain. Soils are poorly developed and formed from recently deposited alluvial sands and gravels.

USFWS WETLAND SYSTEM Palustrine

MOST ABUNDANT SPECIES

Globally

Strata

Species

Herbaceous *Andropogon gerardii*, *Helianthus grosseserratus*, *Panicum virgatum*

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Strata Species

Shrub *Rhus aromatica*, *Symphoricarpos occidentalis*

Herbaceous *Bromus* spp., *Cirsium arvense*, *Pascopyrum smithii*, *Phalaris arundinacea*, *Poa pratensis*

DIAGNOSTIC SPECIES

Globally

Andropogon gerardii, *Panicum virgatum*, *Spartina pectinata*

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Information not available

VEGETATION DESCRIPTION

Globally

This is a graminoid dominated community whose most abundant species, *Andropogon gerardii* and *Panicum virgatum*, are 2-3 meters tall. *Spartina pectinata* is rare to abundant in this community. It also grows to 2-3 meters. Shrubs and small trees are sometimes present. Cover is typically 90% or more. The diversity of species is relatively high for herbaceous communities. Forbs that are usual across its range include *Elymus canadensis*, *Equisetum* spp., *Helianthus grosseserratus*, *Liatris pycnostachya*, *Liatris lancifolia*, *Phlox pilosa*, *Solidago canadensis*, *Thalictrum dasycarpum*, *Silphium integrifolium*, *Viola pedatifida*, and *Zizia aurea*. On the wetter margins of this community, *Calamagrostis canadensis* and *Carex* spp. are often found.

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The community is predominantly herbaceous with scattered trees (*Populus deltoides*, *Fraxinus pennsylvanica*, and *Salix* spp.) and shrubs (*Rhus aromatica*, *Salix exigua*, and *Symphoricarpos occidentalis*). The common graminoids are *Bromus japonicus*, *B. tectorum*, *Elymus caninus*, *Elytrygia repens*, *Pascopyrum smithii*, and *Poa pratensis*. Exotic forbs are abundant, especially *Cardus nutans* and *Cirsium arvense*. Vegetation is dense except on some gravelly flats near the river where native annuals predominate.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G2G3

RANK JUSTIFICATION

Sites that formerly maintained this community have largely been converted to agricultural uses. Disruption of fire regimes has allowed shrubs and trees to invade other examples of this community.

COMMENTS

Fire is important in maintaining this community against invasion by woody species. In Missouri the average pre-settlement fire frequency was 2-5 years for a stand of this community.

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This community has significant numbers of exotic and woody species. The areas where this community now occurs appear to have had significant disturbance in the past. They are not representative of this community as a whole. It is possible that these sites should be classified as some type of disturbance community.

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REFERENCES

The Nature Conservancy (TNC). 1991a. Illinois State Community Abstract, Wet-Mesic Prairie (N). Midwest Regional Office, Minneapolis, MN.

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MN DNR. 1993. Minnesota's Native Vegetation: A Key to Natural Communities, Version 1.5. Minnesota Department of Natural Resources, Biological Report No. 20. St. Paul, MN. 111 pp.

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The Nature Conservancy (TNC). 1991d. Nebraska State Community Abstract, Wet-Mesic Prairie. Midwest Regional Office, Minneapolis, MN.