

Poa pratensis - (Pascopyrum smithii) Semi-natural Herbaceous Vegetation

COMMON NAME Kentucky Bluegrass - (Western Wheatgrass) Semi-natural Herbaceous Vegetation
SYNONYM Kentucky Bluegrass Semi-natural Grassland
PHYSIOGNOMIC CLASS Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (V.A.5.N)
FORMATION Medium-tall bunch temperate or subpolar grassland (V.A.5.N.d)
ALLIANCE POA PRATENSIS SEMI-NATURAL HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 3

USFWS WETLAND SYSTEM Terrestrial

RANGE

Badlands National Park

Introduced, exotic grasslands occur throughout the Park and are associated with disturbances such as roadsides, abandoned farm fields, and areas that were interseeded with exotic grasses to "improve" the range for grazing. Areas especially noted are adjacent to the Park access road and facilities, abandoned agricultural fields along the northern boundary, abandoned agricultural fields on Sheep Mountain Table, and interseeded grasslands on Cuny and Stronghold Tables.

Globally

This type is potentially widespread throughout the Great Plains and into the Midwest, depending on how the type is defined.

ENVIRONMENTAL DESCRIPTION

Badlands National Park

Introduced grasslands are on relatively level sites accessible to farming equipment. Typically the soils are silt and/or clay loams, which historically supported western wheatgrass (*Pascopyrum smithii*) alliance grasslands.

Globally

This type can occur in a wide variety of human-disturbed and native habitats.

MOST ABUNDANT SPECIES

Badlands National Park

<u>Stratum</u>	<u>Species</u>
Herbaceous	<i>Poa pratensis</i>

Globally

<u>Stratum</u>	<u>Species</u>
Graminoid	<i>Poa pratensis</i>

CHARACTERISTIC SPECIES

Badlands National Park

Poa pratensis, *Pascopyrum smithii*, *Bromus japonicus*, *Psoralidium tenuiflorum*

Globally

Pascopyrum smithii, *Poa pratensis*

OTHER NOTABLE SPECIES

VEGETATION DESCRIPTION

Badlands National Park

Stands of introduced grasses typically have moderate herbaceous cover, ranging from 40-90%, and very dense litter over the ground surface. Many abandoned agricultural fields and selected range interseeding sites are strongly dominated by Kentucky bluegrass (*Poa pratensis*). In some cases, a few plants of western wheatgrass (*Pascopyrum smithii*) and fairly large stands of ragweed (*Ambrosia psilostachya*) may also be present. Many species of forbs and occasional shrubs are also found in the type.

Globally

The vegetation is dominated by medium-tall (0.5 - 1 m) graminoids. The dominant grass is *Poa pratensis*, considered to be both a native and naturalized species from Eurasia (Great Plains Flora Association 1986, Gleason and Cronquist 1991). Other native species may occur as well, but they are generally less than 10% cover. Native species may include mixed-grass prairie grasses, such as *Pascopyrum smithii* and *Stipa comata*, as well as others.

CONSERVATION RANK GW. This is primarily a naturalized type from Europe and Asia, widely planted for lawns and pasture, and it has escaped into a variety of habitats (Great Plains Flora Association 1986, Gleason and Cronquist 1991). Although native populations do exist, and may be integral parts of some prairie and other native habitats, most stands that are thoroughly dominated by *Poa pratensis* are a result of human modifications to the habitat.

USGS-NPS Vegetation Mapping Program
Badlands National Park

DATABASE CODE CEGL005265

MAP UNITS Kentucky bluegrass grasslands are mapped as part of the Introduced Grassland unit, Map Class 17 on the Badlands NP vegetation map.

SIMILAR ASSOCIATIONS

COMMENTS

Badlands National Park

The introduced grassland group occupies previously disturbed sites, including roadsides, abandoned agricultural fields, and interseeded rangeland. Stands of Kentucky bluegrass tend to be monotypic. They tend to have dense litter layers that impede other species establishment and also serves to store moisture following precipitation events. One introduced grassland site was observed where prairie dogs had invaded, and through grazing and burrow construction activities were instrumental in reclaiming some of the introduced grassland back to western wheatgrass and blue grama grasslands. Present management of exotic grasses consists of limited mowing and light grazing by bison in the North Unit and heavy grazing by livestock in the South Unit.

Several introduced grassland sites were visited, and the units were well-surveyed into their components during preparation of the vegetation map.

Some smaller areas of annual, exotic vegetation were also encountered during field data collection in support of vegetation map production. These patches of vegetation typically grew around livestock watering areas, such as windmills, and generally were placed under land use Map Class 55, Other Agricultural Land.

REFERENCES

- Gleason, H.A., and A. Cronquist. 1991. Manual of vascular plants of northeastern United States and adjacent Canada. New York Botanical Garden, Bronx, NY. 910 pp.
Great Plains Flora Association. 1986. Flora of the Great Plains. University of Kansas Press, Lawrence. 1392 pp.