

H-SMBR *Bromus inermis* Semi-natural Herbaceous Alliance
Smooth Brome Semi-natural Herbaceous Alliance

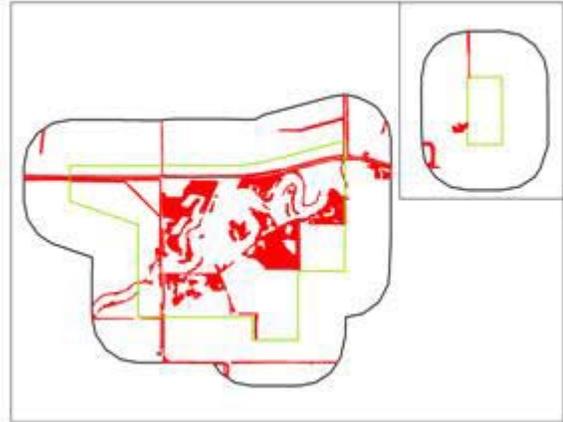
Associations and Alliances

Bromus inermis Semi-natural Herbaceous Alliance

Common Species

Bromus inermis
Pascopyrum smithii
Stipa comata
Convolvulus arvensis
Kochia scoparia
Setaria pumila

Range and Distribution

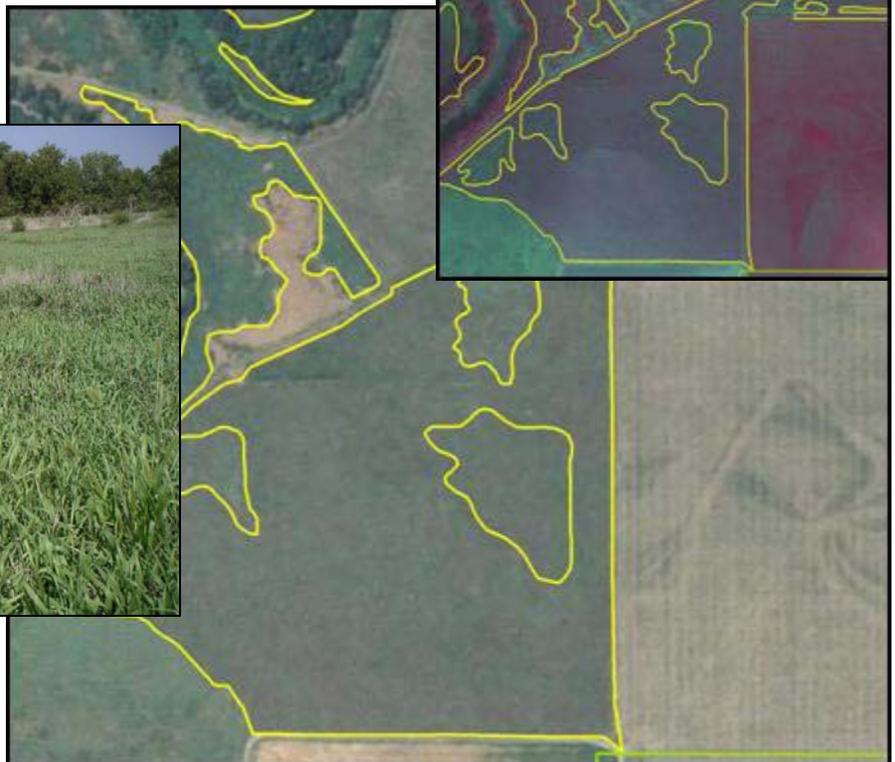


Description

This type is common to the area in and around Fort Larned, where it dominates the areas formerly used for agriculture. This grass was likely seeded extensively for pasture and hay production. Smooth brome is also common in the restored prairie and old field map units but in these situations it was usually not the dominant. Stands of this type usually had little diversity other than a handful of other non-native forbs. Typically smooth brome grows about 0.3 to 1 m tall, and entirely covers more than 90% of the plots. Native grasses cover less than 10% of these stands, but can include *Bouteloua curtipendula*, *Sorghastrum nutans* and *Andropogon gerardii*. At FOLS this type is being actively managed through herbicide treatments and prairie restoration efforts. On the color infrared imagery this type had a characteristic smooth, pink signature that sometimes contained dark red splotches with the presence of weedy forbs.

Photo Signature Examples

Representative Ground Photos



***Bromus inermis* Semi-Natural Herbaceous Alliance**

COMMON NAME	Smooth Brome Semi-Natural Vegetation	
PHYSIOGNOMIC CLASS	V	Herbaceous vegetation
PHYSIOGNOMIC SUBCLASS	V.A	Perennial graminoid vegetation
PHYSIOGNOMIC GROUP	V.A.5	Temperate or subpolar grassland
PHYSIOGNOMIC SUBGROUP	V.A.5.N	Natural/semi-natural temperate or subpolar grassland
FORMATION	V.A.5.N.d	Medium-tall bunch temperate or subpolar grassland
ALLIANCE	<i>Bromus inermis</i> Semi-Natural Herbaceous Alliance	

Alliance Identifier: A.3561

RANGE

Globally

This introduced-species grassland alliance occurs throughout the Northern Great Plains in a variety of human-disturbed habitats.

Fort Larned National Historic Site

At Fort Larned National Historic Site, Smooth Brome Vegetation dominates the areas of the main unit formerly used for agriculture. The introduced grass species is also present in many re-planted and restored fields on Fort Larned National Historic Site, but where possible these areas were classified according to the native grasses that had been re-planted.

ENVIRONMENTAL DESCRIPTION

Globally

This introduced-species grassland alliance occurs widely throughout the Northern Great Plains of the United States, and perhaps more widely in the Midwest and Canada. It likely occurs throughout much of the Rocky Mountains and Intermountain West. In semi-arid environments, it is restricted to relatively mesic conditions such as in riparian areas or forest openings at montane elevations. Stands can occur in a wide variety of human-disturbed habitats, including highway rights-of-way, jeep trails, etc. *Bromus inermis* is also widely planted for cover, pasture, and hay, and has escaped into a variety of habitats (NatureServe 2006).

Fort Larned National Historic Site

Smooth Brome Vegetation grows on fields previously leveled and plowed for agriculture. The slope is flat and the soils are loamy, at least near the surface.

MOST ABUNDANT SPECIES

Globally

<u>Strata</u>	<u>Species</u>
Herbaceous	<i>Bromus inermis</i> , <i>Agropyron smithii</i> , <i>Stipa comata</i>

Fort Larned National Historic Site

<u>Strata</u>	<u>Species</u>
Herbaceous	<i>Bromus inermis</i> , <i>Convolvulus arvensis</i> , <i>Kochia scoparia</i> , <i>Setaria pumila</i>

CHARACTERISTIC SPECIES

Globally

<u>Strata</u>	<u>Species</u>
Herbaceous	<i>Bromus inermis</i> , <i>Agropyron smithii</i> , <i>Stipa comata</i>

Fort Larned National Historic Site

<u>Strata</u>	<u>Species</u>
Herbaceous	<i>Bromus inermis</i> , <i>Convolvulus arvensis</i> , <i>Kochia scoparia</i> , <i>Setaria pumila</i>

VEGETATION DESCRIPTION

Globally

This alliance is characterized by a moderately dense to dense layer of medium-tall (0.5-1 m) perennial graminoids. The dominant grass is *Bromus inermis*, a naturalized species from Eurasia. Other weedy species may occur as well, but native species are generally less than 10% cover. Native species may include mixed-grass prairie grasses, such as *Agropyron smithii* and *Hesperostipa comata* (= *Stipa comata*), as well as others. Where native species are conspicuous enough to identify the native plant association that could occupy the site, the stand has been typed as such (NatureServe 2006).

Fort Larned National Historic Site

Smooth brome, an introduced cool-season grass from Eurasia, grows 0.3 to 1 m tall, and entirely covers more than 90% of the plots. Other weeds found in association with smooth brome include *Convolvulus arvensis*, *Kochia scoparia* and *Setaria pumila*. Native grasses cover less than 10% of the plots, but can include *Bouteloua curtipendula*, *Sorghastrum nutans* and *Andropogon gerardii*.

MAP CODE: PG2 (Planted Grass 2)

PLOTS: AB, AG, AH, AI, AW, DG, DL, DM, DN