

Andropogon hallii - Calamovilfa longifolia Herbaceous Vegetation

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| COMMON NAME | Sand bluestem-Prairie sandreed Herbaceous Vegetation |
| SYNONYM | Sandsage prairie |
| 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 hallii</i> Herbaceous Alliance |

CLASSIFICATION CONFIDENCE LEVEL 2

RANGE

This community is found in Colorado, Montana, South Dakota, Nebraska, and Kansas. Its distribution within these states is not known.

Scotts Bluff National Monument

This community is found primarily on the plains north and northwest of Scotts Bluff. Small patches of this community occur elsewhere.

ENVIRONMENTAL DESCRIPTION

This community is found on flat to moderate slopes with sandy, loamy sand, or sandy loam soil. Often these locations are stabilized sand dunes (Johnston 1987). The sandy soil allows precipitation to penetrate quickly with little lost to runoff or evaporation. However, the water holding capacity of the soils and the precipitation of the region is low. This results in very little water remaining in the soil near the surface for much of the growing season (Tolstead 1942).

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Sites of this community are on level to gentle (<10%) slopes on interfluvies of plains. The soil is loamy sand (Dwyer loamy fine sand).

USFWS WETLAND SYSTEM Not applicable

MOST ABUNDANT SPECIES

Globally

Strata

Herbaceous

Species

Andropogon hallii, *Calamovilfa longifolia*, *Schizachyrium scoparium*

USGS-NPS Vegetation Mapping Program
Scotts Bluff National Monument

Scotts Bluff National Monument

Strata

Species

Herbaceous *Andropogon hallii*, *Bromus* spp., *Calamovilfa longifolia*, *Stipa comata*, *Elymus lanceolatus* ssp. *lanceolatus*, *Yucca glauca*

DIAGNOSTIC SPECIES

Globally

Andropogon hallii, *Calamovilfa longifolia*

Scotts Bluff National Monument

Andropogon hallii, *Artemisia frigida*, *Calamovilfa longifolia*, *Ipomoea leptophylla*, *Yucca glauca*

VEGETATION DESCRIPTION

This mixed grass community is dominated by graminoids that are between 0.5 and 1.5 m tall. The most abundant of these are typically *Andropogon hallii*, which reaches 1-1.5 m in Nebraska and *Calamovilfa longifolia*, which is 0.5-1 m (Tolstead 1942). *Bouteloua hirsuta*, *Schizachyrium scoparium*, and *Stipa comata* are common and can be co-dominant, locally. Other graminoids that are usually found in this community are *Agrostis hyemalis*, *Eragrostis trichodes*, *Carex inops* ssp. *heliophila*, *C. filifolia*, *Sporobolus cryptandrus*, *Muhlenbergia pungens*, *Koeleria macrantha*, and *Schizachyrium scoparium*. Forbs that accompany these graminoids include *Ambrosia psilostachya*, *Psoraleidum* spp., *Ipomoea leptophylla*, *Liatris punctata*, *Tradescantia occidentalis*, *Aster ericoides*, and *Solidago missouriensis*. Low shrubs, which rarely exceed 0.5 m, can be scattered throughout this community. These include *Amorpha canescens*, *Rosa arkansana*, and *Yucca glauca*. There is usually a significant amount of bare ground between the plants (Ramaley 1939, Tolstead 1942).

This community is a grassland, often with sparse shrub cover. The dominant species are *Calamovilfa longifolia*, *Stipa comata*, and, in some places, *Andropogon hallii*. Plants are relatively widely spaced with exotic *Bromus* spp. often filling the intervening spaces. *Yucca glauca* is quite conspicuous and the high concentration of yucca is often a useful indicator of this community. *Artemisia filifolia* is also characteristic of but not always common in this community. It is also present in other communities. *Ipomoea leptophylla* is the most conspicuous of numerous forb species.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G2

RANK JUSTIFICATION Information not available.

COMMENTS

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This community intergrades with *Stipa comata-Bouteloua gracilis-Carex filifolia* Herbaceous Vegetation, although in some places the border is distinct. Much of the sandsage grassland west of Scotts Bluff (west of the old fenceline) has been heavily disturbed.

REFERENCES

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