

Calamovilfa longifolia - Carex inops ssp. heliophila Herbaceous Vegetation

COMMON NAME Prairie Sandreed - Long-stolon Sedge Herbaceous Vegetation
SYNONYM Prairie Sandreed - Sedge Prairie
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 Tall sod temperate grassland (V.A.5.N.a)
ALLIANCE CALAMOVILFA LONGIFOLIA HERBACEOUS ALLIANCE
CLASSIFICATION CONFIDENCE LEVEL 2
USFWS WETLAND SYSTEM Terrestrial

RANGE

Lacreek National Wildlife Refuge

The prairie sandreed type is found primarily in the sandhills portion of the Refuge, although small stands sometimes occur in coarse textured soils along the northern margin of pool #10.

Globally

This community is found in 3 ecoregional sections in Wyoming, Montana, North Dakota, South Dakota, and Saskatchewan.

ENVIRONMENTAL DESCRIPTION

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The more developed stands of prairie sandreed grassland are found on sandy deposits along the northern border of the sandhills. Extensive stands occur primarily in the northeast corner of the sandhills. These species are also common components of many of the sandhill communities.

Globally

Stands are found on gently rolling uplands with little to moderate slopes (typically between 0 and 20%, but occasionally as high as 39%, Hirsch 1985, Hansen and Hoffman 1988). The soils are sand, sandy loam, or loamy sand and there is rarely substantial soil horizon development (Hanson and Whitman 1938). The parent material is sandstone (USFS 1992). Moisture levels may be high deep in the profile.

MOST ABUNDANT SPECIES

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<u>Stratum</u>	<u>Species</u>
Shrub	<i>Yucca glauca</i>
Herbaceous	<i>Calamovilfa longifolia</i> , <i>Carex inops ssp heliophila</i> , <i>Hesperostipa comata</i> , <i>Poa pratensis</i>

Globally

<u>Stratum</u>	<u>Species</u>
Graminoid	<i>Calamovilfa longifolia</i> , <i>Carex filifolia</i> , <i>Carex inops ssp heliophila</i>

CHARACTERISTIC SPECIES

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Calamovilfa longifolia, *Hesperostipa comata*

Globally

Calamovilfa longifolia, *Carex filifolia*, *Carex inops* ssp. *heliophila*

OTHER NOTABLE SPECIES

Globally

Stratum

Species

Graminoid *Koeleria macrantha*, *Schizachyrium scoparium*, *Hesperostipa comata*

VEGETATION DESCRIPTION

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Small stands of prairie sandreed grasslands are fairly common throughout the sandhills. Many are below the minimum mapping unit of 0.5 hectares. Foliar cover is usually sparse, ranging from 20-40%. The dominant grass is prairie sandreed (*Calamovilfa longifolia*), with needle-and-thread (*Hesperostipa comata*) and Kentucky bluegrass (*Poa pratensis*) as common secondary species.

Globally

The vegetation structure is somewhat open, with cover averaging 65 percent in parts of its range (USFS 1992). The vegetation is dominated by graminoids, with two strata, one of mid- to tall-grasses, the other of dense short sedges. In the taller grass layer, the most abundant species is *Calamovilfa longifolia*. Other species found in this layer include *Koeleria macrantha*, *Schizachyrium scoparium*, and *Hesperostipa comata*. *Pascopyrum smithii* may be present on some stands with finer soil textures. The short graminoid layer is composed chiefly of *Carex filifolia* and *Carex inops* ssp. *heliophila*, which may have high cover values. Other upland Carices, such as *Carex duriuscula* (= *Carex eleocharis*), as well as *Bouteloua gracilis* and *Muhlenbergia pungens*, may also be present. Forb species diversity is moderate, but they do not contribute greatly to the cover (Hanson and Whitman 1938, USFS 1992). The forbs that are typical of this community include *Artemisia dracunculus*, *Artemisia frigida* (a shrub to some), *Artemisia ludoviciana*, *Chenopodium album*, *Chenopodium leptophyllum*, *Lathyrus* spp., *Liatris punctata*, *Lygodesmia juncea*, *Phlox hoodii*, and *Psoralidium lanceolatum*. Shrubs are uncommon. When shrubs are present they are short shrubs such as *Yucca glauca*, *Rosa* spp., and *Artemisia frigida* (a forb to some).

CONSERVATION RANK G3. No occurrences have been documented, but the community is reported in 3 ecoregional subsections in Wyoming, Montana, North Dakota, South Dakota, and Saskatchewan. It is a very uncommon community in Badlands National Park, South Dakota.

DATABASE CODE CEGL001471

SIMILAR ASSOCIATIONS

Calamovilfa longifolia - *Hesperostipa comata* Herbaceous Vegetation

COMMENTS

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Calamovilfa longifolia - *Hesperostipa comata* Herbaceous Vegetation (CEGL001473) may be an equally good fit.

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