



GRASSES

Native to Short Grass Prairie

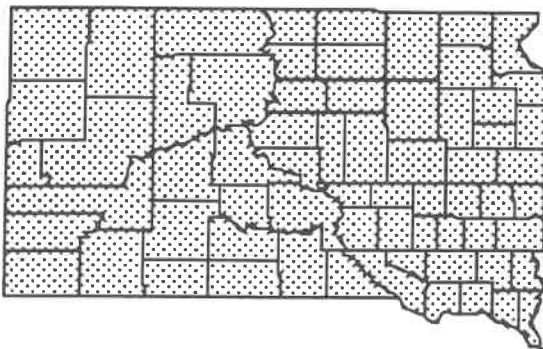
BUFFALOGRASS

(*Buchloe dactyloides*)

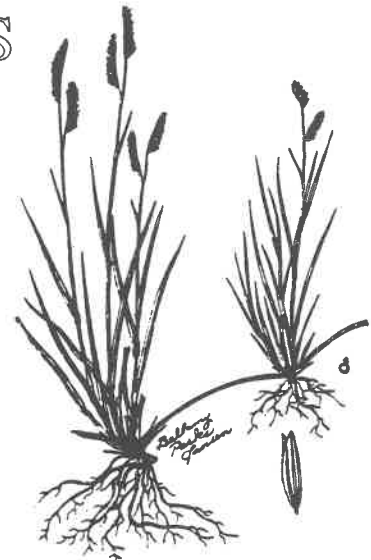
Description

In old western movies and novels, wagon masters and settlers often talked of buffalograss so tall that it was belly deep to a horse or was waving in the breeze across the open prairie. They could not have been talking about buffalograss as taxonomists identify it today. Buffalograss is actually a very short sod-forming grass, seldom taller than 5 inches (12.7cm), as shown in the illustration.

The scientific name, *Buchloe*, comes from the Greek words, "bous", meaning cow or ox and, "chloe", meaning grass. *Dactyloides* means finger-like and refers to the appearance of the male spikes. Buffalograss has curly leaf blades covered with fine hairs on both the top and bottom surfaces. The growing leaves are gray-green in color and older dead leaves are light straw colored.



Species Distribution



This species is called a sod-forming grass because it has *stolons*, or above ground stems, that form a dense sod or mat of grass. These *stolons* are similar to the runners of strawberry plants in that they take root wherever they touch the soil. The male and female flowers of buffalograss usually grow on separate plants. The female flowers grow in seed burs on short stems while the male flowers grow on thin stalks that extend upward above the leaves.

Buffalograss can be distinguished from blue grama, a species with which it is often found, because buffalograss has *stolons* and separate male and female flower heads while blue grama lacks *stolons* and produces only one kind of flower head that has both male and female parts.

Distribution

Buffalograss is native to the short grass prairies of North America. It is a *dominant* species of short grass prairie communities in western South Dakota. It is commonly found in association with blue grama. In the western part of the state it grows on relatively flat, rolling plains, and on various sizes of sod tables in badlands formations.

Natural History

Buffalograss reproduces two ways: *asexually* by the growth of *stolons* that begin new plants wherever they touch the soil; and sexually by seeds. The male and female flower heads usually grow on separate plants. The male flowers produce the pollen and are carried on long, thin stalks. The shorter stalked female flowers, after being pollinated, develop the seeds. This species is a warm season *perennial* grass that grows as

temperatures rise in late spring and summer and flowers during the summer.

Significance

During the homesteading days, buffalograss provided settlers with a major building component for sod houses. Buffalograss is an important part of the short grass prairie ecosystem. It provides excellent ground cover for erosion control. Also, this grass is a good quality food for wildlife and livestock in all seasons. Unfortunately, the quantity of food produced by buffalograss is limited by its low-growing nature. This low growing form makes the species ideal for lawns. Many people use buffalograss as a substitute for the more common, introduced lawn species. Buffalograss does better in warm, dry summers, needs less water and less mowing than the common lawn grasses like Kentucky bluegrass.

Glossary

- Asexual reproduction** - the type of reproduction that is accomplished by an individual without the help of another individual. The resulting offspring will be genetically identical to the adult.
- Dominant species** - the species in a community that significantly influences that community due to its greater population, size, or coverage.
- Stolon** - a horizontal, above-ground stem that gives rise to new plants wherever it touches the soil.
- Perennial** - a plant that can live for more than 2 years.

References

- Hatch, Stephen and James Stubbendieck, and Charles Butterfield, 1991. North American Range Plants. Univ. of Nebraska Press, Lincoln, NE.
- Johnson, James and James Nichols, 1982. Plants of S. Dakota Grasslands. SDSU, Brookings, SD 57007.
- Hitchcock, A.J., 1971. Manual of Grasses of the U.S. Dover Publications, New York.
- Looman, Jan, 1982. Prairie Grasses, Pub. 1413. Canadian Government Publishing Centre, Ottawa, Canada
- VanBruggen, Theodore, 1983. Wildflowers, Grasses and Other Plants of the Northern Plains and Black Hills. Badlands Natural History Assoc., Interior, SD 57750.

Resources for Teachers

- SDSU Range Club, College of Ag. and Biological Sciences, Brookings, SD 57007, dried plant mounts.
- BHSU Herbarium, Spearfish, SD 57799, dried plant mounts.
- County Extension Agents, U.S. Forest Service and Soil Cons. Service Offices (See Nat. Source Directory).

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