

SAND BLUESTEM

Andropogon hallii Hack.

Plant Symbol = ANHA

Contributed by: USDA NRCS Kansas Plant Materials Center



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Dept. of Systematic Biology-Botany

Alternate Names

Sand hill bluestem, Hall's bluestem, Hall's beardgrass, prairie bluestem, and turkey-foot

Uses

Erosion control: Sand bluestem is often recommended for erosion control plantings on sites which are sand, loamy sand or sandy loam. Generally, it is planted as part of a mixture with other warm season grasses.

Conservation Practices: Sand bluestem, because of its growth habit, is used with certain conservation practices; however, conservation practice standards and specifications vary by state. By going to the e-FOTG website for your state you can read if this grass is applicable to your needs. However, for

localized county data it is best to consult the local NRCS Field Office. NRCS practices include the following: 575-Animal Trails and Walkways; 327-Conservation Cover; 342-Critical Area Planting; 647-Early Successional Habitat Development-Management; 386-Field Border; 393-Filter Strip; 603-Herbaceous Wind Barriers; 543 and 544-Land Reconstruction, Abandoned/Current Mined Land; 512-Pasture and Hay Planting; 338-Prescribed Burning; 550-Range Planting; 643-Restoration Management of Declining Habitats; 645-Upland Wildlife Habitat Management; 601-Vegetative Barriers.

Livestock: Sand bluestem is a good to excellent forage due to its palatability and high yield. Under continued heavy grazing pressure it will die out and be replaced by other less desirable plants. It is an important component of many native hay meadows. The nutritive value of sand bluestem rises and falls with the growing season. It is high in crude protein and palatability until just prior to seedhead formation. After seedheads are formed the nutritive value and palatability decreases significantly.

Wildlife: Sand bluestem is good to excellent forage for all browsing wildlife species. Upland birds eat the seeds. Because it frequently grows in large clumps and retains an upright vegetative structure throughout the winter it makes an excellent nesting habitat for many upland birds and small mammals.

Ornamental Landscaping: As xeric landscaping becomes more popular the use of sand bluestem has increased in yard plantings. Because of its height and growth form many consider it an excellent plant for lawn and flower bed borders.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

Sand bluestem is a native, perennial, warm season bunch grass. It is tufted, forms sod, and has well-developed rhizomes reaching lengths of 4 to 8 inches. Sand bluestem is tall, reaching a height of 7 feet under best conditions. Sand bluestem has a J-shaped stem base, and the culms are solid, grooved on one

side. The leaf blades have none to few hairs and have prominent midribs. Most leaves are found near the base, with some leaves carried up on the stem. The seedheads generally have 2 to 6 digitate racemes, commonly 3 which produces the 'turkey foot' appearance, hence the common name.

Adaptation and Distribution

Sand bluestem is climatically adapted throughout the Great Plains Region on sandy, loamy sand or sandy loam soils. It occurs predominantly west of the Mississippi River to the Rocky Mountains and from Canada to Mexico. Consult the PLANTS Web site for additional distribution information and Plant Characteristics.

Establishment

Sand bluestem should be seeded in the spring just prior to the start of the growing season. A drill specifically built for seeding native grasses should be used. It is best if the grass is seeded into a weed free standing cover crop. The seeding rate is about 6 pounds Pure Live Seed (PLS) per acre. The local NRCS Field Office should be consulted prior to ordering any seed to ensure the right amount and planting mixture is used. Broadcast seeding will result in significantly fewer viable seedlings as opposed to drilling. Broadcasting should only be done on small acreages where drilling is not physically feasible. Applying commercial fertilizers to native grass seedings is more likely to result in competitive weed growth rather than improve grass establishment. If the pH is below 5.5, lime should be incorporated into the soil prior to planting. When possible, a named variety suitable for your growing area should be used. If this is not possible, a seed source closer than 400 miles to the South, 150 miles to the North or an elevation increase of 1,500 feet should be used if a stand is to be successfully grown.

Management

No harvest of bluestem during the establishment season should be allowed. During the second growing season, harvesting by controlled pasturing or haying is possible on good stands. The first harvest should not commence until the bluestem is 20 inches tall. It should be grazed (5 days maximum duration) or cut no lower than 8 inches and then protected from use until 20 inches in height is reached again. No cropping should occur below 8 inches or within 1 month of anticipated frosts. After a killing frost, the area may be grazed to 8 inches, but forage quality is greatly reduced and supplementation is recommended for growing animals.

Sand bluestem has relatively weak seedling vigor compared to weeds and cool season grasses; therefore, control of competition is necessary for successful stand establishment. High mowing (above the bluestem seedlings) should be done when the weeds reach a height of 6 to 8 inches. Herbicide applications for weed control should be considered when weeds create more than 50 percent or more of the canopy. All pesticides used must be Federally and locally registered and must be applied in accordance with authorized registered uses, directions on the label, and other Federal or State policies and requirements.

Prescribed burning can help remove weed mulch from small seedlings and warm the ground up in the early spring. It is recommended a prescribed burning plan be made with your local NRCS Field Office prior to any actual burn.

Grazing of competing cool season grasses after frost in the fall and before the bluestem is 1 inch tall in the spring is desirable, unless soil conditions are too wet.

Cultivars, Improved, and Selected Materials (and area of origin)

There are 4 cultivars available as certified seed, i.e. 'Elida' (NM), 'Garden' (NE), 'Goldstrike' (NE), 'Woodward' (NM).

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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