

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.

Big 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) is a common method of weed control. Selected herbicides may have application when forage harvests are not anticipated during the year. 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.

Opportunities to Participate

NRCS Field Offices, District Employees, Partners and Volunteers: We need your help!

The Cape May PMC serves a nine-state area extending from Massachusetts to North Carolina. The plant developmental process used by the Cape May PMC relies heavily on the cooperation of our conservation partners to locate native plant stands; collect materials and ship them to Cape May; locate suitable plant testing sites; record plant performance data; and publish new scientific findings. Call the Cape May PMC for more details about how you can help.

Tours Available

Visitors are always welcome at the PMC. The center is open Monday through Friday. Please call the PMC to schedule your visit.

**USDA NRCS Plant Materials Center
1536 Route Nine North
Cape May Court House NJ 08210
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Suther Germplasm Big Bluestem Source Identified Germplasm

Andropogon gerardii Vitman

A North Carolina Ecotype

*Cape May PMC products are
helping people help the land
through better plants and science*

Big Bluestem



USDA-NRCS PLANTS Database / Hitchcock, A.S. (rev. A. Chase). 1950. *Manual of the grasses of the United States*. USDA Miscellaneous Publication No. 200. Washington, DC

Scientific Name:

Andropogon gerardii Vitman

Common Name:

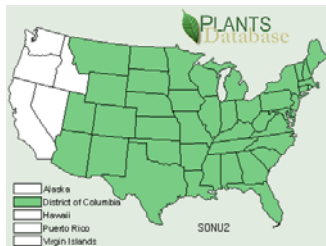
Big Bluestem

Description:

Andropogon gerardii, big bluestem, is a native, perennial, warm season grass that occurs from the short grass prairie region to the Atlantic Ocean. It is tufted, forms sod, and has short, scaly rhizomes. Big bluestem is tall, reaching a height of 6 to 8 feet on most sites where it is protected from grazing. It is very leafy at the base, with some leaves carried up on the stem. The seed heads normally have 3 spikelets that appear like a 'turkey foot.'

Plant Distribution:

Prior to using any plant material determine its local invasive status.



Establishment

Big bluestem should be seeded as early in the spring as possible. Conventional tillage should be used where practical. Where no-till must be used due to slope, stoniness, or other reasons, the sod control should be performed in the fall to permit early spring planting. The seeding rate for broadcast or no-till methods should be 7 to 12 pounds PLS per acre. When drills are used to plant, debearded seed must be utilized unless the drill has a chaffy seed box. When the seed is broadcast, a packer should be utilized to firm the seedbed and incorporate the seed 1/4 to 1/2 inch (3/4 inch on very droughty sites) as if alfalfa was being planted. No nitrogen fertilizer should be applied during the establishment year unless no weed competition is expected. If pH is below 5.5, lime is recommended during site preparation or the fall prior to no-till plantings.

The most common cause of failure of warm-season grasses is a loose seedbed. Conventionally-tilled seedbeds should be packed before and especially after seeding. The seedbed should be firm enough to show only a light imprint when stepped on. When using a no-till drill, be sure the coulter furrows are closed to avoid seed exposure and drying. This can be accomplished by culti-packing after the drilling operation.

Photo of PMC Production Field



Seed increase plot at the Cape May PMC.

Origin

Suther Germplasm Big Bluestem originated from Cabarrus County North Carolina. Because the site never experienced the American plow, the plant community was considered a remnant eastern U.S. prairie system.

Adaptation

Area of adaptation have not been determined. However, this geno-type has exhibited typical morphological characteristics as far north as Cape May NJ.

Application and Uses

- ◆ USDA Conservation Programs
- ◆ Providing food and cover for Wildlife
- ◆ Increasing species diversity
- ◆ Controlling erosion
- ◆ Restoring native plant environments