

## BIG BLUESTEM

***Andropogon gerardii* Vitman.**

plant symbol = ANGE

Contributed by: USDA NRCS Plant Materials Program



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USDA NRCS 1995  
Northeast Wetland Flora  
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### Uses

**Erosion control:** Big bluestem is a top choice for erosion control plantings on sites with moderately well drained to excessively well drained soils. Generally, it is planted in combination with other warm season grasses on these sites.

**Livestock:** Big bluestem is one of the most palatable warm season grasses and is preferred over switchgrass by livestock. Therefore, in pastures, it should be planted alone for best management, especially where continuous or extensive grazing practices are used. It can be mixed with other species for intensive, rotational grazing.

**Wildlife:** Birds and mammals use big bluestem for nesting and escape cover in summer and winter. It resists lodging under snow cover almost as well as switchgrass, thereby contributing to spring nesting habitat.

### 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

*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.'

### Adaptation and Distribution

Big bluestem is climatically adapted throughout the Midwest and Northeast on moderately well drained through excessively well drained soils. It is adapted to a range of other soil limitations such as shallow depth, low pH, and low fertility.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Website.

### 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.

### 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.

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

There are several cultivars available as certified seed, i.e. 'Bison' (ND), 'Bonilla' (SD), 'Champ' (NE, IA), 'Kaw' (KS), 'Earl' (TX), 'Niagara' (NY), 'Pawnee' (NE), and 'Rountree' (IA).

#### **Prepared By & Species Coordinator:**

*USDA NRCS Plant Materials Program*

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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 <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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