Cottle County Germplasm
Sand Bluestem
Andropogon hallii Hack.

A Conservation Plant Release by USDA NRCS James E. “Bud” Smith Plant Materials Center, Knox City, TX

Cottle County Germplasm sand bluestem, *Andropogon hallii* Hack., was released from the James E. “Bud” Smith Plant Materials Center in Knox City, Texas in 2002.

**Description**
Sand bluestem is a native, perennial, warm-season bunchgrass. Plants will grow 4-6 feet tall with long, flat and strongly ribbed leaves. The blue-green stems have a flat base with a pale purple color during early spring growth. Seed is produced in a three part seed head at the top of the plant. Sand bluestem is similar to big bluestem. The main difference is the prominent rhizomes on sand bluestem that can reach 4 to 8 inches from the original plant. Sand bluestem has a deeper grey and waxy appearance than big bluestem.

**Source**
Cottle County Germplasm was originally collected from native plants located approximately 14 miles west of Paducah, Texas.

**Conservation Uses**
Cottle County Germplasm may be used as a component in seed mixtures for range seeding. It has the potential for use in many vegetative practices such as contour buffer strips, cross wind trap strips, field borders, and critical area plantings. It may be used for stabilizing sandy soils that have high erosion potential. Its forage value is fair to good for grazing livestock during any season of the year. Sand bluestem also provides cover and food for wildlife.

**Area of Adaptation**
Cottle County Germplasm is adapted to a wide range of sites throughout Texas and Oklahoma. It performs best on deep, sandy and fine-textured soils. Sand bluestem is not adapted to saline sites or wet bottomlands.

**Establishment and Management for Conservation Plantings**
The full seedling rate for Cottle County Germplasm is 6.0 pounds of pure live seed per acre. Seed is best planted using a grass drill since grain drills will not handle fluffy seeds. Broadcast seeding may be used in areas not easily accessible with a drill, but some soil disturbance will be necessary to ensure seed-to-soil contact. When planting this as a component of a seed mixture, the seeding rate should be adjusted to the desired percent of the mix. Seed should be placed ¼ to ½ inch deep.

Seedbed preparation should begin the year prior to spring planting to reduce weed problems during the first year of establishment. Work the site as necessary during the summer or early fall prior to establishment to create a firm weed-free seedbed. Work should be completed in the fall to allow time for the soil to settle and accumulate moisture. Minimum and no-till operations should use herbicide applications to control weeds.

Plantings should be well established before livestock grazing is permitted. Twelve months of grazing deferment should give plants enough time to become established. Established stands should not be grazed lower than 6-8 inches, depending upon the prescribed grazing system. Contact your local USDA-Natural Resources Conservation Service field office for assistance in planning and applying prescribed grazing plans.

Soil tests should be conducted to determine the amount of fertilizer applied to sustain a medium level. Nitrogen should not be used during the establishment year because it will encourage weed growth. Weeds may be controlled by mowing or with herbicides. Consult your local extension weed specialist for recommendations on herbicides for sand bluestem.

**Seed and Plant Production**
Seed production fields of Cottle County Germplasm should be established in 36 to 42 inch rows depending on equipment available. Seed is harvested by direct combining or swathing and combining the seed using a specialized header attachment for conventional combines. A seed stripper has also shown to be an efficient harvester for fluffy grass seed. Average seed yield at Knox City is 100 pounds per acre with a summer and fall harvest.
Availability
For conservation use: Seed is available from several commercial seed companies.

For seed or plant increase: Generation zero (G0) seed (equivalent to Breeder seed) will be maintained by the USDA-NRCS Plant Materials Center in Knox City, Texas and is available through the Texas Foundation Seed Service in Vernon, Texas, phone number (940) 552-6226.


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

Citation
For more information, contact:
James E. “Bud” Smith PMC
3950 FM 1292 Suite 100
Knox City, TX 79529
Phone: (940) 658-3922 ext. 5
Fax: (940) 658-3095
http://plant-materials.nrcs.usda.gov/txpmc/