

A Conservation Plant Released by the Natural Resources Conservation Service  
Brooksville Plant Materials Center, Brooksville, Florida

# Fort Cooper Germplasm

## *splitbeard bluestem*

### *Andropogon ternarius* Michx.



*Paired seed stalks (racemes) of Fort Cooper splitbeard bluestem*

Fort Cooper Germplasm is a Florida-source selection of the native, warm season, perennial bunch grass splitbeard bluestem (*Andropogon ternarius* Michx.). The USDA, NRCS Brooksville Plant Materials Center released Fort Cooper in 2008.

#### Description

Splitbeard bluestem is a bunch grass with 10- to 16-inch long basal leaves that are often purplish in color and covered with a white powdery bloom. Some leaves will generally remain green throughout the winter. The clumps are usually 0.5- to 1-foot in diameter, but can be larger on moist sites. The slender flowering culms are 2- to 4-feet tall and often red or purple in color. The inflorescence is a shiny silver when emerging, becoming white or cream-colored when the flowers are fully open. One of the primary distinguishing features of this grass is that each inflorescence usually splits into two (rarely three) branches or racemes. Spikelets have long white silky hairs and after the seed disperses, a tuft of silver hairs remains, giving rise to an alternate common name of paintbrush bluestem. At Brooksville, seed generally ripens in late November and early December.

#### Source

Seed of this release was originally collected in Fort Cooper State Park in Citrus County, Florida. It was assigned the NRCS accession number 9060084. Fort Cooper Germplasm is a source-identified release that has undergone limited testing in central Florida.

#### Conservation Uses

Because it produces an abundant supply of viable seeds that establish readily, one of the greatest potential uses of Fort Cooper Germplasm is as a natural nurse plant for slower establishing native species, especially on sites with coarse dry soils. It has great potential for planting as an understorey component on longleaf pine restoration sites. Livestock graze splitbeard bluestem in the spring, but it is generally not a primary component of most range sites and forage quality is only moderate. Fort Cooper is ideally suited to provide wildlife habitat, control erosion, and improve species diversity on reclaimed mineland and other critically disturbed areas. Its persistent seed heads give it ornamental appeal.

#### Area of Adaptation and Use

The native range of splitbeard bluestem includes the southeastern and south-central United States. Fort Cooper was tested in MLRAs 154 and 155 (central Florida). It may also be adapted to other areas in the southeast.

#### Establishment and Management for Conservation Plantings

The planting site should be free of invasive or noxious weeds. Close mowing or burning prior to planting will reduce competition from existing vegetation and allow Fort Cooper seed to reach the soil surface. Most sites will generally be broadcast planted; however, a no-till drill with a fluffy seed box can be used if available. Grazing should be deferred until the plants are well established.

#### Ecological Considerations

Splitbeard bluestem is a mid-successional species that will form stable communities with broomsedge and panicgrasses in abandoned fields and disturbed areas. Because splitbeard bluestem is a native species in the area of potential use, Fort Cooper poses little risk of harming native communities.



*Harvesting Fort Cooper Germplasm with a Woodward flail-vac seed stripper that brushes the seeds off the plant.*

### Seed and Plant Production

The planting site should be cultivated or treated with herbicides for one to two years prior to planting to obtain a clean, weed-free seedbed. Production fields in Florida can be planted year round if irrigation is available. It is best to plant non-irrigated fields in January or August. The recommended planting method is to use a seed drill with a fluffy seed box and sow in 24- to 48-inch rows. The planting rate for 24-inch rows is 3 lb PLS/ac; this rate should be reduced by one third for 36-inch rows and by half for 48-inch rows. Seed can also be broadcast; however, the planting rate should be doubled to 6 lb PLS/ac. Seed fields established by broadcast planting will be more difficult to manage than fields where the seed is drilled in rows. Debearded or hulled seed can also be used if available and will pass more easily through a conventional seed box on a drill. Planting rate for both hulled and debearded seed is 2 lb PLS/ac for 24-inch rows and should be reduced as outlined above for wider row spacing.

Seed production stands should be fertilized according to soil test recommendations. Nitrogen fertilization is not recommended at planting; but other nutrients should be applied if soil testing indicates they are deficient. Established stands on severely nutrient deficient soils can be fertilized annually with 30 to 50 pounds per acre of nitrogen in the spring. Excess nitrogen can cause lodging and may reduce the longevity of the production stand. Fort Cooper plants are moderately tolerant of fire, but do not respond well to annual burning; mowing to a 4- to 8-inch-stubble height is recommended to remove dead tissue in the spring.



Hulled Fort Cooper Germplasm seed (left) and intact seed (right)

### Availability

*For conservation use:* Seed was distributed to commercial producers from 2009 to 2014. Fort Cooper seed for conservation use will likely be available within five years.

*For seed or plant increase:* Foundation seed is available from the USDA, NRCS Brooksville Plant Materials Center and is available to any interested seed producer with no royalty fee required.

***For more information, contact:***

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### Citation

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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.plantmaterials.nrcs.usda.gov>>

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