

**A Conservation Plant Released by The Natural Resources Conservation Service
Los Lunas Plant Materials Center, Los Lunas, New Mexico**

'Elida'

sand bluestem

Andropogon hallii Hack

Elida sand bluestem was released in 1963 by the New Mexico State University Los Lunas Agricultural Science Center and the NRCS Los Lunas Plant Materials Center in Los Lunas, New Mexico.

Description

Elida sand bluestem is a warm-season, perennial, native bunchgrass that spreads from prominent rhizomes reaching 4 to 8 inches in length. Culm height averages about 6 feet and supports substantial foliage which extends up to 48 inches on the culms. It has a J-shaped stem base, and the culms are solid, and grooved on one side. Leaf blades have margins with none-to-few hairs, have prominent midribs, strongly ridged on the upper surface but not below. The leaf collar is often hirsute. Most leaves are found near the base.



'Elida' sand bluestem ©W.L. Wagner Courtesy of Smithsonian Institution Dept. of Sys. Biology-Botany

Source

Original seed was collected in 1956 from the sand dune area southeast of Elida, New Mexico. Elevation at the collection site is 4,345 feet, and annual precipitation averaged 15.7 inches at the time of collection.

Conservation Uses

Erosion control: Sand bluestem is often used in erosion control plantings on sandy, loamy-sand or sandy-loam sites. It establishes quickly and its rhizomes aid in stabilizing sandy soils. Generally, it is planted as part of a mixture with other warm-season grass species.

Forages: Sand bluestem is good-to-excellent forage due to its palatability and high yield. It is an important component of many native hay meadows and range pastures. 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 seed head formation. After seed heads are formed, the nutritive value and palatability decreases significantly.

Wildlife: Sand bluestem is a good-to-excellent forage for all browsing wildlife species. Because it frequently grows in large clumps and retains an upright structure throughout the winter, it makes an excellent nesting habitat for many upland birds and small mammals. Its seed is also a food source for wildlife.

Ornamental Landscaping: Sand bluestem's height and erect growth form make it an excellent plant for lawn and flowerbed borders.

Area of Adaptation and Use

Sand bluestem is climatically adapted throughout the Midwest and Great Plains Region on sandy, loamy-sand, or sandy-loam soils. Typically, sand bluestem is not found where annual precipitation is less than 14 inches, greater than 30 inches, or on soils with a high-clay component.

Establishment and Management for Conservation Plantings

Seed sand bluestem in the spring just before the start of the growing season. Using a drill specifically built for seeding native grasses is recommended. The seeding rate varies from 6 to 12 pounds Pure Live Seed (PLS) per acre. Broadcast seeding can result in significantly fewer viable seedlings and should only be done on small acreages where drilling the seed is not feasible. Do not harvest seed during the establishment period. The first harvest should not occur until the bluestem is 20 inches tall. In pastures, it should be grazed (5 days maximum duration) or cut no lower than 8 inches, and then it should be

protected from use until it reaches 20 inches in height again. Do not cut below 8 inches or within one month of anticipated frosts. Herbicide applications for weed control should be considered when weeds create more than 50 percent of the canopy.

Native Hay Meadow: In meadows where sand bluestem is an important component, mow 1 to 3 weeks before seed head formation and no closer than 4 inches above the soil. Regrowth rate is determined by the mowing date and weather conditions. The meadow must be mowed before boot stage if significant regrowth is to occur. If the cut meadow is grazed, livestock should only be placed on it after the first killing frost.

Livestock Grazing: Cattle and horses prefer sand bluestem over many other grasses and forbs. When sand bluestem is repeatedly overgrazed (closer than 6 to 8 inches during the growing season), it decreases in population and may be replaced by less productive and desirable vegetation. The old rule of thumb, “Take half and leave half,” works well when dealing with sand bluestem. At the end of the grazing season, the average height of sand bluestem plants in a well-managed prairie should be at least 6 inches. If the pasture is to be grazed during the winter, the grass should be at least 8 inches tall to help trap moisture as a forage reserve. Prescribed burning can be used to maintain or improve prairie ecosystems. Fire can reduce competition from competitive cool-season grasses and remove many invasive woody species. Sand bluestem responds well to fire and prescribed burning may prevent “blowouts” in sandy soils. Burning should be done when new spring shoots are ½- to 2-inches long.

Ecological Considerations

This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed.

Seed and Plant Production

For seed production, planting 2 to 4 pounds pure live seed per acre in late spring or early summer at 0.5 inch seeding depth is recommended. Elida sand bluestem may be planted in 36 inch rows, and 80-120 lb/acre nitrogen may be applied when stands are well established. The time of flowering and seed maturity may vary with the time of irrigation or precipitation. Under irrigated conditions, at the Los Lunas Plant Materials Center, Elida shows a uniformity in plant height and seed ripening with flowers in late July and seed maturity in early October.

Availability

For conservation use: For information on seed sources or on the management and use of Elida sand bluestem, contact your local County Extension Service or the USDA-Natural Resources Conservation Service.

For seed or plant increase: Foundation seed is produced by the Los Lunas Plant Materials Center and limited quantity of seed is available to certified growers.

For More Information

For more information on Elida sand bluestem, please contact Los Lunas Plant Materials Center 1036 Miller Road, Los Lunas, NM 87031, Tele: 505-865-7340, FAX: 505-865-5163
<https://www.nrcs.usda.gov/plant-materials/nmpmc>

Citation

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For additional information, 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 Website. <https://www.nrcs.usda.gov/plant-materials>



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