



# West Texas Native Seeds

Article by COLIN SHACKELFORD, FORREST SMITH  
and LOUIS HARVESON



Greenhouse production of whiplash pappusgrass and silver bluestem will be planted for seed increase.  
*(Photo by Colin Shackelford)*

is a collaborative project between the Borderlands Research Institute at Sul Ross State University and the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville. The project's primary goal is to provide economically viable sources of locally adapted native plant seeds that can be used for the restoration of the native plant communities in West Texas.

Restoration of native plant communities is a growing need in West Texas. Common restoration goals include providing habitat for wildlife, revegetating highway rights of way, the reclamation of oil and natural gas production fields and pipelines and revegetation in the rapidly growing solar energy industry. Commercial sources of locally adapted native seeds for these kinds of projects are critical for successful restoration.

Previous to WTNS, with the exception of one or two grass species, there were no commercial sources of native seeds available that originated from West Texas. A large scale research project looking at the performance of multiple existing plant varieties already available in the commercial seed market showed that few of these existing plant varieties could pass muster in the challenging soils and variable climate found in West Texas. The small number of plants that showed some indication of good performance originated from the western

**W**est Texas Native Seeds (WTNS) has been hard at work across a large swath of Texas—from Del Rio north to Abilene and all the way west to El Paso. Over six years of plant material development work is finally paying dividends for grassland restoration in West Texas. The hard work of seed collecting, greenhouse production, plant

evaluation research and seed production has resulted in the first two plant material releases specifically for West Texas in nearly 30 years. New releases of silver bluestem and whiplash pappusgrass are in the final stages of seed increase before being made available to consumers in 2018.

WTNS, formally called the Trans-Pecos Native Plant Materials Initiative,

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Planting whiplash pappusgrass for seed increase at the Sierra la Rana seed increase site, south of Alpine. (Photo by Jameson Crumpler)



Harvesting seed from whiplash pappusgrass at the Sierra la Rana seed increase site south of Alpine. (Photo by Colin Shackelford)



Evaluation plantings in the Permian Basin at the Railway Ranch, south of Odessa. (Photo by Colin Shackelford)

portions of south or central Texas, evidence of the importance of locally originating seeds.

WTNS is moving forward with several new plant material releases in addition to the upcoming release of silver bluestem and whiplash pappusgrass. Five grass species and three forb species were planted for initial seed increase this past May. Seed increase is the last step in the development process before commercial release to consumers. The grass species sideoats grama, sand dropseed, blue grama, Hall's panicum and slim and rough tridens, as well as the forbs Tahoka daisy, Gregg's mistflower and skeletonleaf goldeneye could be available to consumers in the summer of 2019.

The seed collection and plant evaluation process that paves the way to plant release and commercial scale production is continuing alongside seed increase. The first step of the seed development process is the collection of multiple populations of each target plant species. To date over 1,100 plant material collections of 130 species from 60 counties in West Texas and southeast New Mexico have been made. Private landowners have been critical project partners by providing access to make small collections of seed. These collections and subsequent evaluation plantings allow researchers to identify populations with the best natural adaptation for successful restoration use.

Evaluation plantings of hooded windmill grass and cowpen daisy were installed at evaluation sites in Alpine and Odessa in May. Data will be collected from these evaluation plantings for two years before selections of high performing populations are moved to seed increase prior to commercial release. Hooded windmill is an exceptionally drought tolerant grass adapted to sandy soils and disturbed sites. Cowpen daisy is an excellent wildlife plant producing flowers attractive to a diverse group of pollinator species and abundant seed highly preferred by scaled quail.

As disturbance and fragmentation increase in West Texas, commercial sources of native seeds for restoration will be critical for conservation of the region's unique biodiversity. The release of silver bluestem and whiplash pappusgrass is a big first step for the project. Over the next few years WTNS hopes to release and ensure the commercial availability of seed sources of 15+ native species. These releases will be the foundation for diverse native seed mixes that will successfully meet restoration needs across West Texas.

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*For information about West Texas Native Seeds for native seed collection or grassland restoration on your property, please contact us at (432) 837-8225 or bri@sulross.edu.*