The Trans-Pecos Native Plant Materials Initiative

A NATIVE PLANT RESTORATION REVOLUTION started in South Texas is making its way to West Texas. In an effort to improve native seed availability in the Trans-Pecos, the Borderlands Research Institute (BRI) is partnering with the Texas Native Seeds project (TNS) of the Caesar Kleberg Wildlife Research Institute (CKWRI). TNS is a multi-agency collaborative initiative to develop and promote native plants for the restoration and reclamation of habitats in South, Central, and West Texas. In West Texas, this work is spearheaded through the Trans-Pecos Native Plant Materials Initiative led by BRI.

The initiative’s primary goal is to provide economically viable sources of locally adapted native plants and seeds that can be used for the restoration of the native plant communities in West Texas. Another objective is developing effective restoration strategies for the region. Trans-Pecos Native Plant Materials Initiative is modeled after CKWRI’s South Texas Natives project (STN), which has released 20 native seed selections to commercial growers in the last decade.

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, and oil and natural gas field reclamation. Commercial sources of locally adapted native seeds for these kinds of projects are critical for successful restoration. Currently, with the exception of one or two grass species, there are no commercial sources of native seeds available that originated from the Trans-Pecos Ecoregion.

As a result of the lack of native seeds, exotic grasses are often planted to prevent soil erosion in reclamation projects or following habitat improvement efforts. However, research continues to suggest exotic grasses have many negative impacts to wildlife and the ecosystems they are introduced into. 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 initial phase of the West Texas project includes evaluating the adaptation of existing native plant releases to the variations in soil, climate and restoration settings across the region. Past native seed releases from the NRCS Plant Materials Program, STN’s recent releases, and other commercial sources have been planted at two research sites in West Texas. Initial results show that a handful of these plants
may be able to be successfully used in the Trans-Pecos. Overall, though, these projects clearly show the need for development of regionally specific releases of many species. Plants showing some indication of good performance so far are those originating from the western portions of South or Central Texas, further evidence of the importance of locally originating seeds.

The main task of the West Texas project at present is obtaining native seed collections. The first step of any seed development process is the collection of multiple populations of each target plant species. These collections allow researchers to identify populations with the best natural adaptation for successful restoration use. These naturally vigorous plant populations will eventually be candidates for new regional seed sources. Thus, private landowners providing access for project staff to make small collections of seed is vital for project success. TNS staff has already made 188 seed collections from 32 ranches across the project area. As moisture conditions improve, TNS hopes to obtain at least two collections of each species of interest from each Trans-Pecos county.

Over the next decade, the Trans-Pecos Native Plant Materials Initiative hopes to release and ensure the commercial availability of seed sources of 15-plus native species, eventually resulting in diverse native seed mixes that will successfully meet restoration needs across West Texas.

The diverse wildlife found across the Trans-Pecos is a result of the region’s rich native plant communities. Our goal is to make native plant restoration after habitat disturbance a viable management option for all land users. We think conserving the treasure that is the native plant-dominated Trans-Pecos is a win-win for everyone, wildlife included.

The Trans-Pecos Native Plant Materials Initiative and Texas Native Seeds are funded through a combination of private and public funding sources. Founding sponsorship was provided by a grant from the Texas Department of Transportation, augmented by generous support from the Dixon Water Foundation, Faye L. and William L. Cowden Foundation, Will Harte, and the Caesar Kleberg Partners Program. CF Properties’ Sierra la Rana Development and Pecos County Irrigation District #3 are currently providing plant material evaluation sites for the project.