

Operation Ponderosa

Texas A&M Forest Service Leads the Restoration and Recovery of Ponderosa Pines in the Davis Mountains of West Texas and the American Southwest

The Davis Mountains of West Texas contain some of the largest populations of Rocky Mountain Ponderosa Pine, *Pinus ponderosa* var. *scopulorum*, in Texas. The Davis Mountains Preserve in Fort Davis contains a majority of these endemic stands— and they are in peril.



Environmental stresses, initially a lack of soil moisture from drought, coupled with secondary bark beetle invasions, have killed the majority of trees. In addition, wildfires in 2011 burned through some of the most productive stands.



2014

Texas A&M Forest Service and Texas Nature Conservancy staff assessed 18 Ponderosa Pine stands in the TNC Preserve—leading to recommendations to help maintain and improve existing stands:

- collect native seed
- thin overpopulated stands
- remove competing vegetation
- collect baseline data to monitor the recovery of forest stands over time

2015

TFS marked stands and gathered baseline data in preparation for thinning operations scheduled for 350 acres of forestlands on the TNC Preserve.



TFS received a grant from USDA Forest Service for forest stand assessments and management prescriptions.

TNC received grant to thin competing trees and TFS marked the removals on 300 acres

TFS gathered cones from trees in yards in Ft Davis and grew out 2,800 ponderosa seedlings at the TFS West Texas Nursery.



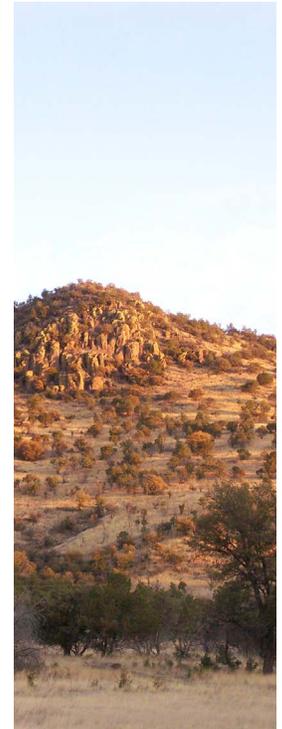
2016

TFS conducted a wildland site preparation experiment using the grown-out seedlings.

Herbivory, mainly gophers, take their toll on the plantings.

The second round of cone collection yields only 180 seedlings for the 2017 planting, but the third round yields a large cache of seeds for 2018.

TFS gave away seedlings to landowners in the surrounding communities of Ft Davis, Alpine and Marfa.



Future

TFS will create a handbook of Best Management Practices. These and other educational resources will serve as technical information and assistance to landowners and the public in restoring and recovering Ponderosa Pines in Texas and the American Southwest.

TFS is hosting a Ponderosa Restoration Conference for Texas and New Mexico in June 2017 at Sul Ross State University.



Conserve Protect Lead

Texas A&M Forest Service, Texas Nature Conservancy, USDA Forest Service
Partners: New Mexico and Arizona Departments of Forestry, Northern Arizona University, Texas A&M AgriLife Extension, Wildlife Conservation Society, City and Citizens of Fort Davis, International Society of Arboriculture—Texas Chapter, National Park Service—Big Bend and Guadalupe Mountains National Park