

## **Restoration of plugged and abandoned oil and gas well pad sites**

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Returning plugged and abandoned oil and gas well pad sites to productive wildlife habitat is an important concern of many landowners. In order to examine the ability of commercially produced, locally adapted native seeds to return these sites to productive wildlife habitat, *South Texas Natives* in cooperation with ExxonMobil and King Ranch restored and monitored 4 former pad sites on the Santa Gertrudis Division of King Ranch. Following removal of the wells and infrastructure, the caliche pads were removed during the summer of 2011. We then seeded each site with a diverse native seed mix using a Truax native seed drill in September 2011.

Vegetation data was collected bi-annually from autumn 2011-summer 2014.

- In just 6 months after seeding, all 4 pads were returned to usable wildlife habitats.
- 20 of 24 seeded native plant species established by 2 years post planting, with an increasing occurrence of highly desirable species such as little bluestem as time since planting increased.
- Basal cover of seeded native species has ranged from 75%-90% during the time since seeding.
- The sites have been subjected to moderate livestock grazing pressure throughout the monitoring period, as well as extreme to moderate drought conditions; even so, successful achievement of restoration objectives has been obtained.
- All 4 pads have different species compositions evident; we suggest this finding demonstrates the need for use of diverse native seed mixes to adequately cover multiple sites, and account for minor variations in soil properties.

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