





Parkhill Prairie - Future Grassland Restoration Initiative

The Nature Conservancy (TNC) proposes to expand native grassland at Collin County's Parkhill prairie through restoration of an additional ~230 acres. TNC has received a substantial grant from Union Pacific Railroad for projects planned in California, Nebraska, and Texas. A significant portion of this funding will be used for the Parkhill Prairie restoration project.

Restoration of substantial additional acreage at Parkhill Prairie will reach three key metrics:

- 1. Improved habitat for grassland obligate species will greatly increase the conservation space in the immediate region.
- 2. Improved water quality delivered into the watershed through increased residence time onsite and reduced erosion and downstream sediment loading.
- 3. Grassland restoration in a public park will reach a growing number of visitors and communicate the importance of healthy ecosystems, native plants, appropriate management of wildlands while providing equitable access to nature.

Collin County's Parkhill Prairie is a rural public park operated under the county's Parks and Open Spaces program. TNC assisted with acquisition of the property in the late 1980s and led grassland restoration on a portion in early 1990s. The 436-acre property protects a 52-acre unplowed prairie remnant and two 25-acre restoration areas. Parkhill Prairie drains into Arnold Creek, western border of the site, just upstream of a reservoir providing drinking water to more than 1 million residents, Lavon Lake. Over the last two decades, TNC has been contracted by Collin County to maintain the grasslands portions of the property, and this is accomplished through prescribed fire, mechanical, and chemical management. The Park is open daily to the public, has two TNC-maintained walking trails through the prairie, fishing ponds, several pavilions, and restroom facilities. Additionally, visitors are drawn to wildflower displays and wildlife viewing opportunities, and the Park is used for occasional outdoor nature-based classes.

Once spanning 12 million acres, the Blackland Prairie ecoregion of Texas now contains less than 0.1% in virgin, unplowed condition. Remaining remnant prairie patches are small in size with most less than 100-acres. Parkhill Prairie is located very nearby to TNC's Clymer Meadow Preserve (750-acre prairie, 1,470-acre site) and Countyline Prairie Preserve (25-acre prairie, 40-acre site). Efforts by a third party to establish a mitigation bank just downstream of the site have been underway for several years with plans to restore several miles of riparian habitat and hydrologic integrity of the streamflow. It is imperative that remaining patches are maintained using best management practices, and that corridors link high quality sites to ensure the greatest genetic exchange possible through connected quality habitat.

An additional threat to Parkhill Prairie is a rapidly urbanizing region. Between 2010-2019, Texas gained more residents than any other state, and Collin County is the ninth fastest growing county in the U.S. (2020 Census). Though still in a largely rural space, the areas surrounding Parkhill Prairie face significant changes over the next decade with projected growth.

Parkhill Prairie has several areas ripe for grassland restoration. The largest, 150-acres, is fallow agricultural land that will require improvement prior to planting. Another area, 30-acres of grassland succeeded to woodland, will require tree, brush, exotic species removal to begin restoration. A final area, 50-acres, has been improved by TNC in recent years but still requires extensive effort to achieve the high biodiversity goals of successful grassland restoration.



<u>Brandon.Belcher@TNC.org</u> Brandon Belcher, TNC NTX Preserves Manager 903-752-0676