

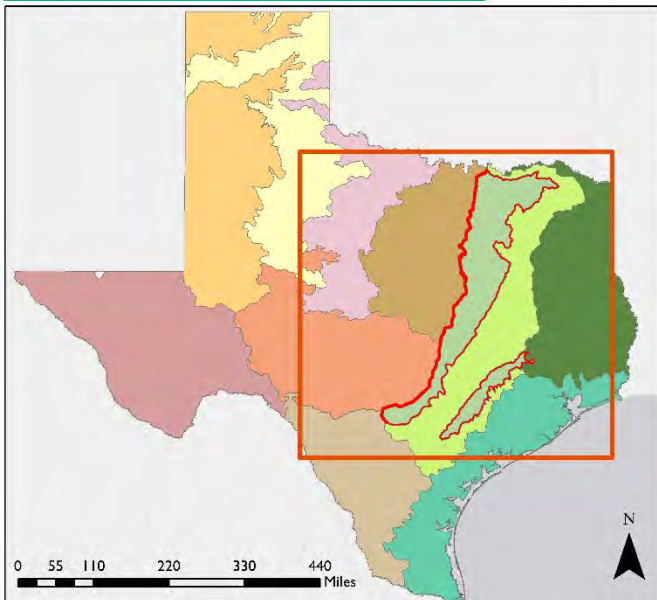
## Site Context

### Texas Blackland Prairie Ecoregion

The Texas Blackland Prairie is a unique subset of the grasslands and prairies that once covered North America’s interior. In general, eastern prairies are characterized by taller, denser-growing grasses and forbs (herbaceous flowering plants) that gradually transition westward into mixed-grass and short-grass prairies as average precipitation declines. Much of a prairie’s richness lies below the soil line, driven by complex relationships between plant roots, mycorrhizal fungi, and soil microbes. Above ground, prairies are home to a diverse community of mammals, reptiles, birds, and insects.

The Texas Blackland Prairie ecoregion covers nearly 19,948 square miles in a band from San Antonio, TX to the Oklahoma border northeast of Dallas, TX. Most of the ecoregion was covered in tallgrass prairie, dominated by grasses such as little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon gerardii*), Indiangrass (*Sorghastrum nutans*), and switchgrass (*Panicum virgatum*). Local site conditions such as soil type, slope, and moisture strongly influence the species and composition of Blackland prairies across the ecoregion. The heavy clay soils associated with many of these prairies create microhabitats as they swell and contract, creating unique gilgai formations. During wet seasons, these

### Major Ecoregions of Texas



- |  |   |
|--|---|
|  Arizona/New Mexico Mountains |  Texas Blackland Prairies        |
|  Chihuahuan Deserts           |  Edwards Plateau                 |
|  High Plains                  |  East Central Texas Plains       |
|  Central Great Plains         |  Southern Texas Plains           |
|  Southwestern Tablelands      |  Western Gulf Coast Plain        |
|  Cross Timbers                |  Gulf Coast Prairies and Marshes |

### Texas Blackland Prairie Ecoregion



### Reference Map



gilgai would hold water and form unique microhabitats of moist or wet prairie.

Constant disturbance by fire and bison grazing were vital in suppressing the spread of woody vegetation, especially the fast-growing eastern red cedar (*Juniperus virginiana*) into the prairies. More protected from fires, riparian areas in the ecoregion were dominated by deciduous bottomland hardwood forest. These forests were characterized by a canopy dominated by oak (*Quercus* sp.), elm (*Ulmus*, sp.), ash (*Fraxinus* sp.), pecan (*Carya illinoensis*), eastern cottonwood (*Populus deltoides*), and sugar hackberry (*Celtis laevigata*). Mid- and understory trees such as bois d'arc (*Maclura pomifera*), Texas buckeye (*Aesculus glabra*), and shrubs such as rough-leaf dogwood (*Cornus drummondii*) provide food and shelter to a variety of animals. The forest understory is host to a diversity of shade-tolerant grasses such as Virginia wild rye (*Elymus virginicus*) and inland sea oats (*Chasmanthium latifolium*) and flowering forbs like goldenrod (*Solidago* sp.) and frostweed (*Verbesina virginica*). With its mosaic of prairies, wetlands, and forest, the Texas Blackland Prairie ecoregion is host to more than 500 species of animals, including over 300 species of birds.

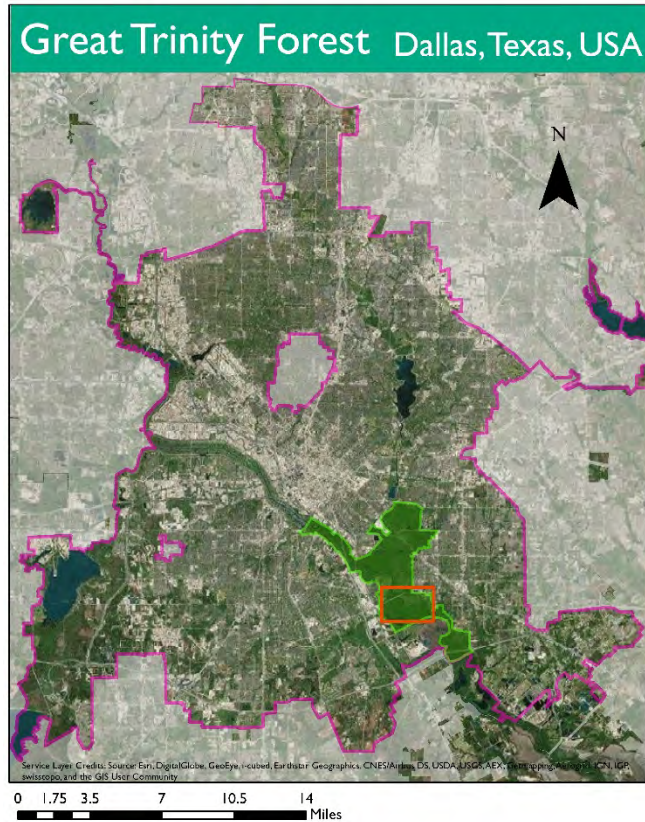
The disruption of the fire and bison-grazing disturbance regimes and the conversion of this extremely fertile soil into row-crop agriculture and pasture land were largely responsible for the disappearance of native prairie ecosystems. Many of the bottomland hardwood forests, sitting on rich, moist soils, were also put into livestock production or cultivation. By the 1920s, more than 80% of the native prairie plant cover had been converted to agricultural uses.

Today, less than 1% remains in its native cover, making it one of the most endangered ecosystems in North America. These are primarily privately-owned, isolated parcels that face increasing pressure from urban development.

### Site History and Background

The Trinity Forest Golf Course site sits within the 6,000 acre Great Trinity Forest within the Texas Blackland Prairie ecoregion, southeast of downtown Dallas. The 18 holes of the Trinity Forest Golf Club rest atop two capped sites in the former South Loop Landfill. The 48 acre practice range and short course lie to the north of the main course across Loop 12/Great Trinity Forest Way, on the capped Elam landfill. It sits directly adjacent to the [Trinity River Audubon Center](#), which was built as part of the remediation of the illegal Deepwood landfill and opened as a nature center in 2008.

In 2014, the Trinity Forest Golf Club worked with Audubon Texas's [Urban Conservation Program](#) to design a plan to reintroduce prairie plantings into the golf course's out-of-play areas.



Enlarged Area: Trinity Forest Golf Course and Adjacent Open Spaces in the Great Trinity Forest



Created by: Tania Homayoun, Audubon Texas, Conservation Science, 6/2015

### Prairie Restoration Areas

The main course covers roughly 156 acres, 89 acres of which are in-play areas with the remaining 62 acres as restoration areas. The practice course covers roughly 48 acres, 29 acres of which are in-play areas with the remaining 19 acres as restoration areas. Turf on the in-play areas of the course consists of a mixture of zoysia (*Zoysia*), Bermuda grass (*Cynodon dactylon*), and native buffalo grass (*Bouteloua dactyloides*). The restoration areas were seeded with Caliche Mix and Blackland Prairie Mix from [Native American Seed](#). Together, these provide a foundation of 17 native grass species and 28 native forb (flowering) species.

The first seeding started late Oct 2014 on slopes facing the drive into Trinity River Audubon Center and Secret Bird Pond. These areas were seeded in order to stabilize the slopes, prevent erosion, and provide habitat and protection to the pond area. Since many of these seeds would not germinate until spring, the initial mix included a cover crop of Cereal Rye (*Secale cereale*), an annual cool season non-native grass that germinates quickly, holds the soil through the winter, and dies back in the spring.

Construction and contouring of the course was completed in stages, moving from east to west across the course, with vegetation for the greens, fairways, and natural areas installed as sections of the course were completed by mid-September 2015. The practice range to the north was seeded late October through early November 2015. Temporary irrigation was used to germinate the seeded natural out-of-play areas and then removed.

### The Importance of Prairies

Texas's native prairie grasses are adapted to the state's unpredictable weather and climate, able to survive through periods of heat and cold, drought and flood. Part of this is due to the deep root systems – some up to 15 feet long – that these plants develop. In fact, the first 3 to 4 years of a prairie's growth are spent putting down these deep roots, with only modest growth aboveground.

In addition to anchoring soil and reducing erosion, prairie plants can protect water quality, filtering pollutants from runoff. The wildflowers that are an integral part of prairies are vital to supporting the bees and pollinators that are responsible for nearly one-third of the food on our tables. Texas prairie landscapes are critical habitat for North America's migratory bird species, many of which spend the winter in our grasslands or use them as stopovers during spring and fall migrations.

And, for Texans, bringing back a small piece of this vanishing landscape is a way to honor our history and leave a legacy for the future.

[PHOTOS?]



A header image showing a close-up of green plants with yellow flowers in the foreground, with a blurred background of a golf course and trees under a bright sky.

# TRINITY FOREST GOLF CLUB SEED MIX PLANT LIST

The seed mixes installed contain native grasses and forbs and were purchased from Native American Seed.

- Caliche Mix (14 grass species)
- Blackland Prairie Mix (12 grass species + 28 forb species)

Since many of these seeds will not germinate until spring, the mix includes a cover crop of Cereal Rye (*Secale cereale*), an annual cool season non-native grass that will germinate quickly, hold the soil through the winter, and die back in the spring.

## GRASSES

Buffalograss  
Blue grama  
Cane bluestem  
Curly mesquite  
Eastern gamagrass  
Green sprangletop  
Hall's panicum  
Indiangrass  
Little bluestem  
Prairie wildrye  
Purpletop tridens  
Texas cupgrass  
Sand dropseed  
Sand lovegrass  
Switchgrass  
White tridens  
Sideoats grama

## WILDFLOWERS/FORBES

American basket-flower  
Big bluestem  
Black-eyed Susan  
Butterfly Milkweed  
Clasping coneflower  
Croton

Cutleaf daisy  
Large-flowered beardtongue (foxglove)  
Gayfeather  
Illinois bundleflower  
Firewheel (Indian Blanket)  
Lemon mint (beebalm)  
Maximilian sunflower  
Partridge pea  
Pink evening primrose  
Pitcher sage  
Prairie agalinis  
Plains coreopsis  
Purple prairie clover  
Prairie verbena  
Rattlesnake master  
Showy milkweed  
Prairie spiderwort  
Standing cypress  
Swamp milkweed  
Tall Goldenrod  
Texas yellow star  
Winecup

*Cereal Rye (temporary cover crop)*