Have you ever daydreamed about time travel? Do you know that it IS possible? Seriously. With a little natural history knowledge and imagination, you can experience time travel. How? Put on your hiking boots and set out on Crosstimbers Trail.
Starting from the new bridge on the levee, you will notice two distinctly different ecosystems on either side. To the west, the water is tranquil, and there is abundant wetland vegetation. To the east, you see the present flow of the West Fork of the Trinity River (the original flow was altered in the 1940s via construction of the levee). Cast your gaze toward the horizon and imagine a time when the ancient river meandered, creating sand bars, oxbow lakes, and wetlands. The Trinity River originated during the Cenozoic Era (60 million years ago), according to *Fort Worth Nature Center & Refuge Geology Context* by Molly Holden, a former TCU student. In this paper, she states that the river carved terraces through Cretaceous (120 to 60 million years ago) materials and redeposited that material as alluvium.

As you look back to the wetland side of the trail, you can imagine ancient times when the environment was humid, with extensive marshes and riparian gallery forests. Wetland plants such as arrowhead (*Sagittaria latifolia*), crowfoot sedge (*Carex crus-corvi*), lotus (*Nelumbo lutea*), and water willow (*Justicia americana*) may have lined the shores many millennia ago, just as they do now. Perhaps a glance toward the horizon would reveal Cretaceous megafauna such as Columbian mammoths or camels. Paleo peoples may have camped on the hill to your south where our Hardwicke Interpretive Center is located.

As you continue along the levee, keep an eye on the river because you may see an animal from the ancient past: an alligator! Yes, we have alligators in North Texas. American alligators are the largest reptile in the United States. According to the Texas Parks & Wildlife Department, the longest recorded length for an alligator is 19 feet, 2 inches, taken in Louisiana in 1890. An alligator this size could weigh as much as 1,000 pounds. Alligators inhabit freshwater environments. Because they are cold blooded, their range is restricted to the southern United States. The Fort Worth Nature Center & Refuge is on the western edge of its natural range.

Along the levee, you will notice riparian tree species such as American elm (*Ulmus americana*), cottonwood (*Populus deltoides*), hackberry (*Celtis laevigata*), sycamore (*Platanus occidentalis*), and willow (*Salix nigra*). Understory shrubs include rusty blackhaw viburnum (*Viburnum rufidulum*), American beautyberry (*Callicarpa americana*), and Maryland senna (*Senna marilandica*). Approaching the main loop of the trail, you will notice a
change in tree species. The dominant tree becomes post oak (*Quercus stellata*). Post oaks are the sentinels of the Cross Timbers ecosystem (after which this trail is named).

The Cross Timbers ecosystem is comprised of two distinct bands of woodlands and savannas dominated by post oaks. The Eastern Cross Timbers is a solid line of woods that runs north to south, passing through east Fort Worth. Here on the Crosstimbers Trail, you are in the Western Cross Timbers. The Cross Timbers got its name from early settlers who passed through North Texas. There are several explanations for the name:

settlers had to “cross the timbers” to get to the prairies of the west, they had to cross the timbers from the “civilized east” to the “wild west,” or the woods were so thick and impenetrable that they were impossible to cross without using axes and machetes. Washington Irving, author of *The Legend of Sleepy Hollow*, nicknamed these woods the Cross Timbers.

Using your time travel imagination, think about what this area may have looked like when Native Americans lived here and settlers passed through. What would they have hunted; what fruit would they have collected?

The soils change as you hike farther from the river and embark on the loop section of the trail. Notice the subtle undulations underfoot. You are walking on ancient sandbar deposits from the river! These sandy hills were not farmable, nor were they good for grazing. In the 1800s, settlers homesteaded here and cleared small areas, but other than that, the land has been mostly unchanged. Trees were not commercially logged, which allowed the post oaks you see today to grow old.

In 1980, University of Arkansas researcher Dr. David Stahle collected tree core samples from the post oaks here. His data verified that many trees date as far back as 1737! These trees began their life the same year as John Hancock, the first person to sign America’s Declaration of Independence. In Stahle’s tree ring analysis, he noted periods of drought, abundant rainfall, and fires. Long-lived trees catalog climate change over centuries and provide a glimpse into what a region may have been like.
The Crosstimbers Trail loops across Todd Island, which was not originally an island. In 1909, Fort Worth had a devastating fire that destroyed 26 blocks of downtown. Fighting the fire depleted the city’s artesian wells. According to the *Fort Worth Star-Telegram*, to ensure a reliable supply of water, the City of Fort Worth spent $1.5 million to dam up the West Fork of the Trinity River. In August 1914, just months after construction, a flash flood filled the reservoir, and Lake Worth was born. The land you’re hiking today was surrounded by floodwaters, and Todd Island became an “island.”

Hiking Todd Island, you will notice prairie openings amongst the post oaks. These grassy openings are home to some endemic species found nowhere else in the world. According to ant researcher Ann Mayo, the Comanche harvester ant (*Pogonomyrmex comanche*) exclusively nests in very deep sandy soils in prairies surrounded by oak forests in only five states: Arkansas, Kansas, Louisiana, Oklahoma, and Texas. Another endemic species is the Glen Rose yucca (*Yucca necopina*), whose range is only a few counties in North Central Texas. Just like the Comanche harvester ants, it requires deep sandy prairie soils to survive.

As you ramble along the trail, note the soil, plants, insects, birds, reptiles, and amphibians. Enjoy the subtle changes from wetlands, riparian forests, prairie openings, and ancient post oak woodlands. Washington Irving once stated, “There is a serene and settled majesty to woodland scenery that enters into the soul and delights and elevates it, and fills it with noble inclinations.” I believe that to be true then, now, and in the future.