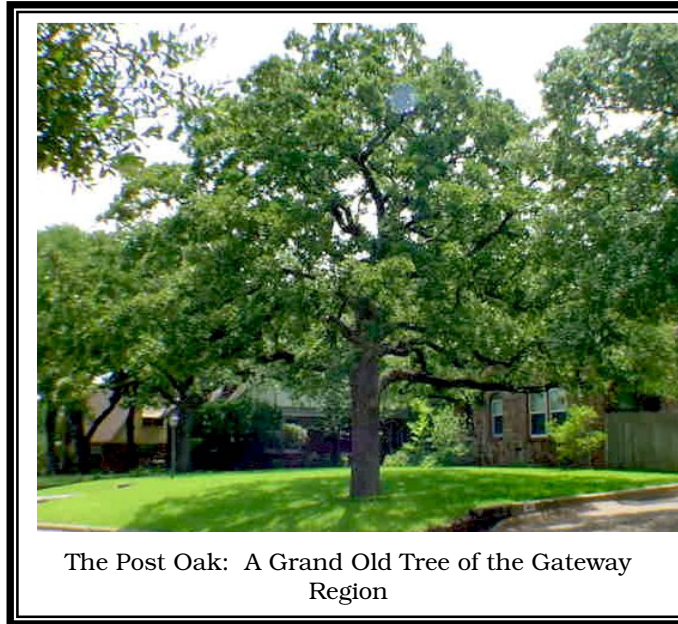


Post Oak Primer

An Introduction to the Post Oak's Role in the Gateway Region

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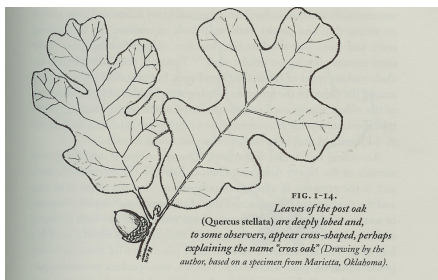
"I shall not easily forget the mortal toil, and the vexation of flesh and spirit, that we underwent occasionally, in our wanderings through the Cross Timber, it was like struggling through forests of cast iron."

Washington Irving, *A Tour of the Prairies*, 1821*

Though the post oak is found in other areas besides the ecosystem we call the Cross Timbers, its presence is a prime characteristic of this unique area. It has been said that the post oak got its name from early settlers who commonly used the decay resistant wood for fence posts.

Post oaks take several forms throughout its range but the tree we are most familiar with is an upright majestic shade tree. Its twisted and gnarled branches make it one of the most prominent deciduous trees in the winter landscape. Post oak leaves are five-lobed and somewhat resemble a crucifix. They are among the last trees to leaf out in the spring and one of the earliest to stop growing, which contributes to their slow growth rate. The average post oak takes more than ten years to grow 2" in trunk diameter. However, it becomes a dominant species on poor sites due to its drought resistance.

The Cross Timbers ecosystem consists of upland forests of drought resistant, slow growing trees, that cut through sections of the prairie from Central Texas, Oklahoma and into southern Kansas. Fort Worth is flanked with the Eastern and the Western Cross Timbers. The drought resistant post oak is a dominant species in both, but in the more arid sandier Western Cross Timbers, they are closer together, smaller and slower growing.



Sketch of Post Oak Leaf by Dr. Richard Francaviglia – [The Cast Iron Forest](#)

Reportedly, the post oak will not begin to bear acorns until it is about 25 years old. Though acorn production is more sparse than other oaks, they are more important to wildlife because they are higher in fatty acids.

The University of Arkansas Tree-Ring Laboratory has been conducting research in the Cross Timbers for over twenty years. They have found thousands of post oaks between 200 and 400 years old in all three states. The oldest are usually found on sandy soils or on steep rocky terrain. The height of the post oak is rarely over 100', or greater than 48" in diameter and the largest recorded post oak is 105' tall and 5' in diameter. However, in its extreme southern range, it often takes the form of a small tree seldom taller than 40 feet. The oldest post oak ever documented in the Cross Timbers is over 400 years old, but is only 20 feet tall.

The gently rolling native grasses of the Fort Worth Prairie once stood between the two Cross Timbers. Settlers wrote of stark transitions from the prairies to the forests, describing them as "walls of woods". Post oaks invaded the Fort Worth Prairie about the same time settlers did. Through the suppression of fire, agriculture, and ranching, the abrupt transition has been blurred by an invasion of woody species into the grassland. Many groups of post oaks and black jack oaks grow in Fort Worth where there was once only prairie or savanna. As the oaks matured, their canopies closed and they shaded out the native grasses reducing the fire fuel load.

Post oak may have been well suited to survive the rigors of the Cross Timbers or an effective opportunist at invading the prairie. However, it has not fared as well in modern urban developments. Post oak cannot tolerate root disturbance of any kind. The tree grows so slowly it is unable to heal torn and ripped roots before they decay.