

Tree Families of the Hill Country

Scientists divide the Natural World into numerous categories based on characteristics such as structure, function and reproduction. All living things are placed into one of two main categories, called kingdoms, as either a plant or an animal. In the plant kingdom, the great majority of all plants are placed into one of two divisions, the Gymnosperms (all conifers) and the Angiosperms which are all the flowering plants—the majority of all plants.

Within the divisions, plants are grouped within families based on structural or reproductive similarity. There are three main families of Gymnosperms and, depending on which source is consulted, there are around 40 to 50 families of Angiosperms.

In the Hill Country, there are only three trees in the Gymnosperm division. The pinyon pine, which is very uncommon the Hill Country, but more common further west, is in the Pine family. The bald cypress and our junipers (cedar) are in the Cypress family. All other trees in the Hill Country are Angiosperms and all produce flowers even if some are quite inconspicuous.

There are many Hill Country trees that are in the Legume family. This family is the third largest family of flowering plants and is characterized by producing seeds in bean pods and most also have associated with their roots nitrogen-fixing bacteria called rhizobia. In our area, trees in this family include mesquite, goldenball leadtree, huisache, acacias, honey locust, Texas mountain laurel, Eve's necklace and Texas and Mexican redbuds.

Our sycamore is in the Sycamore family. The Walnut family includes the large black walnut as well as the smaller Arizona and Texas (little) walnuts, the black hickory, and the pecan.

The Beech family includes all the beeches and chestnuts, none of which are native to our area, but it also includes all of the oaks. So our live oaks, blackjack oaks, post oaks, Spanish oaks (Texas red oaks), shin oaks, chinquapin oaks, bur oaks, and Lacey oaks are in fact in the Beech family. Oaks are further subdivided into groups: the red oak group includes our blackjack and Spanish oaks, and all of our other oaks are in the white oak group. Some people put the live oak in a group by itself.

The Willow family includes the Eastern cottonwood and the black willow which is common along creeks and rivers. The Mulberry family includes our red mulberry, the uncommon Texas mulberry and the bois d'arc or osage-orange as well. Our Carolina buckthorn is in the Buckthorn family.

The Rose family includes all of the plums, cherries, peaches, pears, apples and hawthorns. In the Hill Country this includes the Mexican plum, creek plum, escarpment black cherry, hawthorn, and Blanco crabapple.

Our hackberries, both netleaf and sugarberry, are grouped into the Hemp family. The Elm family is represented here by the American, slippery and cedar elms. The winged elm grows just east of here.

The Cashew family includes the Texas pistache and the American smoketree. Although some sources give the sumacs their own family, other sources group the sumacs (Prairie flame-leaf, fragrant, and evergreen) into the Cashew family.

The Rue family includes the wafer ash or hop tree, as well as the toothache tree. The Soapberry family includes our western soapberry, and all of our buckeyes (red/yellow, Texas, Mexican) as well as our big-tooth maple and box elders.

Our rough-leaf dogwood is in the Dogwood family, gum bumelia is in the Sapodilla family, and our Texas persimmon is in the Ebony family.

The Heath family includes our Texas madrone, the Madder family our buttonbush, the Olive family includes our Arizona and Texas ashes. The desert willow is in the Trumpet creeper family and the rusty blackhaw viburnum is in the Muskroot family.

The above is really just a partial list, but you get the idea that there are a lot of trees in the Hill Country in lots of different families of flowering trees and some trees appear to be in unexpected families. It is also true, however, that there are several sources listing the families of woody species and not all of these sources agree. So if you have a book that lists this or that tree in a different family, don't be surprised—even the experts don't always agree and times change the groupings as new data are generated. Knowing the family may help locate a tree in a book.

We are blessed with a wide diversity of woody species in the Hill Country—more I suspect than most folks would have guessed.

Come by Riverside on Fridays from 10 to 12 and let's talk.

Until next time...

Jim Stanley is a Texas Master Naturalist and the author of the books "Hill Country Ecology," "Hill Country Landowner's Guide" and "A Beginner's Handbook for Rural Texas Landowners." He can be reached at jstmn@ktc.com. Previous columns can be seen at www.hillcountrynaturalist.org.