

We Are Lucky to Live in the Hill Country

I guess the title is no surprise to most everyone living here. But what makes this area so unique?

The Hill Country makes up about half of the larger ecoregion known as the Edwards Plateau. The Edwards Plateau stretches from just north of San Antonio to as far north as Palo Pinto County just south of Ft Worth and from Austin and Waco in the east to the Pecos River on the west, an area of 36,680 square miles, or about 14% of the state of Texas. It is the only ecoregion that is wholly contained within the boundaries of the state.

The Edwards Plateau is characterized as being underlain by thick layers of limestone laid down in the Cretaceous geological period. Soils are largely clay of an alkaline pH due to the limestone base. The topography, usually referred to as "hills", is in fact the result of erosion of a relatively flat plain cutting down through the various layers of limestone. Thus the tops of the "hills" are in fact the un-eroded part of the original plain and the creek and river beds tend to be made up of older sediments. Except for alluvial soils (soils washed down from above) along river floodplains, soil depth in much of the Plateau is less than in most places to the East.

The vegetation of the Edwards Plateau varies considerably from relatively open grasslands to grassland savannas with scattered trees to woodlands of dense trees. The two most common tree species are live oak and Ashe juniper (cedar). The most common grass species in the eastern half of the Plateau are tall to medium height grasses such as little bluestem, silver bluestem, switchgrass and Indiangrass, and in the western half shorter grasses such as grama grasses, curly mesquite and buffalograss.

Because of the thin rocky soil, most of the Edwards Plateau has never been plowed, but has instead always been ranchland. The native grasses, which were grazed by bison in the past, but only occasionally, have now been grazed continuously. While the grasses evolved being grazed and burned occasionally, the continuous grazing since settlement has significantly altered the grass composition and quantity. Excessive deer populations have greatly reduced the replacement of hardwoods, and the lack of fire (again, post settlement) has allowed cedar to encroach on the grasslands and savannas creating cedar brakes.

In spite of these changes, mostly because of not being plowed, the habitats of the Edwards Plateau are probably less changed from the time before European settlement than most parts of the U.S.

We live in an area that is the intersection of very different vegetation ecosystems. To the east we have plants more adapted to deeper soils, higher rainfall and lower

alkalinity than around here, whereas west of us is an area characterized by very much less rainfall and thus drought-tolerant plants. To the south of us is an area characterized by huisache, acacias, and many other thornbush species. Being at the intersection of all of these different ecoregions means we have some plants characteristic of each of these regions growing throughout the Hill Country.

This variety of different types of vegetation gives rise to habitats for different species of animals. Drive in one direction from Kerrville and you will find black walnuts, hickories and mustang grapes, in another direction you might find madrones, Lacey oaks and bigtooth maples. Go in another direction and you will find Goldenball leadtrees, Eve's necklace and a greater abundance of succulents.

The Edwards Plateau and the Hill Country are blessed with a greater variety of native plants and probably also a lower population of exotic plants (although still far too many) than most other areas of the country. This diversity not only makes for much of the beauty of the Hill Country, but also for the health of the habitat. I frequently write about the many problems we have with our native habitats, but the list of problems would be much longer in many other places.

This doesn't mean that because our landscape is more "natural" than other places that we don't need to worry about the condition of the habitat. On the contrary, because our ecosystem is closer to its original condition than most areas, it is even more important that we work to keep it that way, to make sure it does not deteriorate further. The more we have to appreciate, the more we need to protect.

As a kid growing up in the treeless Permian Basin, what "vacations" we had always ended up in the Hill Country. As an adult I have lived in 4 states and visited most all of the others. When it came time to retire, this is where we came. Enough said.

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@kctc.com. Previous columns can be seen at www.hillcountrynaturalist.org.