What Is the Ideal Hill Country Habitat?

A few weeks ago I discussed the changes in the Hill Country habitat since settlement began in the early 19th century and the changes that nearly 200 years of modern human occupation have caused.

We now have three distinct types of habitat extremes in the Hill Country, with many intermediate combinations of these types. Type 1 are habitats that have been severely overgrazed (cattle, sheep, goats, some exotics) and overbrowsed (too many deer, goats and exotics) for some time resulting in virtually no vegetation below the 5 foot browseline, little or no grass and lots of bare ground and rocks on the surface due to erosion.

Type 2 are habitats where the junipers have been allowed to encroach to the point where they now have crowded out much of the earlier vegetation and the individual junipers are touching or almost so. There is little grass in between the junipers and travel through the area is difficult. In short, the habitat has turned into a cedar brake. Native oaks may have been or are declining due to competition from the junipers.

Type 3 habitats are areas where the grazer and browser populations have been controlled for some time and there are numerous species of native trees, shrubs, vines forbs and grasses scattered throughout the area. There is little bare ground. There may be scattered juniper bushes but, except on steep slopes, no dense cedar brakes.

Most Hill Country properties have habitats that fall somewhere between the above three extremes. Maybe there are too many grazers and browsers, but still some grass and browse is left uneaten, some excess cedar, but some cleared areas as well.

But the real question is, what should the best, ideal Hill Country habitat be like? No one can describe what all properties should be like, because all properties are different. Property on a rocky hilltop or southwest-facing steep slope will of course have to be different from a property along a creek or river bottom.

But rather than try to describe what an ideal habitat should look like, it is more meaningful to describe what the functions of an ideal habitat should be. An ideal habitat should: 1. Provide food, water and shelter for reasonable numbers of livestock and native wildlife indigenous to the area in sustainable numbers. 2. Be sustainable, meaning able to continue year after year to produce replacement amounts of forage and wildlife so that the population of neither declines or increases beyond recoverable bounds. 3. Be healthy, meaning able to withstand droughts, floods, pest outbreaks, etc. and recover to a sustainable level over time. 4. Capture rainwater by having it infiltrate into the soil to not only nourish the vegetation but to seep deeper underground to feed

local water tables and aquifers. 5. Prevent loss of soil to erosion even during heavy rains or windy droughts.

Any property which can do all of that would indeed be considered to be an ideal habitat. The property in the creek bottom will almost certainly have more biomass of vegetation as well as more species and greater numbers of wildlife than the property on the rocky hilltop. The amount and quality of the soil has a lot to do with the potential productivity of the land as measured by the above criteria.

Judged by the above list of functions of an ideal habitat, Type 1 above would obviously fail on all counts and would be considered not only degraded and non-functional, but, for all practical purposes, probably unrecoverable by natural forces in any reasonable time frame.

Type 2 above would also fail at providing any of the above functions, although with significant expense, very careful, gradual removal of much of the cedar over several years and several years of recovery, such a property could be significantly improved.

Type 3 above obviously would be the closest to ideal habitat and the easiest to improve to achieve all of the above functions in most cases. And all of the many properties that are in some in-between condition, with more or less effort can mostly also be improved at least somewhat, with time, effort, and, of course, money.

What practices are needed to move the condition of a property more in the direction of the ideal habitat will be the subject of subsequent columns.

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.