

## The Effects of European Man on the Ecology of the Hill Country

A few weeks ago I discussed what the Hill Country Looked like before European man arrived in the early 1800s. Today I want to discuss what changes Europeans caused in the ecology of the Hill Country.

Prior to 1800, Texas was populated mainly by Native Americans with only a very few early settlers, mainly Spanish in South Texas. The Native Americans certainly had some effects on the Hill Country ecology. They started, intentionally or accidentally, grass fires, hunted many wild animals and cultivated a few small farms here and there. But their effects on the landscape were relatively minor, because of their relatively small numbers and their rather subsistence lifestyle.

Most of the settlers arriving in Texas in the mid-1800s were either immigrants coming directly from Europe, mainly Germany, or people of European ancestry from the Southern US. They brought with them their knowledge and habits of agriculture based on land that had much deeper soil and higher rainfall than the Hill Country. And they brought with them their exotic animals, ones we now call cattle, sheep, goats, pigs and chickens.

Although some of the early arrivals were wealthy plantation owners from the Southern U.S., most of the early settlers were homesteaders who had little or no money, few possessions, only a few head of livestock, and relatively small plots of land, from which they had to provide everything for their families. It was not an easy life.

The few animals they had were crucial to their food supply, what little money they earned and to their quality of life in general. These animals were grazed continuously on their small plots of land and guarded carefully from predators. The animals' only food was what was grown on their land.

This continuous grazing changed the nature of the landscape, greatly reducing the amount of grass and changing the kinds of grass to lower quality species. The settlers also did everything they could to prevent or contain grass fires as fire not only threatened their homes and barns, but also burned up their animal feed.

The combination of continuous grazing and suppression of fire put in motion a change in the landscape as shorter grass, more bare ground and fewer fires gave rise to more woody plants becoming established in areas that were previously largely grasslands. (Wildfires in tall grass burn up young woody sprouts.)

The settlers also cleared land for crops and gardens, hunted all sorts of wildlife to supplement their food stores, and killed every predator they could to protect their livestock.

As the number of settlers and livestock increased, their effects on the ecology became greater. The grass was overgrazed because of too many livestock allowed to graze the same areas continuously. With the introduction of barbed wire, all of these conditions became even more common. At the same time as the population of Texas was growing, there were commercial hunters operating from Texas to the Dakotas slaughtering the bison in large numbers, mostly just for the hides.

By the beginning of the 20<sup>th</sup> century, raising livestock was intense and widespread in Texas, and economic conditions, including the depression, the dust bowl and two wars caused severe overgrazing and overbrowsing of most of the state and the accompanying loss of soil in many areas. The result of all of this is that the land in most of Texas today is considerably less productive than it was even as recently as the early 20<sup>th</sup> century.

Two things that did not happen in the Hill Country to nearly the extent they did in other parts of the state are lumbering and farming. Because of the thin rocky soil, steep slopes and unreliable rainfall, the major activity in the Hill Country has been ranching native grass ranges, and other than shorter, poorer quality grasses and more trees and cedar, it looks a lot like we think it did 150 years ago.

We will never get back to conditions of 150 years ago. That would require taking down all the fences, bringing back the bison, the wolves and other large predators, allowing fire to burn unhindered and, maybe most difficult, replacing the lost soil. But we are fortunate to live in an area less altered by man than most of the country.

I should also state that nothing I have described should be considered a criticism of our ancestors and their activities. They had a very hard life that required them to be constantly concerned about surviving the next winter.

Happy New Year to all.

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