

Lessons Learned from the Dust Bowl

A few weeks back, PBS aired a two-part, four hour documentary film by Ken Burns on the Dust Bowl. If you didn't see it, I am sure it will be rebroadcast again and I urge everyone to see it.

The Dust Bowl was over before I was born, but what I had never thought about until I watched the film was how close I was, in both time and distance to the southern end of the most affected counties in Texas. And watching the film and listening to the tales of the survivors brought back a lot of childhood memories from the late 1940s and early 1950s.

The causes of the Dust Bowl appear to be of two types; a period of severe drought, high temperatures and high winds, and the agricultural practices of the farmers of the plains. The worst of the Dust Bowl occurred from the Texas panhandle and northeastern New Mexico north to Nebraska, all of which had originally been the most prolific open grassland in the country with 6 foot high grasses. Periods of severe drought and high winds had occurred from time to time before, but never generated the huge dust storms seen in the 1930s. The reason was that the tough native grasses held the soil and protected it from the wind.

But the settlers of the plains in the first quarter of the 20th century changed the environment, first by overgrazing the prairie and exposing the soil, then by plowing under the native grasses and planting wheat. The latter was so profitable during the first World War and into the late 1920s that the settlers plowed up more of the land than they actually needed to make a living. Farmers in the region were not even affected, at first, by the Depression because heavy rains made bumper crops of wheat.

But once the drought came and the crops failed and the land was left completely bare, an inch of topsoil that took a thousand years for Nature to build was lost in a single storm. Some of the soil piled up against houses so deep that people had to crawl out of windows to get out of their houses. Most of the soil was deposited all over the eastern U.S., or down into the Gulf.

The drought finally broke in 1939, and the new Soil Conservation Service (now the Natural Resources Conservation Service) developed new farming techniques such as contour plowing, crop rotation and new plows that left the stubble on the surface to protect the soil and add organic matter to the soil, leaving less land bare each year. Instituting these improved practices were supposed to prevent another Dust Bowl.

I grew up in an oil camp in Gaines Co. between Lubbock and Midland, about 50 miles from the southern tip of the Dust Bowl area. As a kid around 1949-1951, I remember watching bulldozers pulling huge 3 foot disks across the short grass/mesquite pastures

around the camp and turning it into farmland. This coincided with the beginning of the “drought of the 50s”. I remember what we called sand storms so dense that I couldn’t see the neighbor’s house 50 feet away and the sand blowing under the doors and windows and piling up on the window sills. I remember paint being abraded off of cars and windshields being sandblasted so that headlights at night would almost blind you.

But the 1950s were no Dust Bowl, for two main reasons. First, farmers planted different crops and used the better plowing techniques, but mainly, because the Ogallala aquifer underneath much of the Panhandle and extending all the way to Nebraska provided irrigation for the crops. I worked for a farmer near our camp growing cotton and sorghum throughout most of the “drought of the 50s” and he made a good living.

The lessons to be learned from all of this are: (1) Mankind is perfectly capable of causing huge climatic changes and destroying his environment. (2) Mankind is also capable of learning from his mistakes, changing his ways, and causing less environmental damage. But there is one big concern about the future. The Ogallala aquifer is not like the Edwards, which replenishes with a few heavy rains. The water in the Ogallala has been there for thousands of years and is finite. What will happen to all that area when (not if, but when) the Ogallala runs dry? Food for thought.

Merry Christmas.

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