

Since the first white men came to the Great Plains, they have almost destroyed the land three times. Today there is a chance to bring stability to the Great Plains, but this can only happen if appropriate social and political decisions are made within the very near future.

When the first white men saw the Great Plains, it was a sea of grass. It was a place to cross, for Lewis and Clark, for the fur traders and for the gold seekers after 1849.

It was not until the 1870's that the first exploitation began, with the idea of running cattle on free grass. Men from London, Boston, Paris, and New York were entranced with the potential for great profits. They formed what we then called syndicates to run cattle on the open range. Overgrazing, homesteaders, and the great cattle-killing blizzard of 1885-86 brought the syndicate era to an end.

The homesteaders came by the thousands about this time. Many were quickly defeated by the unfamiliar climate, but some learned how to farm in a semiarid country and survived.

Then came World War I and the world need for food. High prices, combined with the mechanical power of the first big tractors, turned the sod. There had been visionaries in the early days who believed that rain would follow the plow. Of course, it didn't happen. Instead the war and the plow were followed by the drought of the thirties. The wind wrote the epitaph of the boom in dust.

By now the Nation was conscious of the need to protect its resources. The Great Plains were partially restored with the advent of soil conservation practices which returned much of the marginal cropland to grass.

The next period of destruction came with the drought of the 1950's—again preceded by a war. Land which had been reseeded and should have remained in grass was again broken out and planted to crops, and again it sifted with the wind. The soil bank program was a partial savior and many fields were returned to grass a second time.

Most of the farmers who survived these natural and economic storms had built flexible units around the naturally adapted cash crop of wheat, grass, and feed reserves—husbanded against recurring drought.

The means to flexibility and stability is present in much of the Great Plains area in the form of great underground water resources. One of these, known as the Ogallala formation, underlies 9,000 square miles of all or parts of nine counties in eastern Colorado. But this resource can be exhausted in a generation or less in some areas. The U.S. Geological Survey estimates the reservoir contains about 80 million acre-feet of water. Upward of 30 million acre-feet is considered to be recoverable.

However, the resource is replenished only by rainfall at the rate of less than 1 inch per year.

Senator NELSON. As I understood you, 30 million acre-feet is considered to be recoverable from the 80 million?

Mr. LEHMAN. From the 80 million; that's right.

Senator NELSON. But then your next sentence is that the resource is replenished at the rate of less than 1 inch per year. How much is that in terms of this aquifer?

Mr. LEHMAN. Well, the average annual rate of recharge is estimated at 430,000 acre-feet.