



Dust storm approaching Stratford, Texas, April 18, 1935. NOAA Photo Library, Historic NWS Collection.

On Thursday, April 18, 1935, a huge, black, billowing cloud piled up on the western horizon. For Stratford, Texas, and thousands of farms and small towns, it was the arrival of another dust storm, one of more than 300 that would make an

unwelcome visit to the Southern Great Plains during the 1930s.

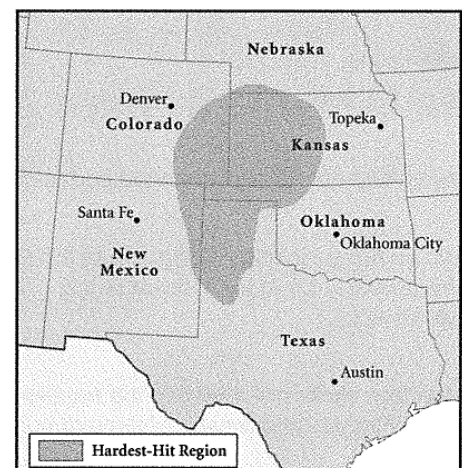
For thousands of years the Southern Plains were covered by shortgrass prairie and home to vast herds of twenty or thirty million buffalo. In more recent times, people arrived. First came the Apache, the Comanche, and the Kiowa. Shortly after the Civil War, there came a few thousand cowboys and several million cattle. Then came the farmer.

The first farmers arrived in the 1880s. Word had gotten out back East that the Southern Great Plains was good for wheat. Yes, rainfall was a bit spotty, but the land was cheaper than farmland in Arkansas or Illinois. Besides, it was said that rain would follow the plow. Grow crops and clouds would form.

With few trees for lumber, many of these early farmers lived in soddies, houses made of earth and grass. Soddies were soon replaced by wood frame houses. A severe drought in the 1890s caused some farmers to move away, but then the federal government sweetened the pot. A new Enlarged Homestead Act passed in 1909 offered 320 acres of land to anyone who could hang on for three years. Thousands of new farm families took up the offer. In addition, the giant XIT ranch on the Texas panhandle sold off much of its three million acre spread to wanna-be farmers. Wheat would replace cattle as the new king of the Southern Plains.

Wheat fever was in the air. The railroad sent out branch lines to small towns, and more wheat could get to market. World War I, which brought so much pain to Europe, was good for Plains farmers. A hungry Europe bought Kansas wheat. Wheat that sold for 93 cents a bushel in 1914 was close to \$2.50 in 1919. More families moved in. Small towns popped up like spring flowers. Boise City out near the end of the Oklahoma panhandle sported a theater, a newspaper, a furniture store, a bank, and several cafes.

But then trouble came. The Great Depression of the 1930s was the first blow. Unemployment back East made it harder to sell wheat. Sadly, the Depression did not come alone. What made life on the Southern Plains almost unbearable were the dust storms. In the middle thirties these wind-driven dusters darkened the midday sky and carried off millions of tons of precious topsoil as far as Washington DC and New York City.



First, there were two kinds of dusters. There were the more continual sand-bearing winds that blew from the west that built up drift dunes against buildings and fences. Sandstorms stayed low. Second, there were the great billowing 7,000 to 8,000 foot high black clouds of dust that were carried in by a polar air mass. These were sometimes attended by thunder and lightning and could be frightening. More than a few diary accounts speak of the end of the world.

During the 1930s more than three million plains settlers left their farms - some for town, some for a neigh boring state, some for California. Many more, however, stayed put, covering their windows with a water-soaked sheet, eating jackrabbit stew at a kitchen table where an "eating" cloth covered all the plates and drinking cups. Children died from breathing in dust. They called it "dust pneumonia." Writer Timothy Egan has titled his book on Dust Bowl history as The Worst Hard Time.

Dust storms in the Southern Plains occurred before the 1930s and they certainly have occurred since. What made the 30s different is the frequency. A Soil Conservation Service "frequency report" provides these dust storm numbers for the Southern Plains listed to the right.

Health consequences of the dust storms were serious. In the month following Black Sunday (April 14, 1935), four small hospitals in Meade County, Kansas, reported that over half of their admissions were respiratory cases. Of these 33 people died. Gauze masks and Vaseline around the nostrils were not enough to protect the most vulnerable, especially babies and the elderly. The cause of death was usually given as "dust pneumonia."

John Wesley Powell was one of the first to warn Americans that farming beyond the 100th meridian was unwise. There simply was not enough rainfall. He also argued against the continued distribution of 160-acre homesteads in the region. He supported enlarged tracts of four-square miles (2,560 acres), not for farming but for small ranching operations. He was criticized in the 1880s for being pessimistic and undemocratic. However, a half century later, during the years of the Dust Bowl, Powell was seen as a level-headed prophet.

The 100th meridian cuts through the middle of Kansas and Oklahoma. The rainfall charts support Powell's early findings that rainfall west of the 100th meridian averaged under 20 inches per year. He determined that 20 inches of rain annually was the minimum for successful farming on the Plains. But, he said, " at 20 inches agriculture will not be uniformly successful from season to season. One reason that Powell and others had trouble convincing sodbusters to stay away from farming the Southern Plains was that the rainfall averages were just that - averages. There were years that were wet. 1923 was unusually high, and there were occasional strings of wet years that lured families into the region.

Throughout the Depression years, most farmers in the Dust Bowl region tried to put in a crop every year, hoping that the drought would break. There were a few years where some farmers got absolutely no harvest. The term "Dust Bowl" was possibly first used by an AP reporter from Denver. In a dispatch sent to the Washington Evening Star on April 15, 1935, Robert Geiger wrote: "Three little words, achingly familiar on a Western farmer's tongue, rule life in the dust bowl of the continent - if it rains."

The Depression era drought that overwhelmed the Plains really began in 1933. During the next eight years the average rainfall in Dalhart, Texas was 12.4 inches.

1932	14
1933	38
1934	22
1935	40
1936	68
1937	72
1938	61
1939	30
1940	17

Actual Precipitation for Dallam County, Texas
(County Seat, Dalhart)

1923	33.40 inches
1924	15.32
1931	14.66
1932	20.09
1933	10.14
1934	9.78
1935	13.31
1936	9.93
1937	14.48
1938	14.08
1939	14.75
1940	12.74

1. What two states in the Dust Bowl have “panhandles”?
2. What are “soddies”? “Dusters”?
3. What economic effect did World War I have on the Plains wheat farmers?
4. Math Fun: What was the average number of dust storms per year from 1932 to 1940?
5. Whose health was affected the most by the dust storms?
6. How many years in Dallam County, Texas averaged below 20 inches of rain between 1923 and 1940?