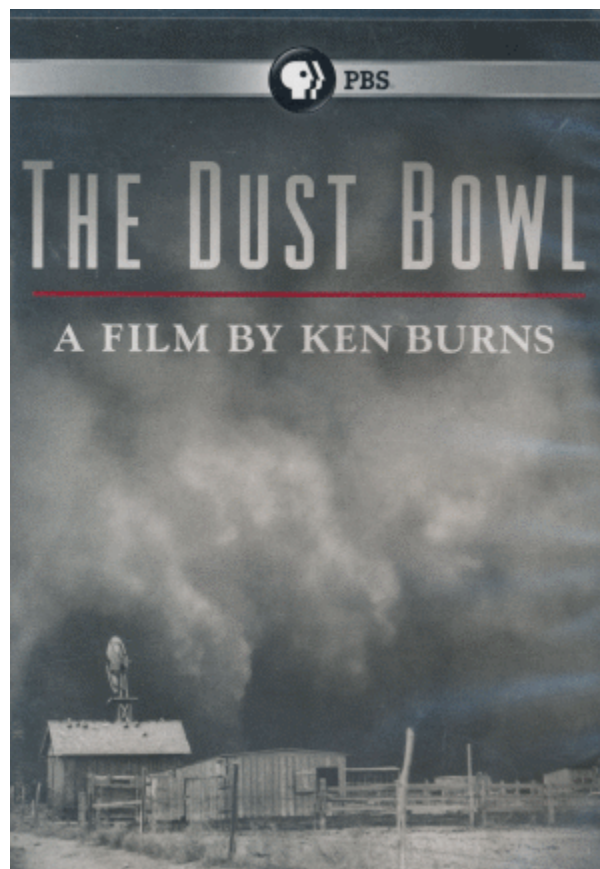
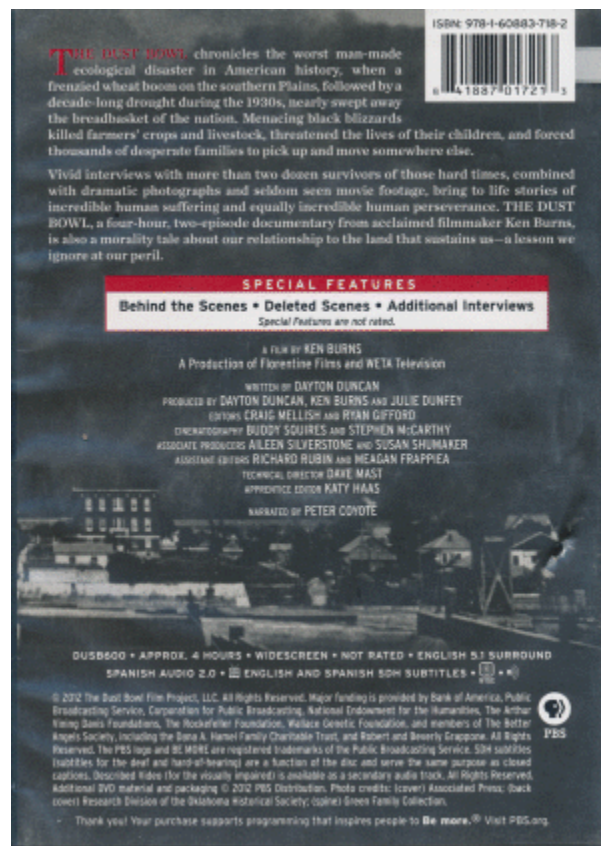


THE DUST BOWL -- ILLUSTRATED SCREENPLAY

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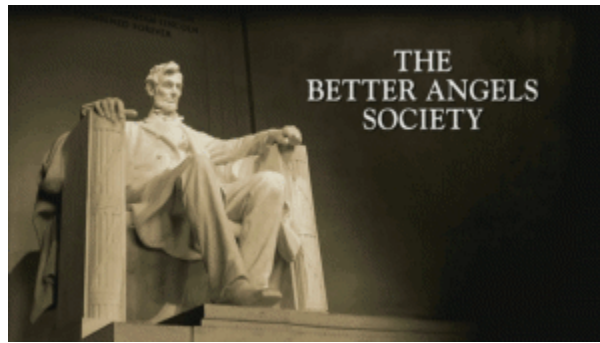
directed by Ken Burns
written by Dayton Duncan
Narrated by Peter Coyote
© 2012 The Dust Bowl Film Project, L.L.C.





[Transcribed from the movie by Tara Carreon]

[Bank of America] History, as seen through the eyes of Ken Burns, is more than just a collection of stories about what's happened in the past. It's a chance for us all to reflect on how to build a stronger tomorrow. We share in his vision, and we're proud to support his efforts.



[Announcer] Funding for this program is provided by: Members of the Better Angels Society, dedicated to helping Ken Burns tell America's stories, including the Dana A. Hamel Family Charitable Trust, and Robert and Beverly Grappone;



The Arthur Vining Davis Foundations, dedicated to strengthening America's Future through education;



The National Endowment For the Humanities, exploring the human endeavor;



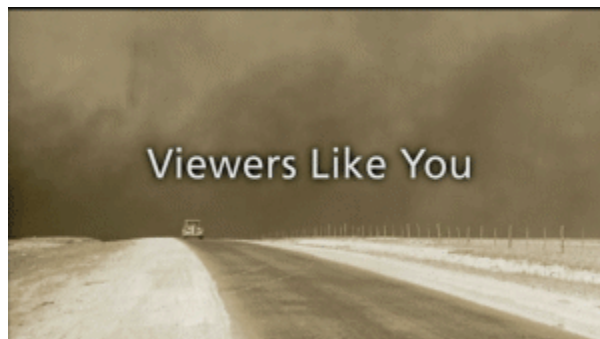
The Rockefeller Foundation;



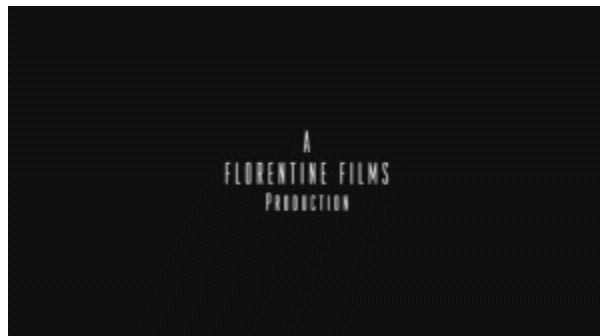
The Wallace Genetic Foundation;



The Corporation for Public Broadcasting, and by contributions to your PBS station from ...



viewers like you. Thank you.



A Florentine Films Production



[Wind Blowing]



[Cows Mooing]



[Don Wells, Cimarron County, OK] Let me tell you how it was.



I don't care who describes that to you ...



nobody can tell it any worse than what it was.



No one exaggerates that. There is no way for it to be exaggerated. It was that bad.



[Pauline Robertson, Union County, NM] It was just unbelievable.



It'd blister your face.



It would put your eyes out.



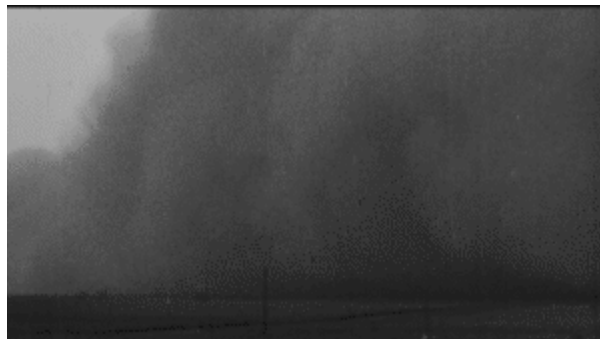
Well, I guess I can't describe it.



It was just ... it was just constant ...



just that steady blow of dirt.



[Floyd Coen, Morton County, KS] As far as you could see, there was a dust storm coming right towards you.



This giant wall just coming towards you.



And you still had the feeling, whether you would admit it, that something was going to run over you and just crush you.



[Dorothy Williamson, Prowers County, CO] It was almost surreal, the dust.



There's nowhere you can run.



You can try to get out of it but it's as if it follows you, follows you, follows you.



You can't escape it.



Dorothy Williamson
Prowers County, CO

Looking back on it, I think it carried with it a feeling of ... I don't know the word exactly, of ... well, being unreal, but almost being, um ...



evil.



THE DUST BOWL



[Narrator] It was a decade-long natural catastrophe of biblical proportions -- when the skies refused their rains; when plagues of grasshoppers and swarms of rabbits, descended on parched fields;



when bewildered families huddled in darkened rooms while angry winds shook their homes,



pillars of dust choked out the mid-day sun,



and the land itself -- the soil they had depended upon for their survival ...



and counted on for their prosperity -- turned against them with a lethal vengeance.



It was the worst man-made ecological disaster in American history,



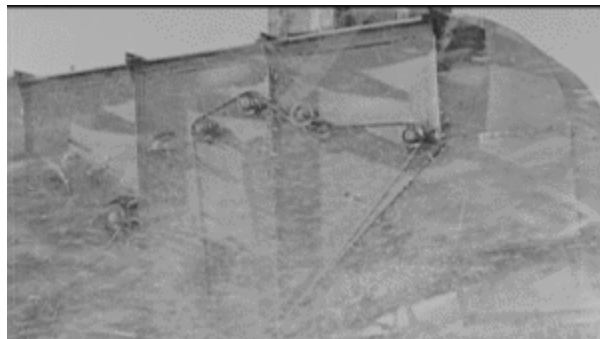
when the irresistible promise of easy money,



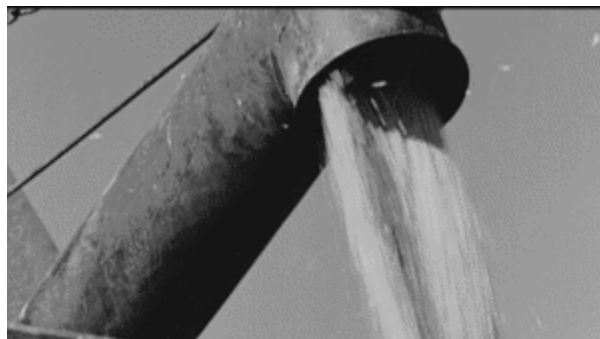
and the heedless actions of thousands of farmers,



encouraged by their government,



resulted in a collective tragedy ...

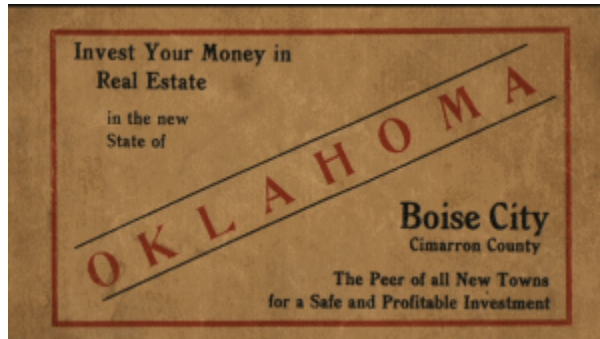


that nearly swept away the breadbasket of the nation.



Timothy Egan
Writer

[Timothy Egan, Writer] It's a classic tale of human beings pushing too hard against nature, and nature pushing back.



[INVEST YOUR MONEY IN REAL ESTATE IN THE NEW STATE OF OKLAHOMA. BOISE CITY. CIMARRON COUNTY. THE PEER OF ALL NEW TOWNS FOR A SAFE AND PROFITABLE INVESTMENT]

And then it's an American bubble story, too, like stocks and like real estate. We think that everything that goes up will not come down, that we can defy gravity, and that's what we did here.

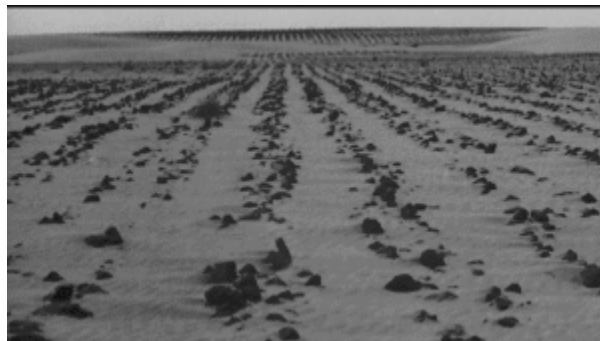


[Donald Worster, Historian] The Dust Bowl belongs on the list

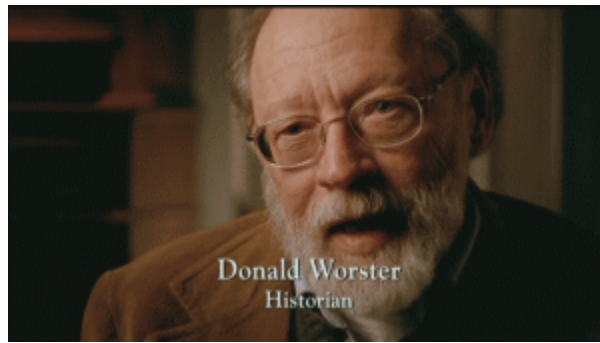




of the top 3, 4, 5 environmental catastrophes in world history.



But those catastrophes took place over hundreds and even thousands of years of deforestation.



We have created a world-class environment disaster in a matter of 40 or 50 years.



[Narrator] It was an epic of human pain and suffering,



when normally self-reliant fathers found themselves unable to provide for their families,





when even the most vigilant mothers were unable to stop the dirt that invaded their houses ...



from killing their children,



when thousands of desperate Americans ...



were torn from their homes and forced on the road ...



in an exodus unlike anything the United States has ever seen.



But it is also the story of heroic perseverance,



of a resilient people who somehow managed to endure ...



one unimaginable hardship after another,



to hold onto their lives, their land,



and the ones they loved.



[Timothy Egan, Writer] What kind of place was this ...



where children couldn't go outside,





where the air itself could kill you,



where the sky showered down this suffocating blackness ...



that could erase the sun at midday? Who could do that?



And we didn't plan this. We didn't set out and say, "Let's ruin the second-greatest ecosystem in North America."



It was a result of a whole bunch of things that are just innate to human beings.



EPISODE ONE: THE GREAT PLOW UP



[Bird Singing]



[Caroline Henderson] April 28, 1908. Here I am, away out in that narrow strip of Oklahoma between Kansas and the Panhandle of Texas. I wish you could see this wide, free, western country, with its real stretches of almost level prairie, covered with the thick, short buffalo grass,



the marvelous glory of its sunrises and sunsets, the brilliancy of its star-lit sky at night.



[Narrator] From the time she was a young girl growing up in Iowa, Caroline Boa Henderson dreamed of having a piece of land she could call her own.



Even when she went East to Mount Holyoke College, where she studied languages and literature, her senior class prophecy predicted that her future would be found "somewhere on a Western ranch."



In 1907, the year of Oklahoma's statehood,



she followed that dream to the newly created Texas County, where she staked out a homestead claim, and moved into a one-room shack,



14 feet by 16, which she called her "castle."



A year later, she married Will Henderson, a lanky Kansas cowboy she had hired to dig her well.



They soon had a daughter, Eleanor, and Will built an addition to their home.



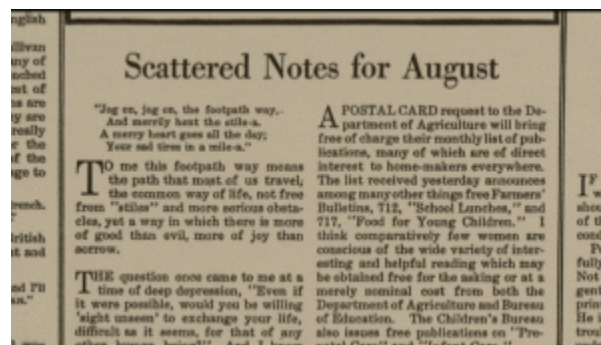
Now they were close to gaining title to the farm, where they raised broom corn, millet, and maize ...



turkeys, chickens, and a few cattle, putting what little cash they earned into improvements ...



particularly a new windmill to draw up water for their animals, house, and half-acre garden.

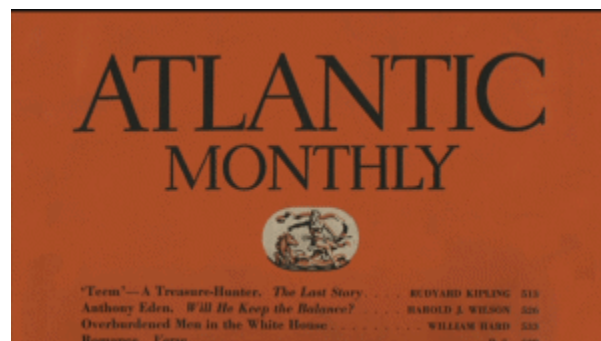


To bring in extra money, Caroline began submitting articles about life on the plains to magazines in the East.



[THE HOMESTEAD LADY'S SCRIBBLING PAD: SCATTERED NOTES FOR AUGUST]

She wrote for "Ladies' World," where her column entitled "The Homestead Lady," became a popular feature,



and eventually contributed to the "Atlantic Monthly," the nation's most prestigious publication.



[Caroline Henderson] Out here in this wilderness has come to me the very greatest and sweetest and most hopeful happiness of all my life.



[Charles Shaw, Cimarron County, OK] You live with the wind when you're out there. It's not something that's constant, but it blows more than it doesn't blow.



The times that it blows really hard may not be that often, but there's just a constant breeze, a little murmur of the wind across the fields, and in the wheat and in what trees are there.



You feel it, you sense it more than you hear it.



[Robert "Boots" McCoy, Texas County, OK] That country was so flat. You know, you could see for just miles.



They used to say that there wasn't a fence between there and the North Pole.



But God, it was good grass country. Man, it was perfect.



[Calvin Crabill, Prowers County, CO] It's said that buffalo grass would hold the moisture so if you went down 12 inches, you would find moist earth.



And I remember us digging down, and the earth was moist down there.



It was beautiful soil. It was beautiful soil.



[Donald Worster, Historian] Well, nature took several million years to find a solution to these unstable soils, these high winds, these turbulent weather conditions, which was the grasses.



They are an evolutionary adaptation. They worked pretty well, for the most part.



They have survived here for millions of years. Our agriculture hasn't been here for much more than a century.



[Narrator] The Great Plains stretch from Canada to Southern Texas, from the Missouri River to the Rocky Mountains -- a land of few trees, infrequent rains, and constant winds.



One of the earliest American explorers [Stephen Long] called it "almost wholly unfit for cultivation, and uninhabitable by a people depending upon agriculture."



The Plains Indians considered it home. The short grasses that covered the treeless expanse sent tangled roots 5 feet below the ground,



forming a dense sod that could withstand the region's periodic droughts and violent weather extremes ...



nurturing the vast herds of buffalo who grazed in numbers beyond counting.



After the bison were eliminated and the Native Americans had been driven onto reservations,



cattlemen took over in what was called the Beef Bonanza.



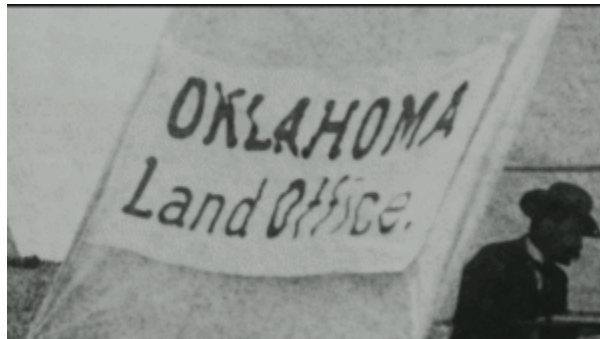
But severe winters in the 1880s killed off their herds,



and the bonanza went bust.



Homesteaders came next, swarming onto land once considered unsuitable for crops, because it averaged less than 20 inches of rain a year.



[OKLAHOMA LAND OFFICE]

Unscrupulous promoters promised that the very act of farming would increase the precipitation --



"Rain follows the plow," they said.



A severe drought in the 1890s proved them wrong,

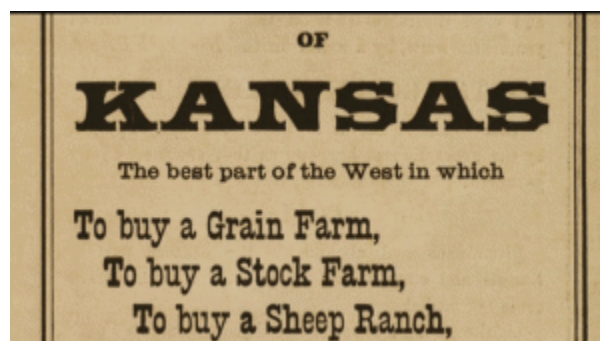


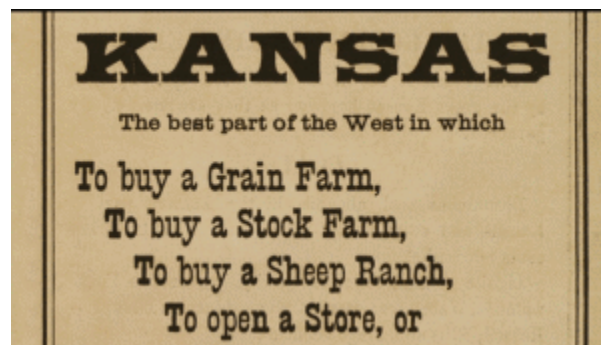
and counties that had tripled and quadrupled in population in less than a decade, emptied just as quickly.



[THE IMMIGRANTS' GUIDE TO THE MOST FERTILE LANDS OF KANSAS. THE BEST PART OF THE WEST IN WHICH TO BUY A GRAIN FARM, TO BUY A STOCK FARM, TO BUY A SHEEP RANCH, TO OPEN A STORE, OR ...]

Then, in the early part of the 20th century, Congress enlarged the original Homestead Act,

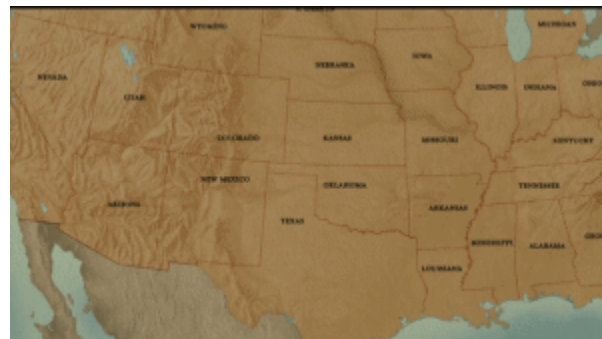




enticing farmers to settle on some of the last unclaimed and most marginal sections of public land in the nation.



The newcomers, nearly all of them white, came from Europe, where land was unavailable, and parts of the United States where it was too expensive.



In the Southern plains, many of them converged on a narrow strip of Oklahoma that bordered four other states -- Kansas, Texas, New Mexico, and Colorado --



a formerly lawless and ungovernable place called No Man's Land, the place where Caroline Henderson would stake her future.



[Caroline Henderson] Farming here often reminds me ...



of the man who, when asked to embark upon some rather doubtful business venture,



replied that if he wanted to gamble, he would prefer roulette, where the chances were only 32-1 against him.



[Donald Worster, Historian] The Southern plains are a high-risk area because they're neither desert nor humid forest or humid grassland, even. They're on the edges of vulnerability.



You've got an area that the rainfall is less than 20 inches a year.



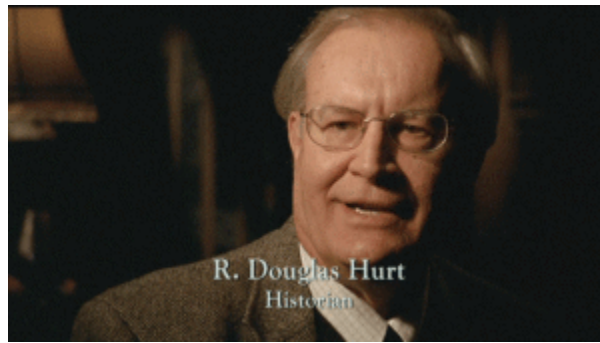
In some years, you get enough rainfall you can make a good crop. The next year, you get half that amount of rainfall.



It is one of the riskiest areas in the world for agricultural production.



[R. Douglas Hurt, Historian] The farm men and women of the Southern Great Plains are the greatest "next year" people in the world.



And they really live their lives with three little words -- "If it rains." You know, if it rains, the dust would settle. If it rained, the drought would be broken. If it rained, the wheat crop would grow.



If it rained, things were good. Uh, if it didn't, they were a "next year" people.



[LAND OFFICE]

[Narrator] Not long after Caroline Henderson moved to No Man's Land in 1907, the Southern plains entered a wet period, and the pace of settlement quickened.

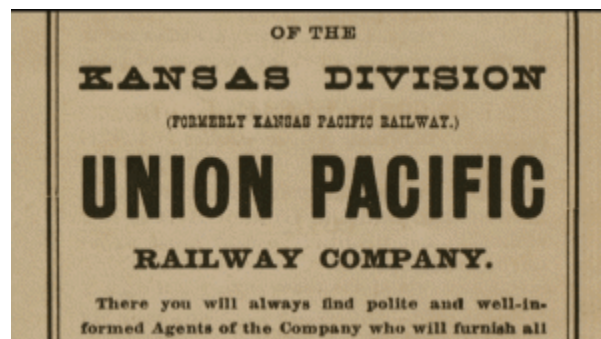


[THE TEXICO LAND OFFICE. 175 FARMS FROM THE FAMOUS CAPITOL LAND PASTURES. TITLE PERFECT.]

Real-estate syndicates began buying big ranches for \$5.00 an acre ...



and carved them up into smaller parcels for sale at three times the price.



[WHEN YOU REACH THE UNION DEPOT AT KANSAS CITY. GO AT ONCE TO THE LAND AND IMMIGRATION OFFICE OF THE KANSAS DIVISION (FORMERLY KANSAS PACIFIC RAILWAY.) UNION PACIFIC RAILWAY COMPANY. THERE YOU WILL ALWAYS FIND POLITE AND WELL-INFORMED AGENTS OF THE COMPANY WHO WILL FURNISH ALL ...]

Railroad companies did the same thing with the vast tracts they had been given by the government.



Special excursion trains brought prospective buyers to the region by the thousands.



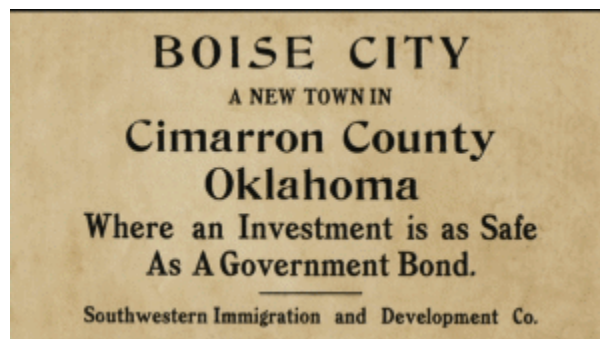
Salesmen assured them that none other than the former chancellor of the University of Kansas ...



had determined that the climate was undergoing a permanent shift -- precipitation was increasing, while the winds were slowing down.



Another expert declared that removing the cover of prairie grasses allowed more rainfall to penetrate the soil.



[BOISE CITY. A NEW TOWN IN CIMARRON COUNTY, OKLAHOMA. WHERE AN INVESTMENT IS AS SAFE AS A GOVERNMENT BOND. SOUTHWESTERN IMMIGRATION AND DEVELOPMENT CO.]

Towns sprang up overnight. In Cimarron County, Oklahoma, the developers of Boise City sold house lots to buyers who didn't even bother to come for an inspection.



[Timothy Egan, Writer] Boise City is named for the French word "Les Bois" -- tree.



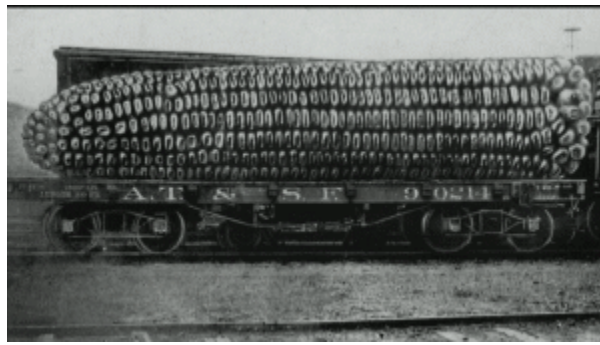
There were no trees. This is in the panhandle of Oklahoma. There were no trees. They advertised it as having artesian wells, big main streets where bankers could live, and stately elms and maples. There were no trees, there was no water, there were no houses, but they sold lots here.



And this is one of the few times in American real estate where real-estate promoters have actually been convicted, sent to federal penitentiary, and one of them rotted and died in that penitentiary after the real-estate scam that was Boise City.



[Narrator] "Oklahoma," one railroad brochure bragged, "grows better cattle than Texas,



better corn than Kansas or Minnesota,



better cotton than Mississippi or Alabama,



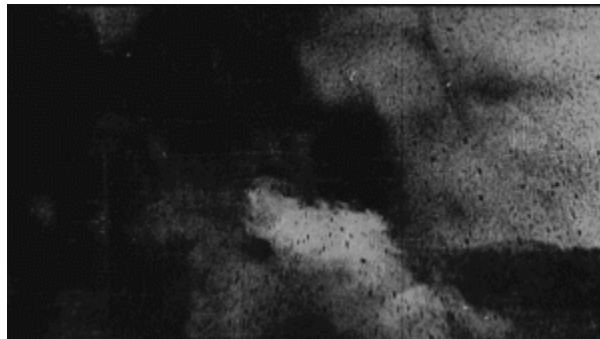
and better swine than anywhere."



But increasingly, in Western Oklahoma and throughout the Southern plains,



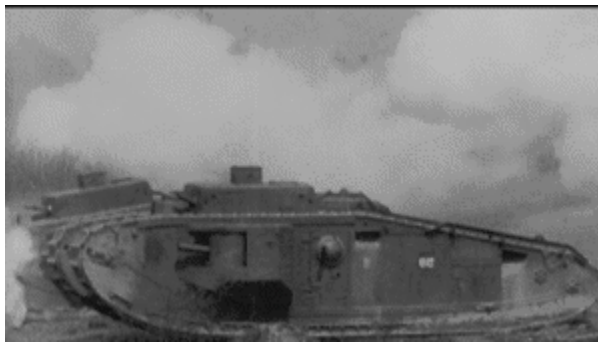
the focus was almost exclusively on wheat.



[CANNON EXPLOSION]



When the "Great" War broke out in Europe,



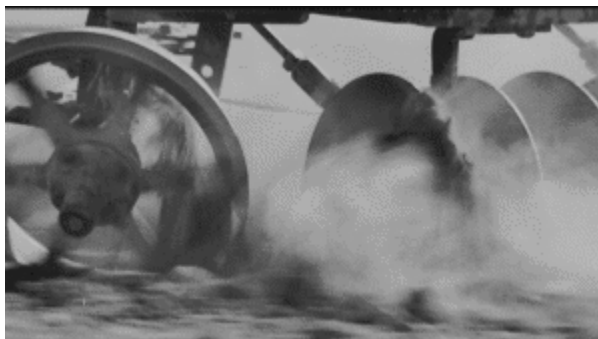
German blockades cut off access to Russian wheat.



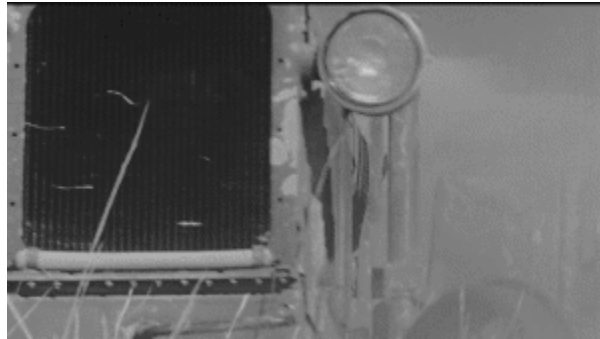
In the United States, farmers mobilized to feed the allies.



Under the slogan, "Wheat Will Win the War," prices were set at \$2.00 a bushel,



twice the previous rate.



In five years, more than eleven million acres of virgin soil



were plowed for the first time --



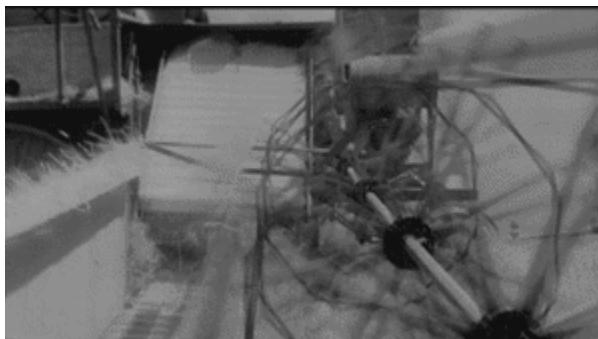
an area twice the size of New Jersey ...



converted from grasslands to wheat fields.



When the war ended, wheat prices dropped, but the plowing and planting only increased.



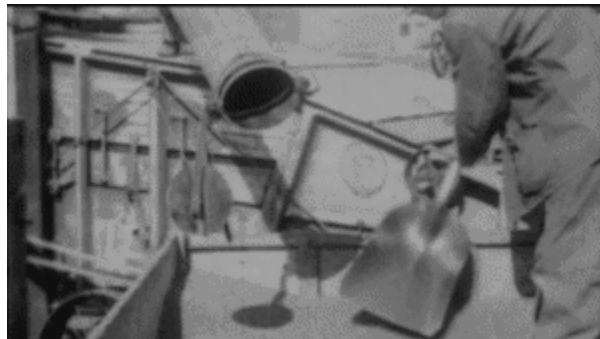
It would come to be called "The Great Plow Up."



[Pamela Riney-Kehrberg, Historian] If you had been a wheat farmer in the 1920s, it would have been relatively easy to make money.



You needed less land to grow wheat than you needed to run cattle.



So the investment was less.



I had a farmer tell me that you just put seed in the ground and boom, you had a crop.



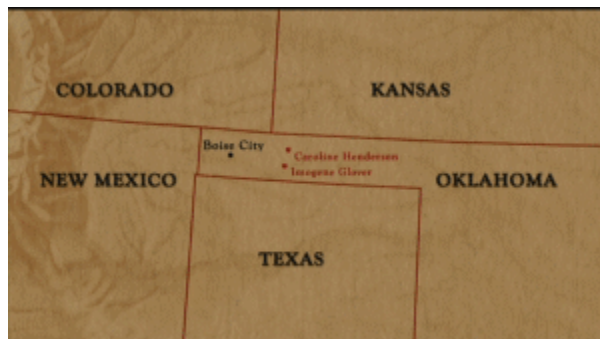
[Imogene Glover, Texas County, OK] It was really advertised all over the nation as THE place to come and live in the twenties.



Oh, it was green, level, and pretty, and the grass was beautiful. We had tall grass,



and I remember running barefooted along in this ditch, which was big clods of cool, damp ground.



[Narrator] Imogene Glover's family had moved to a three-room house on land in Texas County, Oklahoma, not far from Caroline and Will Henderson.



Her father raised cattle, turkeys, and especially wheat.



[Imogene Glover, Texas County, OK] He was a gambler, but I think every farmer's a gambler.



They have to gamble that what they're putting into the ground is going to grow and produce, and they'll get better off.



They always feel that way if they're a farmer.



[Narrator] In the Southwestern corner of Kansas,



Edgar Coen had taken over 160 acres from a failed homesteader.



At first, he moved his wife Rena and their children into a one-room 10-by-12 foot dugout ...



that extended only 2-1/2 feet above the ground, with small windows to let in a little light.



As the family grew, Edgar added more rooms, then an above-ground entrance big enough to double as a kitchen.



By scrimping and saving, he was able to acquire 160 more acres and build a barn for his livestock.



[Dale Coen, Morton County, KS] Oh, it was real nice. Summertime was pretty balmy -- always cooled off good at night.



A lot of times, we would sleep out underneath the trees or something like that. It was a really good atmosphere.



Of course, it has always been an arid country. You know, it never has been lots of rain. But it was a really ideal place to raise a family.



[Timothy Egan, Writer] For the first time in their family history, most of these people owned a piece of dirt.



They were Scots-Irish who'd been kicked around that old confederacy.



They were so-called poor white trash.



They were these Germans from the Russian steppe.



They were Latinos who came up from the South.



They were folks that never owned anything.



And they had wonderful years, 10, 12, 15, where everything was right.



[Narrator] Modern machinery made wheat farming more efficient ...



and still profitable even at prices of \$1.00 per bushel.



Powerful gasoline tractors pulling broad arrays of disc plows turned the sod with ease.





[Donald Worster, Historian] In the 1920s, there was a concerted movement ...



at the highest levels of American society,



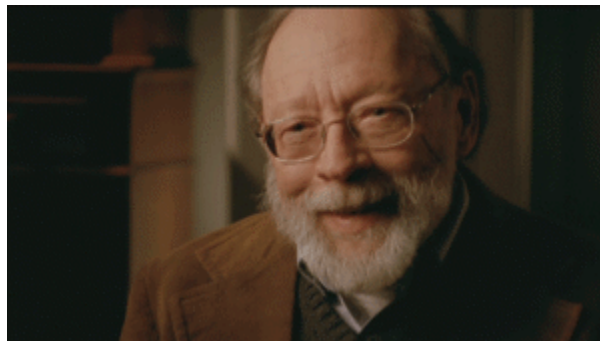
to turn agriculture into an industrial model,



to make every farm into a factory.



Well, you could never have plowed up 30-some million acres of land ...



with horse and a wooden plow, or even a steel plow.



Tractors were going all night long with headlights burning to plow up this land, to get it into production.



[Narrator] In Southeastern Colorado, Calvin Crabill's father hoped to make a life for himself and his family raising horses and cattle.



But to get ahead, he took a job driving a tractor on other people's land.



[Calvin Crabill, Prowers county, CO] He worked nights. Somebody else worked days, and so he worked nights.



He knew that buffalo grass was the natural turf of that country, and it was grazing country.



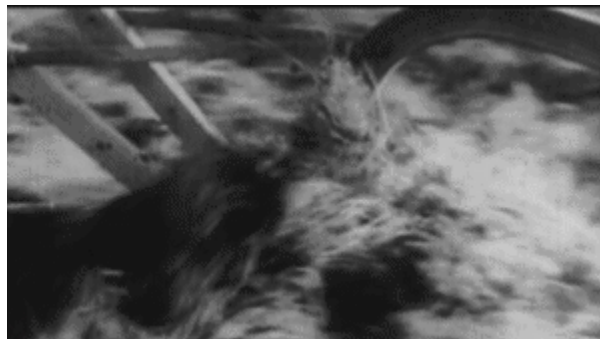
He didn't stay with the tractoring thing too long because I think it just got his heart. He couldn't stand it. And I think that even though he needed the money, he quit doing it. He just couldn't stand to do it.



He was really a stockman, and he knew it was all wrong, and he paid the price for it later.



[Narrator] In previous years, farmers had used a plow called a Lister ...



that split the soil in two directions and dug a deep furrow that caught and held blowing soil.



Now the most commonly used plow was called a One-Way,



which was cheaper and tore through the sod at a faster rate.



[Wayne Lewis, Beaver County, OK] In the late twenties, the crops were good, the prices were good,



and so everybody -- the thing to do was to break out everything and get it in wheat. And practically everybody did that.



[Timothy Egan, Writer] This boom was one of the great classic American bubbles. We've had a lot of them in our history, and this was one.



They had these suitcase farmers who would get off the train, and they called them suitcase farmers because they were just dandies from the city. They weren't farmers. And they had their suitcases, and they'd go out and they'd claim their square mile because they enlarged the Homestead Act.



Then they'd get someone to plow up the grass,



throw some of this turkey red wheat into the ground, and then go back to town and come back in the Spring and harvest this thing.



And it was a fool's game. And you could make a lot of money.



[Caroline Henderson] The suitcase farmers have hired the preparation of large areas of land all around us,



which no longer represent the idea of homes at all,



but just parts of a potential factory for the low-cost production of wheat.



[Narrator] During the last five years of the 1920s alone,



another 5,260,000 acres of native sod --



an area the size of New Hampshire -- was turned over on the Southern plains.



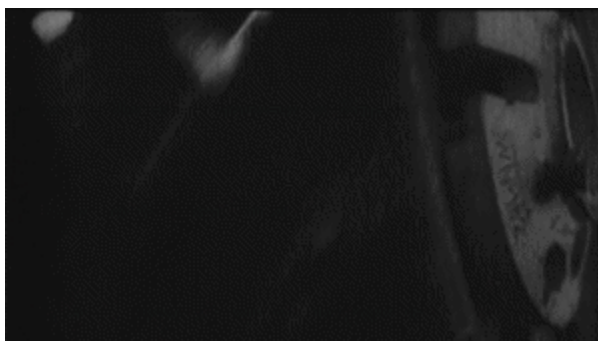
"The soil," a Federal Agency [U.S. Bureau of Soils] confidently proclaimed,



"is the one indestructible, immutable asset ...



that the nation possesses.



It is the one resource that cannot be exhausted,



that cannot be used up."

The surface of the Great Plains appears to be amazingly flat. The most common markers are grain elevators that dominate small, dying towns. In reality, the Plains is tilted slightly, perhaps fifteen feet per mile, from the Rocky Mountains east by southeast toward the Gulf of Mexico. Plains altitudes range from 2,000 to 5,000 feet above sea level. Much of the surface is world-class dirt that enticed settlers onto the otherwise difficult Plains. A significant part of the soil above the Ogallala Aquifer is windblown dust, or loess mantle. Over several thousand years, countless dust bowls of transitory loess deposited the incredibly rich clay soil prized by nineteenth and twentieth-century pioneers and immigrants. Such soil has been named "chernozem," a Russian word for black or dark brown earth (chernyi means a dark brown-black color), a rich and fertile substance.

The Plains chernozem accumulated during 6,000 years to be several feet deep and once seemed inexhaustible to farmers and scientists. In some places like southwestern Kansas and north central Nebraska, the outcome was not fertile soil, but sweeping sand dunes. The famous Nebraska Sand Hills, as large as Massachusetts, Connecticut, and Rhode Island combined, put some truth into the fable of the Great American Desert. Nevertheless, the impact of the widespread belief that Plains soil was unbeatable on American and world history cannot be overestimated. As late as 1900, the U.S. Bureau of Soils claimed that "The soil is the one indestructible, immutable asset that the nation possesses. It is the one resource that cannot be exhausted, that cannot be used up." This may have been a wild promotional statement or whistling in the dark. Pioneering soil historian Edward Hyams notes: "Should anything happen to inhibit the work and multiplication of ammonifying bacteria, the soil fungi, and the nitrogen-fixing bacteria, all [land] life on the planet would come to an end in a matter of months."

People cannot live by pulverized rocks alone. The soil that produces food is more than an inanimate matrix of rocks and minerals. It is an organic living entity: bacteria, fungi, and microbes on one scale, insects, roots, the all-important earthworm, and animals like the mole on a larger scale. The rock particles, mixed with the one necessary ingredient, water, provided the medium in which organic matter flourishes. The end result is often called humus. Plains farmers called it sod. It is the work of nitrogen-fixing bacteria, as well as fungi, rocks, minerals, atmosphere, water, and decaying plant and animal matter.

Humanity's utter dependence upon the thin layer of rocky debris called soil is summed up in "Albrecht's dilemma," after the pioneering Missouri soil scientist William A. Albrecht. The irony of soil is its fluidity. In order to feed themselves, humans intervene in nature by plowing up virgin soil and planting crops that produce more useful food than would naturally grow on the land, but in the process they speed up the depletion of nutrients from the soil by means of high levels of mineral solutions to feed their plants. The brief geological moment of productive soil -- "a temporary interlude for rocks and minerals on their way to solution and to the sea" -- is dangerously hastened by necessary human interference. Erosion from aggressive farming speeds up the loss. Great Plains soil is predestined to flow eventually to rivers and the sea just as much as the rocks inevitably broke from mountains to become soil. On the High Plains, today's soil and wind erosion matches or surpasses that of the horrific Dust Bowl years.

Ecologically minded scientists learned that good sod (humus) on the Great Plains is a miraculous ecological balance between the right chemical salts and the presence of the right amount of water. Farmers knew this already without the jargon. Fortunately for humans, the sod is extremely interactive with the plants that must feed upon it. Soil is potent, a vigorous and flowing medium, at one time the nourishment for the grassland sea and now set to the plow for wheat, soybeans, or sorghum. Calcium, magnesium, potassium, sodium, and hydrogen, as well as nitrate and phosphate, in the top six to eighteen inches of the ground, mixed with the right amount of moisture, are necessary for the electrochemical exchanges between the roots of plants and ingredients in the soil. All the grains, every seed and every morsel of the fruits and vegetables that humans consume depend upon these exchanges. As a secondary result, humans can also have meat to eat -- beef, lamb, pork, and chicken -- because these animals consume the plants, many inedible by humans. Animal and human survival depends upon the ionization that makes the plants grow.

Root hairs, like the ones the weekend gardener sees in transplanting tomatoes or azaleas, are enveloped in hydrogen carbonate. Hydrogen is a hyperactive element, and the plant in the hydrogen exchange between soil and root acquires the solid nutrients in the form of salts. The higher the concentration of chemical dynamics in the soil, the larger and better the crops. Farmers struggled to find the delicate balance: if the soil lacks the nutrients or has too many salts, or if moisture is too high or too low, plant growth is limited, as in the worn-out lands of Appalachia, or virtually nonexistent, as in Nevada's Great Basin.

And enduring soil has consistently offered each human civilization its long-term security, its ecological capital that deserves to be reinvested rather than squandered. Good, life-giving soil maintains a proper physiochemical-electrical balance. The old phrase "salt of the earth" turns out to be remarkably accurate. European settlement on Plains soils, according to Edward Hyams, sacrificed the region's remarkable fertility and stability in its soil to the American commitment to individual freedom (e.g., private property) at all costs.

Unlike hydrogen, nitrogen is underactive. It does not easily combine with other elements for plants to absorb through their roots. Yet nitrogen is essential to every family of living things on earth. The process through which plants acquire nitrogen, which exists in the atmosphere, is called "nitrogen fixing." Strange nodules, called warts or galls, on the roots of legumes like beans, peas, and clover are filled with millions of bacteria. The plants give bacteria their energy through carbohydrates, the bacteria in turn capture nitrogen from the air and make it available to the plant. Once captured by the bacteria, the nitrogen takes the form of nitrates, which plants capture chemically and convert into proteins. Animals and humans in turn consume these proteins. This is a symbiotic relationship, since neither plants nor bacteria alone can achieve nitrogen fixation. Of the importance of nitrogen fixing, journalist Peter Farb wrote in 1959, "Should some calamity overtake these bacteria, or a sudden change occur in the environment of the planet, that their numbers might be so seriously reduced ... [the event would] collapse our superstructure of life, which is hinged to the nitrogen fixed by these microbes."

A good little bluestem acre on the arid Great Plains includes two and one-half tons of plant material in the first six inches of soil. The roots absorb the nitrates, other mineral compounds, and soil matter and hold the plant in place. As a perennial, little bluestem roots are centers of plant food storage. Farmers quickly learn not to cut their bluestem less than four inches above the surface nor to allow their animals to graze it down excessively, or the underground sod would suffer, since the aboveground growth produced the sugars and starches the roots needed. The dense roots of quality bluestem withstand drought and can carry cattle through dry spell and winter. Prairie sod is a final synthesis of the best of the Great Plains.

-- The Great Plains Region, by Amanda Rees



[Donald Worster, Historian] The Great Plow Up had going for it ...



ample rainfall for a period of ten or 15 years,



and it just kept encouraging more and more.



People thought, as they think again and again, that we have turned the corner on climate here. We can see far into the future, and it's all wet.



They knew that there'd been severe droughts in the 1890s, but people forgot about those. They thought that was the past, this is now, and this will be the future.



[Narrator] A handful of old-timers, especially the cattlemen, who had been through those droughts, weren't so sure. To them, the Southern plains were a grassland, and the sod should never be turned.



[Timothy Egan, Writer] Bam White, who was a half-Apache, half-Anglo cowboy, living in the Texas panhandle,



said to his son who asked him what was the problem, he said ...



"Look at it. Wrong side up. It's wrong side up."



[Caroline Henderson] A few days ago, I rode to the store for the mail.



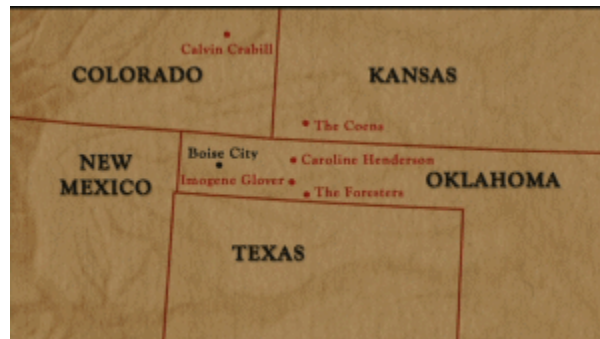
Coming home, I saw the whole country transformed in the sunset glow -- all the brown prairie turned to gold.



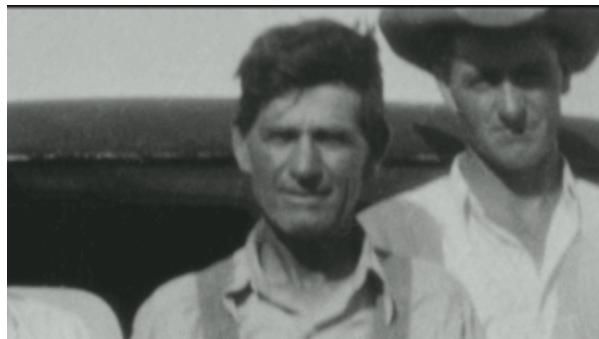
I could feel once more the lure of this great, lonely land, waiting with its stores of fertility all untouched for those who shall one day learn to meet its demands,



to give to it their patient thought and labor.



[Narrator] Among Caroline Henderson's neighbors in Texas County was the family of Harry Forester.



He had grown up in Arkansas and Eastern Texas before filing on a homestead in No Man's Land,



where he and his wife raised nine children.



As times improved, his dreams had expanded, especially for his five sons.



[William Forester, Son, Texas County, OK] And one of his goals was to leave as a bequest to each of his sons a section -- that is a square mile -- of good, arable, wheat production land,



which was something that he felt would guarantee their having a good living and a good life. That was his goal.



[Narrator] In 1928, to fulfill his dream, Forester leveraged the homestead he already owned with a mortgage to buy even more wheat-growing land near Boise City.



[William Forester, Son, Texas County, OK] He had used all his property and all his lands



and all he had accrued from 1906 to 1928.



Because of his dream, he essentially put it all at risk, and ultimately, it proved to be a bad time to make a move.





[Narrator] On October 29, 1929 -- the day that would be remembered as "Black Tuesday,"



the stock market crashed on Wall Street, puncturing a speculative bubble that had been building throughout the 1920s.



By the end of the year, the financial panic began to spread to other parts of the economy,



throwing one and a half million Americans out of work.



A year later, that number would triple, and the nation descended into the Great Depression.



But back in No Man's Land, the future still looked bright.



The U.S. Chamber of Commerce pronounced the Southern plains as one of the most prosperous areas in the entire nation.





[ONWARD GOES OUR CIVILIZATION: Ours is essentially an age of machinery whether it be in the realm of the smallest industrial enterprise or the large scale wheat grower. Ever since Cimarron county's first home seekers found their way to its productive soils, John Deere implements have played a part in the advancement of agriculture. John Deere has proved a true pioneer, advancing abreast with the development in that field. We join the community in paying homage June 30 and July 1 to Cimarron county's ...]

An advertisement in the "Boise City News" imagined a Manhattan-style skyline, with the prediction, "Soon you will have your own Empire State building, right across from Kirby's Kash Grocery."



[Pauline Hodges, Beaver County, OK] The first two years, they thought it didn't affect them, that it was back East --



"Oh, well, you know, that was Chicago. That was New York. It wasn't here. This won't happen to us."



[Imogene Glover, Texas County, OK] We had the best crop that we had had in 1929.



That's when the market was great,



and the people that did plant wheat had a better year than they'd ever had,



and they just thought they'd get wealthy.



It was a great time,



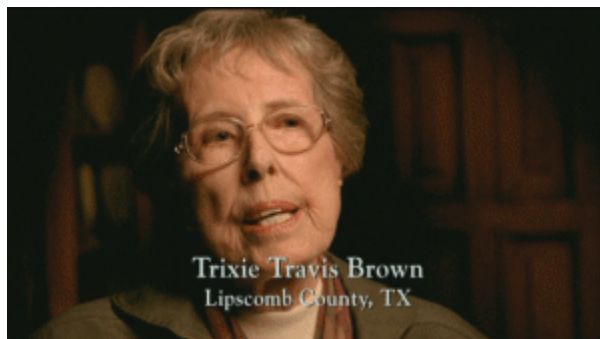
and everything was looking up.



[Narrator] In the Panhandle town of Follett, Texas, Trixie Travis Brown's father decided times were right to start a new business and build a new house.



[Trixie Travis Brown, Lipscomb County, TX] He and his dad and brother opened up a hardware store in Follett.



Follett was a thriving little town. We had a main street that had businesses on both sides of the street.



After my sister was born in '29, we moved into the new house.



It was great. Things seemed to be going well for my dad, for grandpa.



[Narrator] Most of what people knew about the misery gripping the rest of America they learned from reading newspapers and watching newsreels at the Palace Theater in Boise City or the Mission Theatre in Dalhart, Texas.





But as the Depression deepened elsewhere,



prices of farm commodities collapsed,



plunging all of rural American into crisis.



LAX		WHEAT			OATS	
JULY	SEP	MAY	JULY	SEP	MAY	JULY
137	137	123	123	123	115	115
138	138	124	124	124	116	116
139	139	125	125	125	117	117
140	140	126	126	126	118	118
141	141	127	127	127	119	119
142	142	128	128	128	120	120
143	143	129	129	129	121	121
144	144	130	130	130	122	122
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146	146	132	132	132	124	124
147	147	133	133	133	125	125
148	148	134	134	134	126	126
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151	151	137	137	137	129	129
152	152	138	138	138	130	130
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154	154	140	140	140	132	132
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156	156	142	142	142	134	134
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311	311	2				



Instead, farmers decided if they couldn't make as much money per bushel,



they would simply harvest more bushels.



So they plowed up more land --



half a million more acres in the counties around No Man's Land.



The whole area, one agricultural agent said, had gone "wheat mad."



[Donald Worster, Historian] The answer to farmers' problems on the Great Plains is basically always more -- more production.



If you're hurting financially, if your crop prices are low, you produce more to make up. If you're doing well, the bushel prices are high, you produce more. I mean, it's always "more production" is the answer to the problem.



And so in 1930, despite low prices, farmers were producing more wheat than ever before.



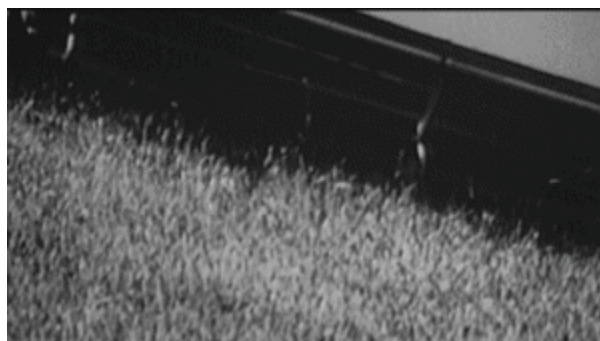
[Timothy Egan, Writer] This big Plow Up was the final surge that came after wheat had crashed.



If you had 10,000 acres and you had taken out a bank loan to service your 10,000 acres, suddenly you're getting only half of what you got the year before. The only way you could cover your nut was to double the amount of land you plowed up.



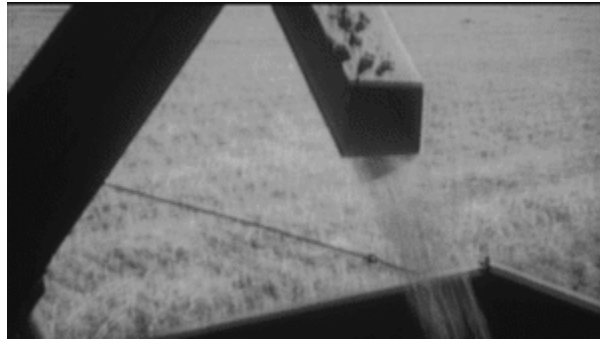
So, it sent them into the fields for this frantic, last-minute effort to turn the land.



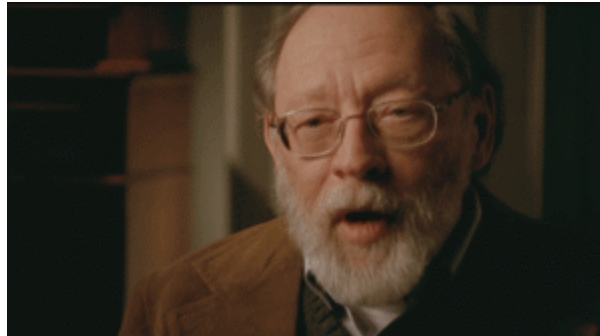
[Donald Worster, Historian] It was a recipe for economic disaster ...



in the sense that they were producing an enormous glut of wheat ...



that didn't have a market.



It was a recipe for disaster in that if a drought comes along, they are lying there vulnerable with so much land that has been exposed.



[Narrator] It snowed and rained that winter, and the spring of 1931 brought adequate moisture.



By harvest time, the winter wheat was shoulder high, and farmers realized they had a bonanza on their hands.



[Caroline Henderson] I have never seen a more beautiful harvest --



one of the best wheat crops this country has ever produced in our 24 years of farming.



[Narrator] Over the years, Caroline and Will Henderson had increased their holdings to 640 acres -- a square mile.



They had purchased mechanized equipment to replace their horses, and made steady improvements to their property.



They now had a real house, with a full basement, five rooms on the first floor, and a big, unfinished room on the second. They had an indoor bathroom -- but as yet, no running water inside the house -- and had purchased a telephone.



But when the bumper crop of 1931 was harvested, there was no one to buy it.



Grain elevators overflowed, and giant dunes of wheat were piled out on the open ground.



[WHEAT DEMANDS SLOW. PRICE IS DOWN TO NEW LOW. FEED GRAIN MARKETS ARE STRENGTHENED, HOWEVER, REPORT SHOWS]

Prices had already collapsed to 25 cents a bushel or lower -- roughly half of what it cost the farmers to grow it.



"We are too big to cry about it," Caroline wrote, "and it hurts us too much to laugh."



[Pauline Hodges, Beaver County, OK] I remember my father saying that his banker had told him that prices certainly wouldn't go any lower than 95 cents a bushel, which, compared to what it had been in the 1920s, was really low.



And my dad used to laugh ironically and say the next day it dropped to 23 cents a bushel -- 60 cents in one day.



It wasn't until the price of wheat dropped so drastically that we really felt the Depression out here.

[WHEAT IN COUNTY IS HARD HIT. COUNTY AGENT'S TRIP THROUGH WHEAT PRODUCING AREA NETS GLOOMY CROP PROSPECT.]



[Narrator] Like so many of their neighbors, Pauline Hodges' parents believed the situation would not last for long.



They were, after all, "next year" people.



[WIND BLOWING]



TWO MIDNIGHTS IN A JUG



[Narrator] A little after noontime on January 21, 1932, a dust cloud appeared outside of Amarillo, Texas.



Dust storms weren't uncommon in the area,



but this one rose 10,000 feet into the air,



carried winds of 60 miles per hour.



The local weather bureau didn't quite know what to make of it, calling it "awe-inspiring" and "most spectacular."



Even old-timers said they'd never seen anything like it in their lives.



[Robert "Boots" McCoy, Texas County, OK] Scared us to death. We didn't know what to think.



We was at home. Dad was gone, looking for cattle. Mom and sister and I, we was outside. We looked at that, and we just didn't know what it was gonna be.



First started way off, it was real dark. But the closer it got, it got brown,



and when it hit in 30 minutes, you couldn't -- it's just like midnight. Middle of day was just like midnight with no stars -- just dark.



[Narrator] Boots McCoy's family lived in Texas County, six miles west of the Hendersons.



He and his big sister, Ruby Pauline, huddled with their mother, who was pregnant.



[Robert "Boots" McCoy, Texas County, OK] It'd be still, be just calm as it could be, and then when that dust got there, wham!



It would hit you.



It was just a-rollin'. It was scary. It scared the heck out of us.



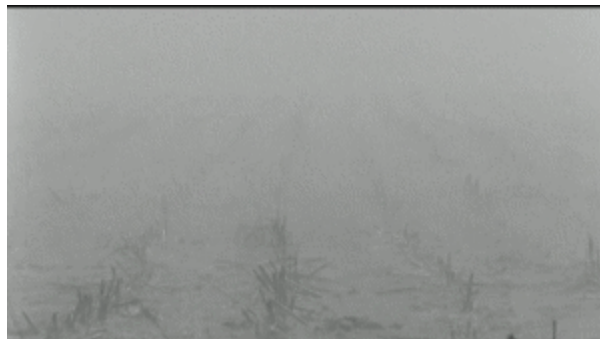
Mother would pray about it, you know.



Us kids, of course, we was little, and we stayed pretty close to ma, I guarantee you.



[Narrator] The storm passed quickly, but that winter of 1931-32 was uncommonly dry. So was the Spring that followed.



The fierce winds common to the season began picking up sand and soil from the bare fields again,



and moving it across the landscape.



The weather bureau began classifying the storms by their severity.



Some storms, taking the coarser, sandier soils, moved along the ground for a few miles before disappearing;



others created a light haze in the sky.



The worst ones reduced visibility to less than a quarter mile.



No Man's Land had fourteen of those in 1932.



[Floyd Coen, Morton County, KS] The dust storms was the most fearsome looking,



but as far as damage, I would say the sand storms did more damage to our land and our cattle and so forth.



You don't hear much about the sand storms, but we had a lot of those.



It wouldn't get very dark, but they were a nuisance to be out in, and it'd just pepper you, like sand a-hittin' you. It'd be very abrasive. And they might last two or three days.



And one time, my mother marked 21 days on the calendar that we had sand storms every day.



[Imogene Glover, Texas County, OK] Well, I had to run get the chickens in when we'd see them a-comin',



and if I didn't get back to the house or to the cellar in time,



my bare legs would really feel that sand and grit. But I knew the way.



I think I could run blindfolded ...



from the chicken house to the house and into the cellar.



[Pauline Robertson, Union County, NM] By 8:00, that wind would be hitting, and dirt,



and by the time I would walk from that house to that road, which was as far as from here across the street out there, my legs would be blistered, that dirt would be coming and hitting there so hard.



[Narrator] In the midst of the relentless storms, Boots McCoy's mother went into labor. It turned out she was carrying twins. She named them Roy and Troy, but they were in trouble from the very beginning.



[Robert "Boots" McCoy, Texas County, OK] They lasted, best I could remember, about twelve hours. And the doctor just couldn't save them. And when we buried them, the neighbors built a coffin, and one of them went to the J.C. Penney Store and got some Number 12 shoe boxes, and we put some cotton and put them boys in that -- put them in that coffin. That's the way they was buried.



[Caroline Henderson] Many a time, I have found myself tired out from having tried, unconsciously and without success, to bring the distant rain clouds nearer to water our fields. I am beginning to see how worse than useless is this exaggerated feeling of one's own responsibility, to understand a little the thought of someone who wrote long ago, "He that observeth the wind shall not sow, and he that regardeth the clouds shall not reap."



[Narrator] For Caroline and Will Henderson -- and all the other farmers in the area -- the harvest of 1932 was a double disaster.



Prices for wheat plummeted even lower than the previous year, and there wasn't much of a crop to harvest anyway.



[Caroline Henderson] Judging by any standards that the world would recognize,



we should have been further ahead if we could have spent the year in sleep.



[Narrator] That fall, farmers went back to the fields and planted winter wheat for next year.



[Caroline Henderson] People still toil amazingly, and make a conscious effort to keep cheerful, but it seems to me that the effort grows more apparent.



Behind the characteristic American nonchalance, one detects a growing anxiety, especially about the coming winter.



[Clarence Beck, Cimarron County, OK] You kept thinking that tomorrow things will change, so you kept doing what you were doing.



You thought, well maybe there are some things that we can do that will be a little better than the way they are.



We couldn't live without hoping that things were gonna change for the better.



[Wayne Lewis, Beaver County, OK] We always had hope. Next year was gonna be better, and even this year was gonna be better.



We learned slowly, and what didn't work, you tried it harder the next time. You didn't try something different; you just tried harder the same thing that didn't work.



[Caroline Henderson] By sacrificing the small reserves we had held against the days of drought and disaster, we have succeeded so far in keeping on a cash basis.



We have disconnected the telephone, stopped the daily paper, substituted cheap lye for washing powder so that my hands are rough and uncomfortable,



but of all our losses, the most distressing is the loss of our self-respect.



How can we feel that our work has any dignity or importance when the world places so low a value on the products of our toil?



[Narrator] Things were even worse for Caroline's neighbors, the Foresters.



Harry Forester's crop had withered in the drought, and what little wheat he had managed to harvest brought in only 17 cents a bushel.



The land he had purchased near Boise City turned out to have a prior claim on its title and was taken from him.



The mortgage on his original homestead, which he had used to buy the extra land, could not be paid, and he lost it, too.



He was forced to move his wife and nine children to rented land. Harry Forester's dream of amassing enough property to give each of his five sons 640 acres was in shambles.



Now he would struggle simply to keep his large family fed and warm through the winter.



[Robert Forester, Son, Texas County, OK] One thing, we would do chores. Of course, doing chores for a youngster like me was riding along on the wagon and picking up cow chips, and coming in and piling them behind the house so that we would have fuel for the fires.



And of course, they don't smell at that point in time,



unless you happen to get one that's a little bit fresh.



[Pamela Riney-Kehrberg, Historian] At the beginning of this whole situation, most people are thinking this is a short-term problem.



We've seen droughts before, we've seen dust storms before, we've had high winds before, and you wait till next year.



And everyone assumed that next year things would be better. And then ... the next year they assume things will be better, and it doesn't get better.



[Narrator] Throughout the United States, things were getting worse.



Tens of thousands of banks and businesses had failed.



In just one day, one quarter of the entire state of Mississippi went under the auctioneer's hammer.



From San Francisco to New York, thousands of Americans were reduced to living in shantytowns called "Hoovervilles" ...



after the President they had come to blame for everything.



That November, voters took out their despair and anger on Herbert Hoover ...



and elected Franklin Delano Roosevelt to lead the nation through the crisis.



[THE BOISE CITY NEWS. COUNTY VOTE IS HEAVIEST IN HISTORY. GIVES NATIONAL DEMOCRATIC TICKET OVER THREE-TO-ONE MAJORITY. CARRY FORTY-TWO STATES]

The normally Republican counties of the Southern Plains went Democratic.



Roosevelt, they hoped, would at least try to help them.



But even a President couldn't control the weather.



There was no rain at all in Cimarron County, Oklahoma, in March of 1933.



The agricultural agent there predicted that, at best, farmers might harvest four bushels of winter wheat per acre, versus the previous yields of nearly 30.



And now the dust storms were becoming more frequent.



Instead of the fourteen storms of 1932 classified as the worst, there were 38 in 1933.



One storm in April lasted 24 hours.



[Shirley Forester McKenzie, Texas County, OK] You could hardly avoid looking to the West to see if you could see this rim of dust that was rising on the horizon.



It was earth colored, way far away, beginning to rise, and the next day, perhaps it would be bigger and come quicker and higher, and then suddenly, you were just engulfed. It was overhead, and you couldn't see the sun.



And that's when it was a really bad day. And day after day, it would be that way -- dark, black, scary.



[Pauline Durrett Robertson, Potter County, TX] The experts could tell where the dust came from by the color.



New Mexico had one color, and Oklahoma, coming from the other direction, had another color.



And they would say, "Well, we're enjoying Oklahoma today." "Well, we're getting visited by all the New Mexicans today," and so forth.



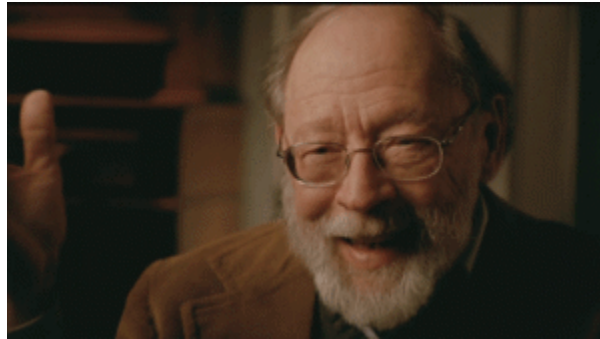
[Donald Worster, Historian] The big dust storms were fine particles of soil.



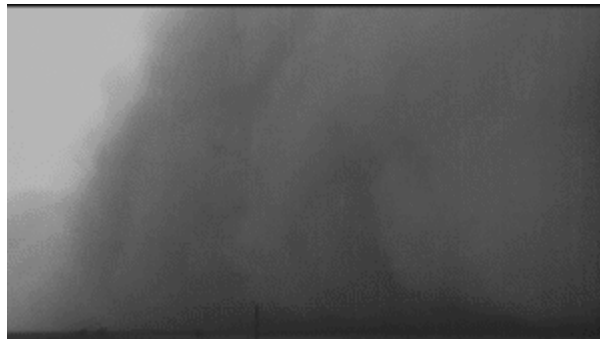
Others were sandier blows that blew along the highways at low elevation,



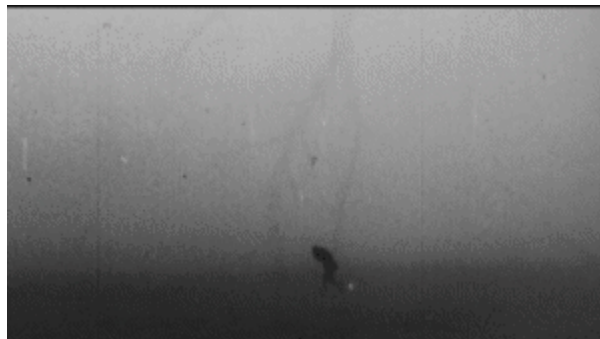
and it could take the paint off your automobile or your house, like sandpaper being rubbed against it.



But the ones that were the most terrifying were the ones that were based on these very fine particles that rose up into the air 7,000, 8,000 feet ...



in this kind of boiling wall of dirt coming at you ...



with gale force, 40-, 50-, 60-mile-an-hour winds.



These were the black blizzards that frightened people so much during those periods.



[Timothy Egan, Writer] When one of these dusters would approach from afar, and they would see it for the first time,



it was like a mountain range, because some cases, the storms were 100 miles, 150 miles, 200 miles wide and a mile or more high.



So imagine driving on a flat land and looking off and seeing a mountain range itself starting to move.



Daylight itself would be obliterated. Someone told me it was like "Two midnights in a jug."



[Dorothy Kleffman, Texas County, OK] One particularly bad storm we had, it was in the daytime, and it rolled in, and it was so black that you couldn't see your hand in front of your face.



So we all gathered in the kitchen, the whole family.



We lit the kerosene lamp, and that didn't help very much. And mother had tea towels that were made out of flour sacks because we were also in the "Great" Depression.



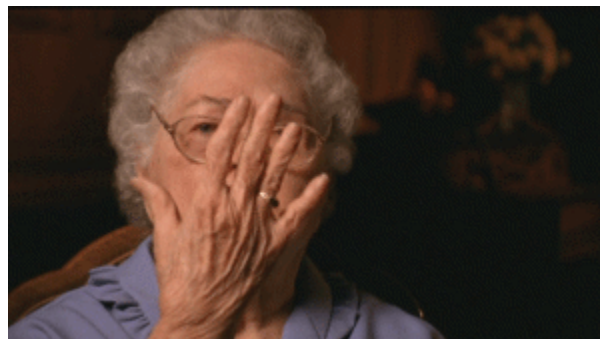
And we just took them and draped them over our head,



down the face -- you know, just the whole head.



You couldn't see anything. You sat there, and you couldn't talk or visit with anybody very much,



but that wet towel would catch the dust. And sometimes those towels were pretty black by the time we took them off.



[Ina Kay Labrier, Prowers County, CO] It'd get so bad, you couldn't even see to drive.



Ina K Labrier
Prowers County, CO

You couldn't see the sides of the road with your lights on.



You couldn't tell whether you was on the road or on the sides or where you were.



[Imogene Glover, Texas County, OK] Sometimes we were caught in the house or in the car, and we'd just sat there until it all blew over.



It just was old brown dirt a-blowin' all around the car, and we just sat there ...



until it kind of cleared up enough so you could see the road to go on to get to the house.



And it was gritty and dirty, and you had to wash your mouth off whenever you got in the house so you weren't eating dirt.



If you'd go out and pick up a handful of dirt and stick it in your mouth, that's just the way it'd feel.



[Timothy Egan, Writer] One of the things that happened just before a duster hit was there was this amazing static electricity in the air. And so people used to carry a chain in their car to ground the electricity.



So you didn't drive anywhere without having this chain that you'd then throw out and drag it along the ground to ground the electricity because your radio would go out, your electrical stuff would short.



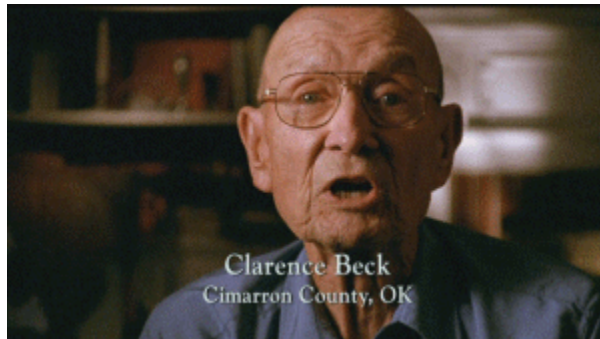
And every person would talk about how you literally couldn't shake another person's hand before one of these dusters because the static was so strong. It was the kinetic energy that was in the air just before a duster hit.



[Dorothy Kleffman, Texas County, OK] I can remember feeling it in my hair. It was just kind of like your head tingles or something, you know. Your hair just gets kind of wiry.



[Clarence Beck, Cimarron County, OK] More dust and the longer the ride, the higher the charge,



until finally it'd get such a powerful charge that if you reach out to touch your car, the electricity will jump out about six inches to meet you ...



and knock you right flat on your butt.



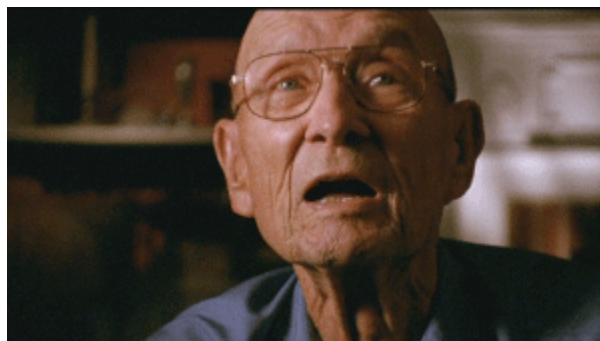
But it wasn't always like that. Don't forget this is a storm, which means it had a beginning and an end.



And in between storms, it couldn't have been more beautiful.



The skies were crystal blue, and the clouds were those puffy white summertime clouds, without a drop of water in 50 of them.



But I can still remember my father looking up at the sky and praying that it'd rain. But naturally, it never would because those weren't rain clouds and never would be.



[Narrator] In the times between storms, the farmers and townspeople tried their best to carry on with their lives,



but the land they called home was being rearranged before their very eyes.



[Imogene Glover, Texas County, OK] Oh, just dirt, piles of dirt around anything,



like the fence rows or something like a plow implement or anything out in the yard, it might be nearly covered up with dirt.



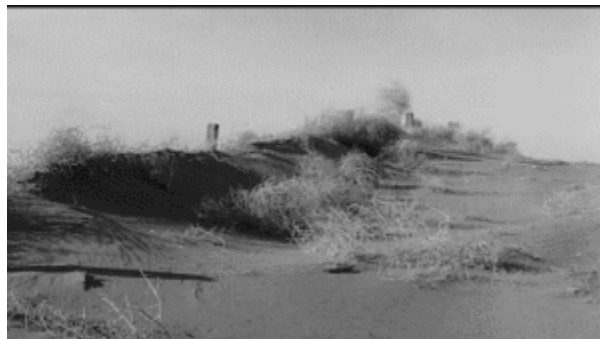
Anything loose banked up around something or blew away.



[Dorothy Kleffman, Texas County, OK] It would drift up the side of the barn, so you could walk up on the roof of the barn, you know?



You just walk up like you had a ladder there, but it would be dirt.



[Narrator] The storms had pushed dried-up Russian thistles --



tumbleweeds -- across the open ground ...



by the hundreds of thousands.



Wherever they piled up against barbed wire fences,



they created eddies in the wind, and the dirt accumulated.



[Don Wells, Cimarron County, OK] Thistles got in the fence, and then the sand got in the thistles, so consequently, what cattle was still alive walked over the fence.



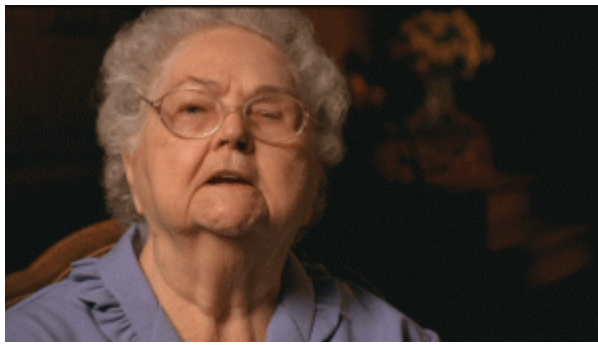
Every place there was a fence, you could almost walk over most of them.



[Narrator] Where the dirt and sand hadn't piled up, the land had been swept clean of topsoil.



[Dorothy Kleffman, Texas County, OK] It was bare. It was hard. You could take a broom and sweep it just like you could a wood floor.



It was hard, just like cement.



[Donald Worster, Historian] So you could walk out onto your farm, and instead of fine dirt, you found this hardpan layer on the top. Impossible to cultivate.



Your dirt would be in somebody else's farm or a county away.



[Imogene Glover, Texas County, OK] You know, the dust was so bad that the cattle died.



They found small herds of cattle ...



that were just filled up with dirt in their lungs and their noses.



I can remember seeing our cows' noses that were just mud on the end ...



where they tried to breathe and couldn't.



[Donald Worster, Historian] They died of suffocation.



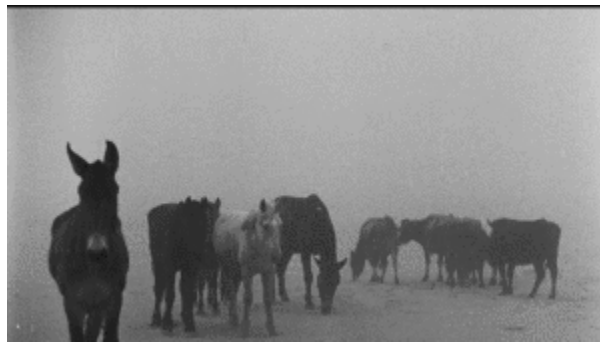
Whatever wildlife was out there died of suffocation.



But animals also simply wandered away not knowing where they belonged ...



and would climb over these dust drifts and be lost.



So it was really devastating for livestock in terms of loss of life.



[Narrator] Housewives nurtured their gardens with well water, but the abrasive winds, the shifting dirt -- even, sometimes, the charge of static electricity in the air -- often killed the vegetables their families were counting on.



[Virginia Frantz, Beaver County, OK] A storm would come, and there would be absolutely nothing left of it.



And mother tried her best to keep that from happening.



She would dig postholes to plant tomatoes in so that the wind wouldn't cut them off until they got bigger and stronger to where they might have some tomatoes then.



And she dug deep rows to put anything in.



And of course, sometimes they would fill up with dirt.



[Narrator] After surveying the residents of Meade, Kansas,



a reporter calculated that the average damage from a single storm was \$25 per home.



What couldn't be measured, he said, was "the loss of disposition of the housewives."



[MRS. HOUSEWIFE. KEEP THAT DUST OUT BY SEALING YOUR WINDOWS WITH GUMMED TAPE. A 500 FOOT ROLL, ONLY 30 c. BOISE CITY NEWS]

[Dorothy Kleffman, Texas County, OK] My mother was very clean. Her house was always clean, and she tried to keep us kids clean.



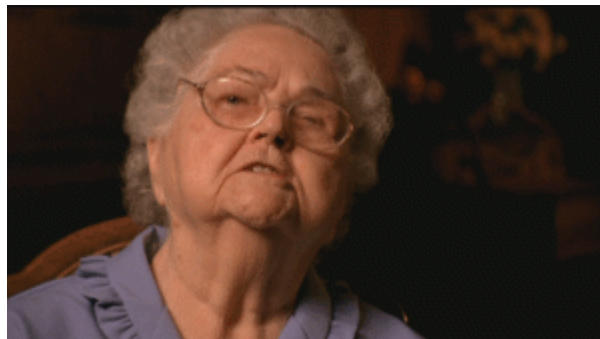
She would take all her curtains down one day and wash them and hang them back up.



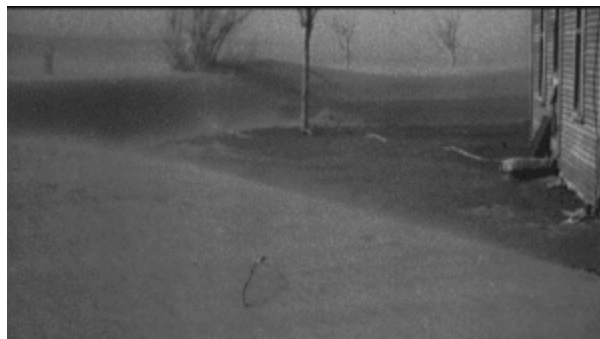
A dirt storm would come in that night, and they were just like they were before she washed them.



And that went on day after day after day,



and once in a while, you would hear of some woman that just couldn't take it anymore, and she'd commit suicide.



[Pauline Robertson, Union County, NM] It blew that dirt into the attic of the house,



and a lot of times when we would get up of a morning,



you could look up at the ceiling and if there was a split or between boards or whatever,



that dirt would just be coming right down like this on the table. And when we'd get up in the morning, a lot of times there would be, say, from an inch to five inches of dirt ...



just piled about like that.



And you cleaned that off, and you eat,



and you eat the dirt if it's there. If it isn't, well, you do good.



[Floyd Coen, Morton County, KS] When we set the table, we always set the plate upside-down --



glasses or cups, whatever it was, upside-down.



And still, I think you'd turn them over and shake them, look at them before you put anything in them.



My family thinks that I'm kind of stupid,



and I guess I am, but I still -- if I get a glass out of a cabinet, I rinse it out before I drink out of it.



[Dorothy Kleffman, Texas County, OK] When we would go to bed at night, sometimes a dust storm would come in,



and when we got up the next morning, our covers would be completely covered with dust, and the only clean place on our pillow would be where our head had laid.



[Caroline Henderson] Dust to eat,



and dust to breathe,



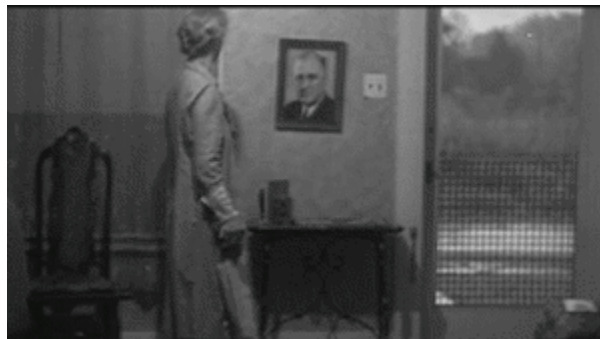
and dust to drink.



Dust in the beds and in the flour bin, on dishes and walls and windows,



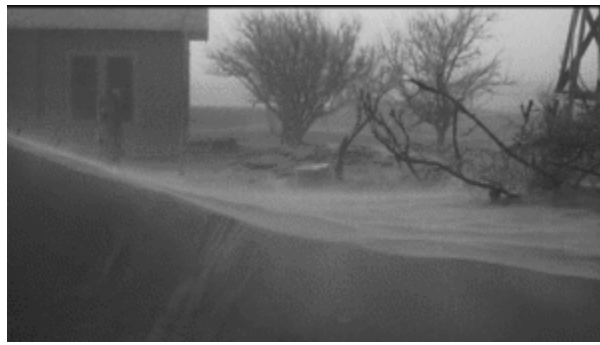
in hair and eyes and ears and teeth and throats,



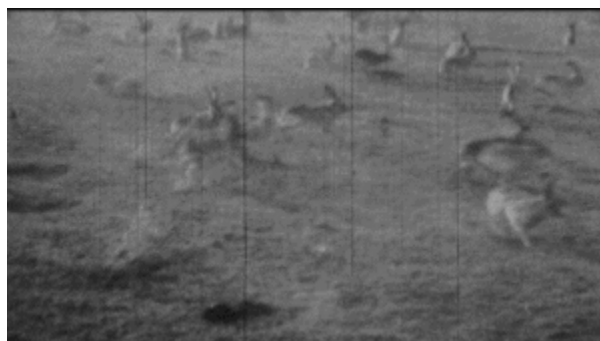
to say nothing of the heaped-up accumulation on floors and window sills after one of the bad days.



This wind-driven dust, fine as the finest flour,



penetrates wherever air can go.



[Narrator] As if the wind and dust weren't enough to deal with,



hordes of jackrabbits,



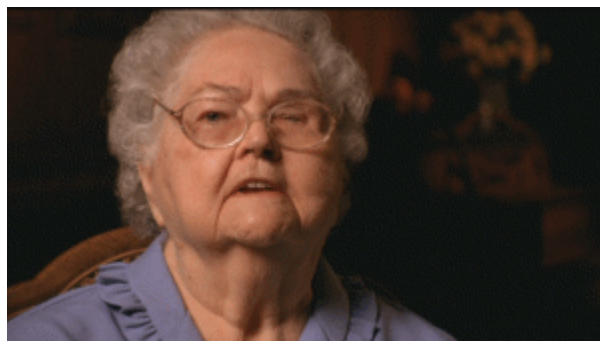
driven by hunger,



now invaded what pastures, crops, and gardens were left.



[Dorothy Kleffman, Texas County, OK] They ate everything green there was.



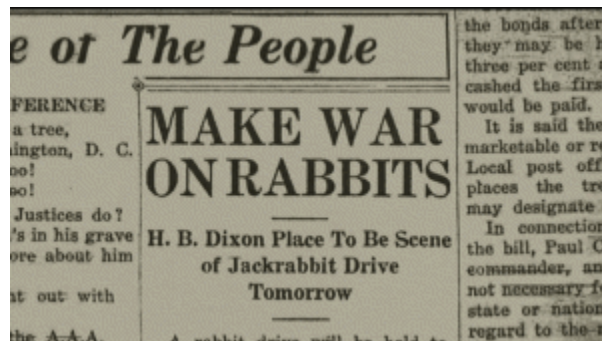
The farmers had killed off the coyotes, and that upset the natural order of things, and the rabbits just exploded, and they would eat anything green they found, and they would eat your garden up.



[Robert "Boots" McCoy, Texas County, OK] There'd be thousands of rabbits. They'd eat everything -- eat the bark off of the fence posts.



Dad put new posts up on our place when he'd done it, and it was cedar post that had bark on it, and they ate that bark off of it.



[MAKE WAR ON RABBITS. H.B. DIXON PLACE TO BE SCENE OF JACKRABBIT DRIVE TOMORROW]

[Narrator] To combat the invasion, entire communities began organizing "rabbit drives."



[Clarence Beck, Cimarron County, OK] You'd advertise it with flyers all over the place in advance -- "On Saturday afternoon on the farm of Joe Smith would be a rabbit drive. Please come. Bring the family."



So on that afternoon, there might be 50 to 100 families show up.



[Don Wells, Cimarron County, OK] And then the people would go out in a semi-circle, and then bring them in.



And they had clubs, and they'd use wagon spokes for clubs.



[Clarence Beck, Cimarron County, OK] And what started out as a peaceful picnic sort of turned into a riot --



dogs barking and yipping,



people yelling,



kids screaming,



rabbits hopping in the air.



[Robert "Boots" McCoy, Texas County, OK] And they just -- we'd kill them until we just give out. And then more kids would get in and go to fighting them. They'd kill them by the thousands.



[Dale Coen, Morton County, KS] You'd club the rabbits to death, which was an unsightly thing,



and it was a horrible thing to do. They would scream, and I can still hear rabbits, the noise they'd make.



I went on one, and that was enough for me.



[Narrator] In the early Spring of 1934,



a snowstorm blanketed No Man's Land.



The flakes, mixed with airborne dirt, were darkened --



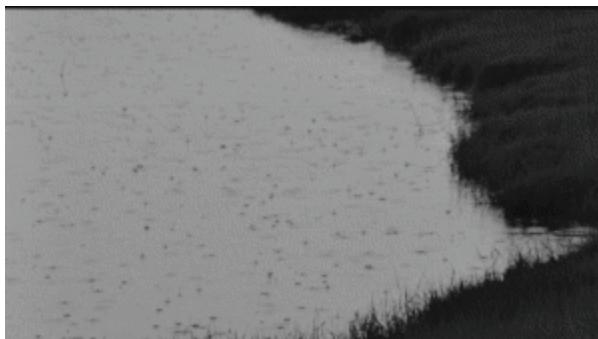
locals called it a "snuster" --



but at least it was a little moisture.



In the Texas Panhandle, a light rain fell. Many people thought the drought had broken.



"The goose hangs high," a local newspaper reported. "Farmers are going down the furrow with brighter days in sight and a song in their hearts."



[Pauline Durrett Robertson, Potter County, TX] And I remember one time it rained, and we were all just thrilled, and the children went out in the streets, and barefoot and dancing in the rain, and let the rain fall on their tongues.



We were just ecstatic,



and the mothers called that it was time to come in for supper, and nobody would go in.



So finally the neighbors all brought supper to the front porches, and we had supper on the front porches and dancing in the streets.



It was wonderful.



And we thought maybe the tide had turned.



But, you know, after that, here came the dust again.



[Narrator] 1934 would turn out to be even drier and hotter than the years before -- part of a nationwide drought that affected 46 of the 48 states.



In May, the temperature had already reached 100 degrees in North Dakota, where the drought was a year older.



Parts of Nebraska, where temperatures hit 118, were already blowing.



Then, on May 9th, a massive weather front moving eastward began picking up loose soil from Wyoming and Montana, then Nebraska and the Dakotas -- ultimately 350 million tons of it, lifted tens of thousands of feet in the air.



Carried by high-level winds,



it crossed Iowa, Minnesota, and Wisconsin,



and as it passed over Chicago, it deposited an estimated 12 million pounds of dust --



four pounds for each resident of the city.



On May 10th, it darkened the skies over Detroit,



Cleveland, and Buffalo.



By the morning of the 11th, the storm enveloped the Eastern Seaboard ...



from Boston to Savannah.



In New York City, street lights were turned on at mid-day, the thick haze obscured tourists' views of Central Park from the top of the Empire State Building,



and a ship delayed its entry into the harbor because the captain had trouble seeing the Statue of Liberty.



In Washington, D.C., dust descended on the National Mall,



even sifted into the White House where President Roosevelt was holding a press conference promising relief to the drought-stricken Great Plains.



The next day, ships 300 miles from the coast reported dirt falling onto their decks.



[Donald Worster, Historian] People were shocked in the East, and they began, for the first time, to ask questions -- what is happening out on the Great Plains?



[Narrator] Though it originated on the Northern Plains,



Easterners referred to it all as "Kansas Dust,"



and many of them quickly had suggestions ...



about how to stop it from blowing across the continent.



One company proposed covering the Plains in concrete,



with holes carefully placed for planting seeds,



while a steel manufacturer in Pittsburgh thought its wire netting might work better.



The Barber Asphalt Company of New Jersey estimated it could spread its product over the land for \$5.00 an acre.



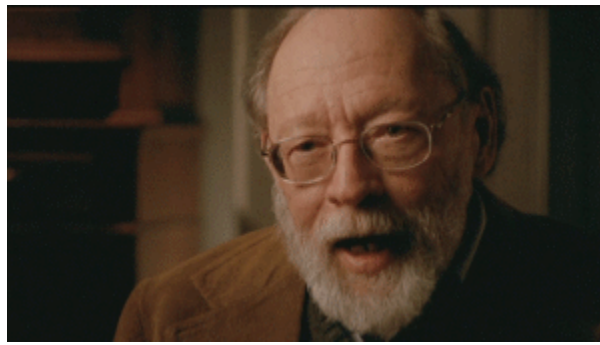
A woman from North Carolina suggested that shipping junk autos west would simultaneously beautify her state while stopping the wind erosion on the Plains.



[Donald Worster, Historian] Well, Easterners in particular, or anyone who didn't live on the Great Plains, had no idea of the scale of this problem or how to go about solving it. So their first idea was basically to cover the Great Plains somehow, cover these soils --



bringing rocks from the Rocky Mountains, I guess rolling them down the mountainside -- anything to cover this area.



They had no idea that they were talking about 100 million acres.



[Narrator] President Roosevelt and his Secretary of Agriculture, Henry Wallace, had ideas of their own --



from encouraging farmers to plant fewer crops to finding ways to stabilize the loose soils through better plowing techniques --



but those programs were still in their infancy. No one knew if they would work.



During a stop in drought-ravaged North Dakota that summer, Roosevelt admitted as much.



"I would not try to fool you by saying we know the solution" to the crisis, the President said. "We don't.



But what I can tell you from the bottom of my heart is this -- If it is possible for us to solve the problem, we are going to do it."



Some of the people lining the route of his motorcade held up signs that noted how Roosevelt had already ended prohibition.



"You gave us beer," the placards said. "Now give us water."



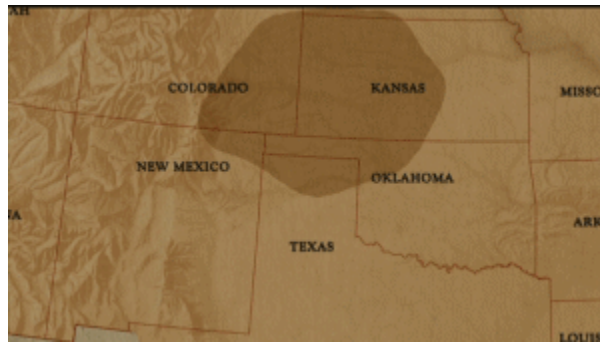
Roosevelt acknowledged their message, and responded, "That beer part was easy."



A series of rains fell shortly after the President's visit and helped ease the drought on the Northern Plains. People there called it "Roosevelt Weather."



But farther south, there was no such relief.



While the outlines of the worst-hit area would shift over the years,



sometimes broadening ...



or narrowing, by the summer of 1934, the Government had officially identified the geographic heart of the dust crisis.



It was near Boise City in Cimarron County, the Western tip of Oklahoma -- in No Man's Land.



One third of the County's land was blowing.



Even some pastures of native buffalo grass that had not been plowed had been buried under drifts of dirt and sand, some ten feet high.



A few of Roosevelt's other New Deal programs, aimed at easing the hunger and joblessness of the "Great" Depression, had now reached the Southern Plains.



In Cimarron County alone, needy residents received two tons of smoked pork, sixteen tons of beef, seventeen tons of flour, and thirty-three tons of coal through a surplus commodities program.



One quarter of the County's population now depended on New Deal jobs.



But none of that addressed the main calamity. "We are getting deeper and deeper in dust," the Boise City News reported.



The same was true in all the other surrounding counties in Texas, New Mexico, Colorado, Kansas, and the rest of the Oklahoma Panhandle.



[Donald Worster, Historian] By 1934, the environmental catastrophe on the Great Plains was pretty clear.



It would have, at that point, classified as one of the worst environmental disasters in American history already.



[Caroline Henderson] We are trying to hope that the worst is over, yet today, after we thought the drought had been effectively broken, we had another terrible day of violent wind, drifting clouds of dust, and Russian thistles racing like mad across the Plains ...



and piling up in head-high impassable banks.



We feel as if the Administration is really making a sincere effort to improve general conditions, but they have a tremendous task, made harder, of course,



by all who cling tenaciously to special privileges or opportunities of the past.



[Narrator] That summer, farmers gathered at the Palace Theater in Boise City to hear details on a new government program designed to stabilize beef prices ...



by reducing the surplus of cattle across the country.



In the Great Plains, it was also meant to deal with the problem ...



of animals wasting away for lack of adequate pasturage.



Already, homesteaders like Caroline and Will Henderson had resorted to harvesting Russian thistles to feed their cows.



Some ranchers were grinding up yucca cactus ...





or burning off the nettles of prickly pears in an effort to give their cattle something -- anything -- to eat.



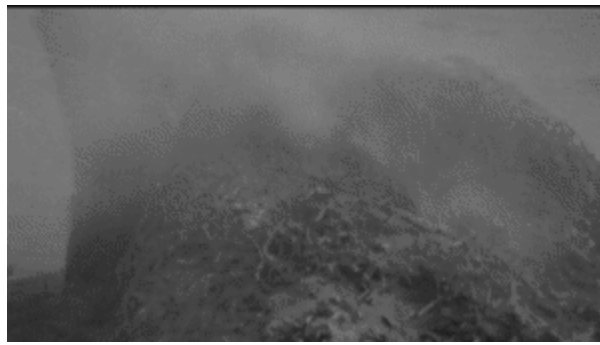
[Pauline Robertson, Union County, NM] Daddy said "We don't have enough money ...



to buy food for the cattle,



but if we can cut thistles and stack them,



there's more food value in that than nearly anything."



And our job was to tramp those thistles down. Now, if you want a bad job, that's one. And those thistles get down your pant legs into your shoes, those little stickers, and you can stand it about so long, but pretty soon you got to stop, get out a sticker.



[Narrator] To encourage farmers and ranchers to cull their herds,



the new government program ...



would pay them up to \$16 a head for a cow healthy enough to be shipped to a packing house, where it would be slaughtered and canned for distribution to the poor.



Cattle deemed unfit for consumption would bring a minimum of \$1.00 a head,



but would be immediately killed and buried.



Government agents fanned out across No Man's Land to make the purchases,



oversee the shipments, and where necessary,



pay men to put their herds under the drifting soil.



Nationwide, the program was a success. \$111 million was spent to purchase 8.3 million cattle, and prices were stabilized.



In Cimarron County, the government purchased 12,499 head of cattle in 1934, paying \$164,449 in much-needed cash to local ranchers.



Desperate as they were for some income, it was a bitter pill for many to swallow,



harder still on their children.



[Calvin Crabill, Prowers County, CO] What they did was they took a bulldozer and made a mammoth ditch, a mammoth ditch, and drove all the cattle down in there. And then there were men above with rifles, and I would say maybe ten or twenty men with rifles, and they shot the cattle.



My father, when our cattle was driven into this ditch to be shot, he said, "There's a little calf. Can I butcher that calf for food for us?" They said, "No. They all have to be destroyed."



I'll never forget to my dying day standing there as a little boy,



I was probably eight or nine years old, when they started shooting those cattle.



And it's a sight to this day that, the average person couldn't stand it, but as a little kid, it was very rough because that was our stock. And you got some money for it. But that didn't matter. They killed the stock.



[Pauline Robertson, Union County, NM] And they said, "If you can get cowboys to get those cattle together, we'll just rush them, and they'll fall in that ditch, and then we'll kill them and cover them up."



And ... and daddy could hardly ... [choking up].



I'm sorry. But he could hardly do that.



And I never will forget my brother and I standing there and watching them shoot those little calves,



and we could hardly stand it. But that's what they did.



THE BATTLE AGAINST HOPE



[Pamela Riney-Kehrberg, Historian] Anybody who had lived on the Southern Plains for any length of time knew that there were periodic droughts, knew that the wind blew in the Spring, knew that there were going to be dust storms.

What's different about the 1930s is how long the drought lasts.



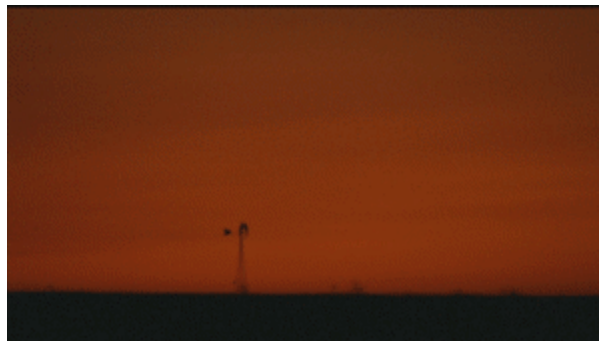
They were always battling against hope ...



because you would see that maybe there was some rain on the horizon, but it would fall on somebody else's field and not yours. You would see some clouds gather, and you would hope that this was going to be good news, but instead it was going to be dirt.



Hope kept them going, but hope also meant that they were being constantly disappointed.



[Trixie Travis Brown, Lipscomb County, TX] My dad could tell if it was gonna be a really bad day by looking out the back door at the sunrise,



and if the sun was red, he'd say, "Oh, it's gonna be a bad day."



That discouraged me even when I was little if I heard him say that.



[Narrator] By 1934, property values around Boise City had declined by 90%, and more than half of the landowners were delinquent on their taxes.

Notice of Sale		THE BOISE CITY, IDAHO	
OF REAL ESTATE FOR DELINQUENT TAXES		STATE OF IDAHO	
Tract	Acres	Owner	Amount Due
1	10.00	John Doe	\$100.00
2	5.00	Jane Smith	\$50.00
3	15.00	Bob Johnson	\$150.00
4	20.00	Alice Brown	\$200.00
5	30.00	Charlie White	\$300.00
6	40.00	Diana Green	\$400.00
7	50.00	Frank Black	\$500.00
8	60.00	Grace Hall	\$600.00
9	70.00	Henry King	\$700.00
10	80.00	Irene Lee	\$800.00
11	90.00	Jack Miller	\$900.00
12	100.00	Karen Wilson	\$1000.00
13	110.00	Larry Young	\$1100.00
14	120.00	Mary Taylor	\$1200.00
15	130.00	Ned Adams	\$1300.00
16	140.00	Olivia Baker	\$1400.00
17	150.00	Peter Clark	\$1500.00
18	160.00	Quinn Evans	\$1600.00
19	170.00	Rachel Foster	\$1700.00
20	180.00	Samuel Gibson	\$1800.00
21	190.00	Tina Harris	\$1900.00
22	200.00	Ulysses King	\$2000.00
23	210.00	Vera Lee	\$2100.00
24	220.00	Walter Miller	\$2200.00
25	230.00	Xavier Wilson	\$2300.00
26	240.00	Yvonne Young	\$2400.00
27	250.00	Zoe Taylor	\$2500.00
28	260.00	Adam Clark	\$2600.00
29	270.00	Bella Evans	\$2700.00
30	280.00	Carl Foster	\$2800.00
31	290.00	Dora Gibson	\$2900.00
32	300.00	Eugene Harris	\$3000.00
33	310.00	Fred King	\$3100.00
34	320.00	Gina Lee	\$3200.00
35	330.00	Harold Miller	\$3300.00
36	340.00	Irene Wilson	\$3400.00
37	350.00	Jack Young	\$3500.00
38	360.00	Karen Taylor	\$3600.00
39	370.00	Larry Clark	\$3700.00
40	380.00	Mary Evans	\$3800.00
41	390.00	Ned Foster	\$3900.00
42	400.00	Olivia Gibson	\$4000.00
43	410.00	Peter Harris	\$4100.00
44	420.00	Quinn King	\$4200.00
45	430.00	Rachel Lee	\$4300.00
46	440.00	Samuel Miller	\$4400.00
47	450.00	Tina Wilson	\$4500.00
48	460.00	Ulysses Young	\$4600.00
49	470.00	Vera Taylor	\$4700.00
50	480.00	Walter Clark	\$4800.00
51	490.00	Xavier Evans	\$4900.00
52	500.00	Yvonne Foster	\$5000.00
53	510.00	Zoe Gibson	\$5100.00
54	520.00	Adam Harris	\$5200.00
55	530.00	Bella King	\$5300.00
56	540.00	Carl Lee	\$5400.00
57	550.00	Dora Miller	\$5500.00
58	560.00	Eugene Wilson	\$5600.00
59	570.00	Fred Young	\$5700.00
60	580.00	Gina Taylor	\$5800.00
61	590.00	Harold Clark	\$5900.00
62	600.00	Irene Evans	\$6000.00
63	610.00	Jack Foster	\$6100.00
64	620.00	Karen Gibson	\$6200.00
65	630.00	Larry Harris	\$6300.00
66	640.00	Mary King	\$6400.00
67	650.00	Ned Lee	\$6500.00
68	660.00	Olivia Miller	\$6600.00
69	670.00	Peter Wilson	\$6700.00
70	680.00	Quinn Young	\$6800.00
71	690.00	Rachel Taylor	\$6900.00
72	700.00	Samuel Clark	\$7000.00
73	710.00	Tina Evans	\$7100.00
74	720.00	Ulysses Foster	\$7200.00
75	730.00	Vera Gibson	\$7300.00
76	740.00	Walter Harris	\$7400.00
77	750.00	Xavier King	\$7500.00
78	760.00	Yvonne Lee	\$7600.00
79	770.00	Zoe Miller	\$7700.00
80	780.00	Adam Wilson	\$7800.00
81	790.00	Bella Young	\$7900.00
82	800.00	Carl Taylor	\$8000.00
83	810.00	Dora Clark	\$8100.00
84	820.00	Eugene Evans	\$8200.00
85	830.00	Fred Foster	\$8300.00
86	840.00	Gina Gibson	\$8400.00
87	850.00	Harold Harris	\$8500.00
88	860.00	Irene King	\$8600.00
89	870.00	Jack Lee	\$8700.00
90	880.00	Karen Miller	\$8800.00
91	890.00	Larry Wilson	\$8900.00
92	900.00	Mary Young	\$9000.00
93	910.00	Ned Taylor	\$9100.00
94	920.00	Olivia Clark	\$9200.00
95	930.00	Peter Evans	\$9300.00
96	940.00	Quinn Foster	\$9400.00
97	950.00	Rachel Gibson	\$9500.00
98	960.00	Samuel Harris	\$9600.00
99	970.00	Tina King	\$9700.00
100	980.00	Ulysses Lee	\$9800.00
101	990.00	Vera Miller	\$9900.00
102	1000.00	Walter Wilson	\$10000.00

Each week, the local paper carried notices of upcoming sheriff's sales of farms being put on the auction block because of unpaid mortgages.



Every family, every farm, every business was affected.



The telephone company that had opened in the rural part of No Man's Land went under.



The Palace Theater shut its doors -- until enough people persuaded the owner to reopen. They needed movies to help them take their minds off their troubles.



No one knew what the next calamity would be, or when the hard times might end.



When he lost yet another crop to the drought, Pauline Hodges' father found himself hard up against his mortgage.



[Pauline Hodges, Beaver County, OK] I think he must have been scared to death because he had relative little education. Farming was all he knew how to do, all he'd ever done, and to look out and see that field solid dust, mounds of dust.



He'd say, "Oh, Dora, it's going to get better. It'll get better." And he would talk about his banker in Liberal,



and he'd say, "Oh, Mr. Igo is going to let us continue for a little while longer." He keeps saying, "Oh, Paul, it won't get any worse."



He carried us for probably three years beyond when he should have, keeping the hope that we were going to get rain and times were gonna get better, and if we just had a crop, we could pay off that mortgage.



Finally, the bank was desperate, and in the winter of '34-'35, they foreclosed.



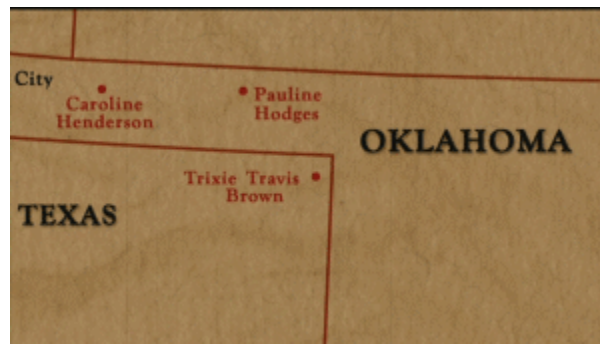
[Narrator] They moved into a vacant three-room house in town, and her father managed to find a government job building roads that helped keep the family fed.



[Pauline Hodges, Beaver County, OK] He made \$3.00 a day to start with, and when he became foreman, he made \$5.00.



But even as young as I was, I remember seeing the change in him from the self-confident person that he'd been to somebody who was really defeated. And frankly, he never recovered.



[Narrator] Over in Follett, Texas, Trixie Travis Brown's father and grandfather were trying to hold on to their hardware business.



Among those having trouble paying their bills were a pair of brothers, valued customers and friends.



[Trixie Travis Brown, Lipscomb County, TX] The two of them came in to the hardware store and talked to grandpa and said, "I don't know what we're going to do. We're wiped out, and we cannot pay this bill that we owe you right now." And grandpa could see how desperate they were, and he said, "Don't worry about it. We'll carry this. You'll be just fine. We'll get our money."



And it was no time before the tragedy happened. One of them, he had a family with children who were in school with me. He hanged himself at home. This sort of agony was going on.



[Narrator] Soon enough, Trixie's father and grandfather couldn't pay their debts, either.

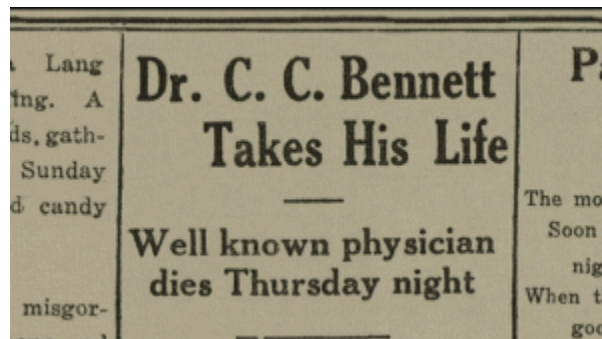
[Trixie Travis Brown, Lipscomb County, TX] The hardware store went bankrupt. We lost it, and the bank took the house.



And the bank foreclosed on Grandpa Travis, and he lost his cattle, he lost his section of land,



he lost his home, and he lost his health.



[DR. C.C. BENNETT TAKES HIS LIFE. WELL KNOWN PHYSICIAN DIES THURSDAY NIGHT.]

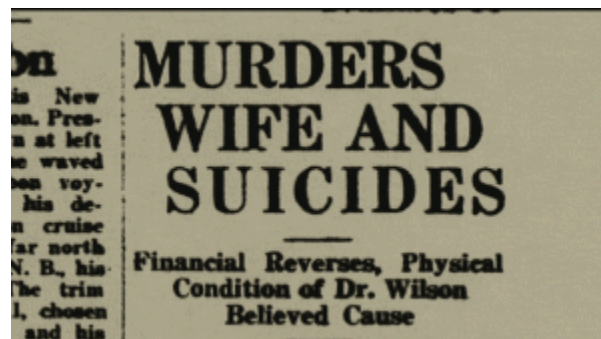
[Narrator] In Bazine, Kansas, a doctor took his own life. "He told us just a few days ago that money was an impossibility now," the local paper reported,

that money was an im
now, and the letters in
financial troubles are
of his act. His many f
miss him, and the tr

"and the letters indicate that financial troubles are the cause of his act."



In Dodge City, a 13-year-old boy, said to be worried that his parents couldn't afford his school books, committed suicide.



[MURDERS WIFE AND SUICIDES. FINANCIAL REVERSES, PHYSICAL CONDITION OF DR. WILSON BELIEVED CAUSE]

Devastated by his investment losses, a Cimarron County doctor killed his wife and then himself.



In Boise City, Millard Fowler was fresh out of high school and ready to build a future.



He had fallen in love with the daughter of a man who until recently had been one of the area's most prominent businessmen.



Fowler and his sweetheart decided to get married, but first he wanted to get her father's blessing.



Fowler found his future father-in-law sitting in his car in front of the family home.

[Millard Fowler, Cimarron County, OK] When I opened the door, I didn't know what he was up to. I knew he was in the car, but I didn't know why.



But when I opened the door, I saw that rifle pointing at his head.



I opened the door and got in the seat beside him and took that rifle and unloaded it without any conversation, as I remember.



But I finally got around and ask him if it'd be all right if we got married, and he finally said yes.



A couple of months later, he committed suicide.



[Narrator] In 1935, the number of "black blizzards" doubled around No Man's Land,



and many of them struck in the first four months.



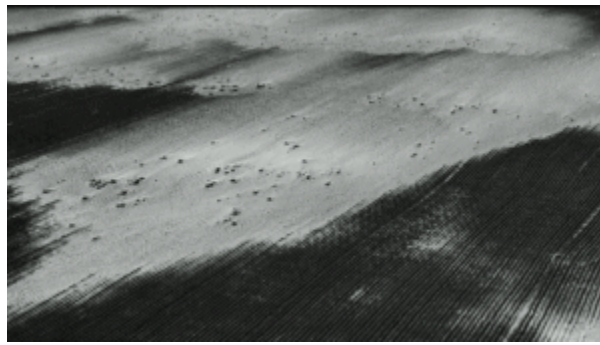
In that time, seven different storms reduced visibility to zero in Amarillo.



Dodge City, Kansas, reported on 13 dust-free days.



One single storm destroyed a quarter of the wheat crop in Oklahoma, half of the Kansas crop, and all of Nebraska's.



It blew out five million acres of fields, and in the space of a day, carried off twice as much dirt as had been excavated by the United States in the decade it took to dig the Panama Canal.



[Donald Worster, Historian] This was more frightening than winter snow blizzards because it was so unprecedented and it seemed so choking.



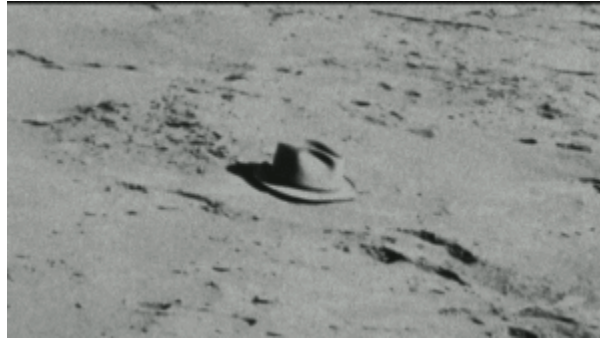
It was in that sense like a winter blizzard where they tied, you know, ropes from the house to the barn to make your way back and forth. But people weren't prepared for this kind of blizzard, black blizzard.



They didn't think about it in the same terms at first. They thought, "Well, this is not something that's gonna kill me." But it did. I mean, it choked people. People died in dust drifts.



[Narrator] During a "black blizzard" in February, a farmer's car went off the road two miles from his home, and he got out to walk the rest of the way.



He never made it.



In March, a 7-year-old boy near Hays, Kansas, got caught alone in a storm. Searchers found him the next morning, suffocated, smothered in dirt.



Farther west, a 9-year-old wandered off alone in the same storm. When he was discovered,



he was tangled in barbed wire but still breathing.



The train from Kansas City to Dalhart, Texas, was forced to stop when its passengers complained they were choking.



It paused long enough to let the dust settle,



while people scooped out the dirt on the floors and seats.



In Garden City, Kansas, the local hardware store sold out of goggles.



Then the train delivering a new supply was delayed -- by a dust storm.

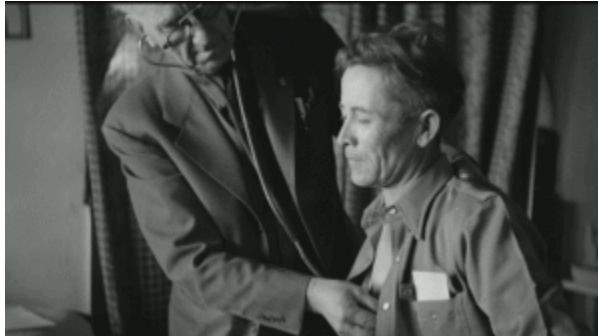


Writing from Great Bend, Kansas, a journalist said, "Lady Godiva could rise through the streets without even the horse seeing her."

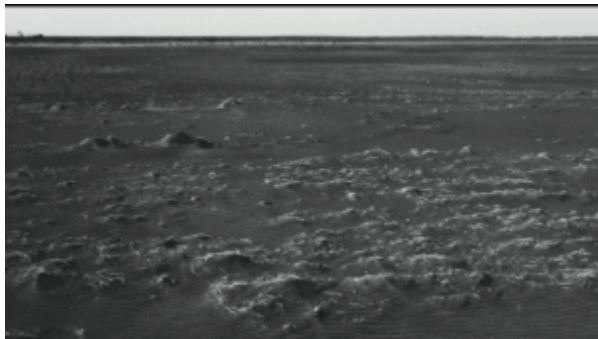




That Spring, a wave of illnesses swept across the Southern Plains, with symptoms of coughing spells and high temperatures, nausea, chest pains, and shortness of breath.



People called it "dust pneumonia."



The soil they had turned over during the "Great" Plow Up had already killed the sodbusters' crops and livestock.



Now it seemed to have zeroed in on something much more precious -- their children.



[Lorene White, Stanton County, KS] There were times when it was hard to breathe because of the dust.



We wore little things, little strips of sheet, sometimes over our nose and mouth so we wouldn't breathe so much of it.



I'm sure mom and dad were concerned about what it would do to us. You didn't know.



[Timothy Egan, Writer] Each particle of soil is about a tenth of the size of a period at the end of a sentence in a book -
- so barely visible to the human eye.



And that's just small enough of a particle to get into the lungs.



[Virginia Frantz, Beaver County, OK] And anytime you took a breath, you had dirt.



Now, if you were coughing, and I call it gunk. If you coughed a bunch of gunk up, well the gunk you'd coughed up was mud.



[Pauline Hodges, Beaver County, OK] There were days when my mother put a dust mask over my face ...



to keep me from choking and gasping.



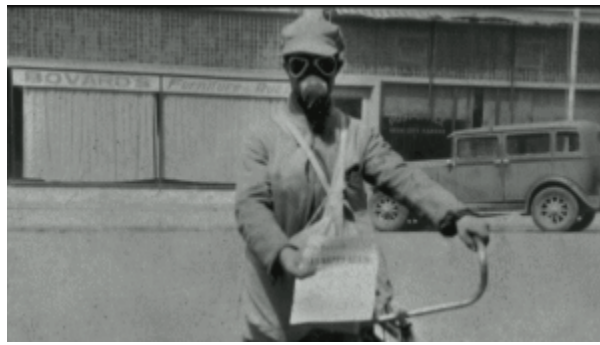
And it frightened me, at least at first.



As I remember, I got over that and I thought it was uncomfortable and I hated it, but it was better than coughing and choking all the time.



[Floyd Coen, Morton County, KS] You just couldn't get a good breath after they was on a while. It'd be soaked up, and the dirt on the outside of them.



What I heard more than anything else, "Floyd, put your mask back on." I hated to wear them. I could get a better breath without it than I could with it, I thought.



[Narrator] The Red Cross issued a call for 10,000 more masks. It wasn't nearly enough. More people got sick.



[Virginia Frantz, Beaver County, OK] You didn't go to the doctor because he was 60 miles away, and so the folks doctored us themselves.



And so I was doctored with kerosene and lard and turpentine that was rubbed on your chest.



And for cough syrup, you had sugar with a drop or two of kerosene in it. And that was your cough syrup.



[Lorene White, Stanton County, KS] My temperature got real high, and they knew that it was probably pneumonia.
There was no doctor near us.



But I kept getting worse, and it was hard for me to breathe with the dust.



[Narrator] In Southwestern Kansas, Lorene White's parents decided their only hope was to move their daughter to relatives farther East, away from the ever-present dust. Her mother would go with her, but her father needed to stay and try to manage the farm.



[Lorene White, Stanton County, KS] The day they came to get me, the dust was terrible. You could hardly see to drive.



And I remember dad wrapped me in a blanket and he carried me to the car.



He told me that when he carried me tot he car, he thought he would never see me alive again. But from then, I don't remember anything.



[Narrator] At her relatives' home, her temperature finally went down, but her coughing wouldn't stop. Doctors saved her with an operation that drained the fluid in her inflamed lungs.



[Lorene White, Stanton County, KS] And one day I was lying on the couch, and I looked into the kitchen, and the door was swinging open,



and you know there's a little crack that you can see through. And I was looking, and I saw my dad.



No words can tell you how tickled I was to see my dad.



[Narrator] Back in No Man's Land, the Red Cross declared a medical crisis.



Emergency hospital wards were opened wherever space could be found,



including the basements of two churches in Guymon, Oklahoma.



Over in Baca County, Colorado, the high school's senior play was cancelled because cots now covered the gym floor.



[Floyd Coen, Morton County, KS] Within a two-week period, there were three little girls died of dust pneumonia. It was close enough we could say they was in the neighborhood.



Two of them was over in Oklahoma, and one of them was in Kansas. But there was -- there was quite a few.



It seemed to get about that age, you know, just before they went to school or a little younger.



[Narrator] By 1935, Edgar and Rena Coen had eight children.



Six years earlier, Coen had started building a proper home for his family, but because of the Depression, construction had ended at the basement.



They covered it with a sheet iron roof and moved in.



It was larger than their old home -- space for two bedrooms and a large room that served as a kitchen, dining room, and living room -- but it was still underground.



In 1932, twins had arrived -- Ralph and Rena Marie, their only daughter, who quickly became the family favorite.



[Dale Coen, Morton County, KS] Rena Marie was our only sister.



And she was so precious to us because the folks had been trying for a girl all the time. It always come out boys.



[Laughs]



She was frail, but she was a pretty little girl.



[Floyd Coen, Morton County, KS] She was just the sweetest little thing that you'd ever seen.



She was smaller than Ralph,



and she was always just busy doing things, just all the time.



She was just a joy for all of us.



[Dale Coen, Morton County, KS] But at night, since Mama had a lot of work to do with seven boys and washing on the board and stuff, she needed her rest, so Rena Marie would sleep close to me.



And I'm glad I was able to do it. I spent an awful lot of time with her.



[Narrator] That Spring, four of the Coen children got sick -- Floyd, Richard, and the 2-1/2-year-old twins.



One night, Rena Marie's temperature skyrocketed.

[Dale Coen, Morton County, KS] We were sitting at the table eating, and she just immediately was bathed in water.



She just sweat -- her head just was water running off her face and head.



[Narrator] She became too weak to be moved from the bed in the parents' room. The doctor was sent for and ushered in to see her.



[Dale Coen, Morton County, KS] We was all awake, all sitting around the fire. I remember I was sitting in behind the stove,



between the stove and the wall -- plenty of room there -- and she was crying, calling for me to come to her.



She called for me -- not mama, not dad, but for Dale.



And I ... I haven't really ever got over it.



It was bad, bad, bad.

[Floyd Coen, Morton County, KS] Dr. Meredith was there, and he knew she was passing away.



Four of us had dust pneumonia at that time. I and Ralph and Richard was in bed also.



The hardest part was we was in bed out in the front room, and when I heard the doctor say, "Do you have a board?"
And my dad said, "Well, we have leaves for the table."



And he took the leaf to the table and took it in there and put her little body on that leaf and brought it out and showed us boys before he took her.



And the doctor put her in the rear seat of his car and took her into the mortuary.



But that was the hardest thing on me, and still is. But she was such a perfect little thing.



[Narrator] Two weeks later, the Coens' first grandchild, Verle's son Dwayne, died at age five weeks.



He and Rena Marie would be two of the 31 people who perished from dust pneumonia that Spring in Morton County, population 4,092.

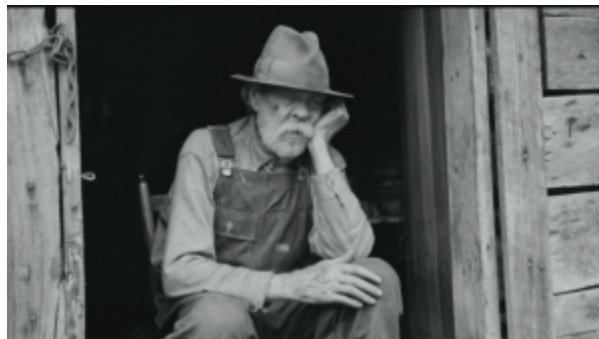


[DUST DISEASE FATAL TO TRIO. DOCTORS BATTLE TO SAVE LIVES OF SCORE MORE AT BEAVER.]

The town of Liberal lost nine to the illness.



In the seven Southwestern Kansas Counties, nearly 1,500 people became sick with it.



Some began to blame themselves for what was happening.



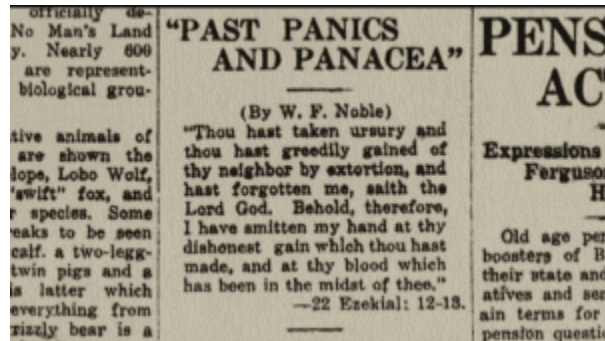
*[URGED TO IRRIGATE GARDENS
DUST FATAL TO PRODUCE TRUCKER
FLOOD EPIDEMIC SWEEPS SOUTH*

"DUSTER" BLANKETS CIMARRON. WORST STORM IN HISTORY OF COUNTY LASTS FOUR DAYS HERE.

STARTS FRIDAY. TRAFFIC IS PARALYZED HOURS; MANY LOST ON WAY HOME AT NIGHT.

"PAST PANICS AND PANACEA," by W.F. Noble) "Thou has taken ursury and thou has greedily grained of thy neighbor by extortion, and hast forgotten me, saith the Lord God. Behold, therefore, I have smitten my hand at thy dishonest gain which thou hast made, and at thy blood which has been in the midst of thee," -- 22 Ezekial: 12-13]

On its front page, the Boise City News published a quotation from the Bible, the Book of Ezekiel --



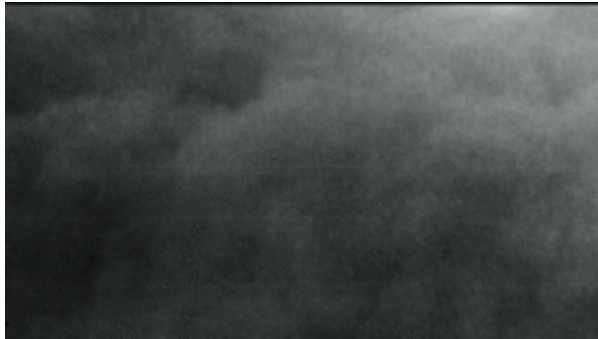
Behold, therefore, I have smitten my hand at thy dishonest gain which thou hast made, and at thy blood which has been in the midst of thee."



[Robert "Boots" McCoy, Texas County, OK] Some people left on account of that,



thinking God wanted them to leave.



After they had the dust storm where the people in Boise City could see the image of Christ into it, people thought that Christ was causing this.



There was just lots of talk that God was tormenting us because they plowed up that good sod.



[Timothy Egan, Writer] You never really escaped the dust.



It always found its way in, and that's, I think, what drove people crazy.



One woman told me it was like a snake. She could hear it slithering along the ceiling ...



and then along the side of the wall. So she said she just waited for that snake to strike from any place. She knew it was always there.



It was that kind of a psychological blow.



When you thought that it was at last behind you,



this monster came along and just clobbered you.



THE END OF THE WORLD



[Hazel Lucas Shaw] It seemed that the black dust was always with us.



If a quiet day happened to be our lot,



the time was spent scooping out ...



the sand of the storm of yesterday.



It seemed that we lived in a land of haze.



The atmosphere seemed to always be closing in around us,



creating an eerie and uneasy feeling.



[Charles Shaw, Son] Mom said she had every crack stuffed with rags, and she would wet them down. She'd hang sheets over everything where the dust might come in, but it didn't keep it out. It would come in somewhere.



[Narrator] In early April of 1935, the Shaws of Boise City, owners of the local mortuary, began planning a double funeral.



They had just lost the oldest and youngest members of their own family to the dust pneumonia.



Hazel's daughter, precocious year-old daughter Ruth Nell had died just a few hours before Hazel's grandmother,



the matriarch of the clan, had passed away.



"Grandma Lou" was to be buried in Texhoma, near her homestead, while Ruth Nell was to be taken to Enid, in the Central part of Oklahoma.



[Charles Shaw, Son] The main reason for that was the fact that Enid Cemetery was visible.



They would have buried Ruth Nell in the Boise City Cemetery except you couldn't even find the tombstones, the headstones in the cemetery, it was so drifted full of dirt.



[Narrator] On April 14th, 1935, the day of the double funeral arrived. It was Palm Sunday, a week before Easter.



[Charles Shaw, Son] And they were excited when they got up that day because it was a day when it was clear. A pretty day. And if you've got to do a job like that, you know, that's a blessing to your heart if you have a nice day for a funeral for a loved one.



[Narrator] Throughout the area around No Man's Land that morning, as many families prepared for church, residents were being greeted by a glorious break in the weather.



[Timothy Egan, Writer] And the Sunday itself was so gorgeous and windless, and people came out of their dugouts and cleaned their sheets and opened up their windows. And it was like a dawn.



It was like a new day, and you thought, "My God, this land can make us whole again. My God, the worst is over."



[Narrator] In Follett, Texas, Trixie Travis Brown's mother hung laundry out on the line, flung open the windows of her house to let in the fresh air, and announced that the family would enjoy the rest of the day out in the country.



[Trixie Travis Brown, Lipscomb County, TX] The sky was blue. There wasn't a breath of wind. We were just exhilarated, the whole family,



and we couldn't understand it, either, because it just was so abnormal. And mother and dad decided we would take a picnic, and we went down on Wolf Creek.



[Narrator] By mid-day, the temperature had risen into the high 70s.



But farther North, a cold front sweeping down from Canada had begun moving south and east across the Great Plains,



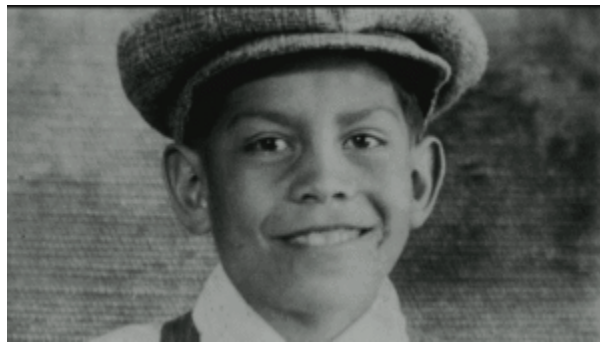
pushing a wind before it, picking up more and more loose soil with each mile it traveled.



Denver, on the Front's Western edge, was covered by a haze, and temperatures dropped 25 degrees in an hour's time.



A little later, it reached Union County, in the Northeastern corner of New Mexico, where Sam Arguello and his family lived.



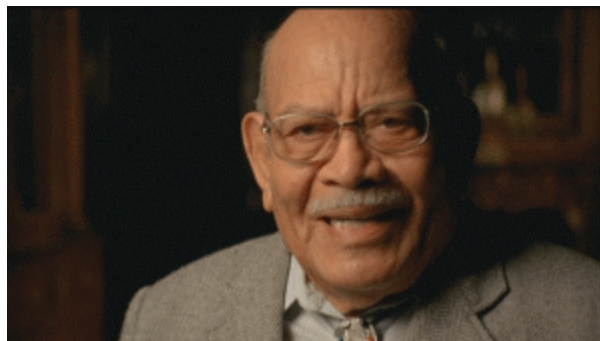
[Sam Arguello, Union County, NM] And I was playing out in the front yard. It was a beautiful day, beautiful sunny day.



And all of a sudden, I looked up, and there was a big, black cloud coming in from up on the Northeast. And we were right at the turn of a canyon, deep canyon,



I'd say probably 60 foot deep from the top down to the bottom -- or more than that. And when that thing came over, I run into the house and I told them, I says, "There's a big, black cloud coming out there." And everybody says, "There's no clouds out there."



It was a beautiful, sunny day.



By the time they got to the door, it was just black. Everything was black. You couldn't see anything.



[Narrator] The residents around No Man's Land already had four years of experience with dust storms of all kinds,



but to a person, this one seemed different -- bigger, blacker, more sinister.



[Pauline Robertson, Union County, NM] We saw this cloud coming in. It would just roll in -- black, black dirt.



And I'll never forget, my grandmother, she was pretty much Christian, and she said, "You kids run and get together. The end of the world is coming." And boy, we -- that was law and gospel because grandma said so. And we all got together, you know, and we were scared to death.



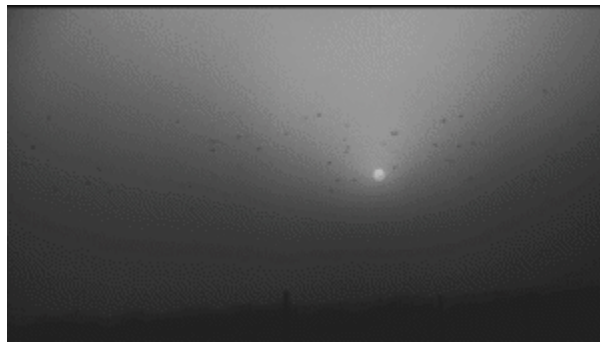
And that cloud just rolled like that, just kept coming, and it just got dark as could be.



[Wayne Lewis, Beaver County, OK] We sat there and watched it.



I remember the thing rolling, that it ... it was like a tornado that was on its side.



[Don Wells, Cimarron County, OK] All the birds, everything was flying south. We could see this thing rolling in.



And my brother told me he thought the end of the world was coming. Well, of course, that scared me half to death, and I wasn't so sure about it.



[Narrator] By now, it was even bigger than the monstrous "black blizzard" of 1934, and as it moved South and East across the open fields of Kansas, Oklahoma, and Texas, it got bigger still.



It was 200 miles wide, moving at 65 miles per hour,



and it began catching more and more people out in the open.



Trixie Travis Brown's family was at Wolf Creek, in the midst of their picnic, 20 miles from home.



[Trixie Travis Brown, Lipscomb County, TX] We noticed what looked like rain clouds forming in the North.



Rain clouds have a blue cast to them, a navy blue cast, and there was no blue in this one. It was black.



We all got into the car very quickly. Dad and mom wet anything that was in the car -- shirts, towels, handkerchiefs -- put everything around all of our faces.



And when it hit, the car just did a jiggle from side to side.



I don't remember any sound from any people. But it was black. It was totally black.



[Narrator] In Guymon, Oklahoma, the parents of Boots McCoy had dropped him and his sister, Ruby Pauline, off for Sunday school,



promising to pick them up when services were over. Then the storm hit.

[Robert "Boots" McCoy, Texas County, OK] They finally stopped the church because it was getting so bad. People was getting up and leaving anyway.



The pastor excused everybody with a prayer, and as we went there, they had a rail. I can remember holding that rail and holding Ruby's -- she was -- she was more scared than I was.



So I just took sister, and we started off.



[Narrator] Through the darkness, they struggled to make their way home through back alleys and neighbors' yards, relying on memory more than eyesight.



They finally made it home, but the house was empty.



Their parents were frantically searching for them outside the church and along the main streets.

[Robert "Boots" McCoy, Texas County, OK] Then the folks came, and it was so dark in the house that they couldn't see us. And mom was crying and hollering that we weren't home. And she was wanting to go back to see if they could find us.



And I hollered and said, "We're home," you know, and it relieved them quite a lot. Then we all just -- just sat, and mom just cried. And we had to hug mom a lot, you know, to get her to hush.



[Charles Shaw, Son] They had just completed the funeral. They had taken Ruth Nell back across the street from St. Paul's Methodist Church to the funeral home. And they had just sent the funeral procession with Grandma Lou off towards Texhoma.



They got about ... a little bit more than six miles out of Boise City when the funeral procession saw the black duster behind them.



[Narrator] Hazel Lucas Shaw and her husband had not accompanied the caravan of cars headed for Grandma Lou's graveside service. They had remained behind, not wanting to leave the body of Ruth Nell.



Their young niece, Carol, had been told to stay with them.



[Charles Shaw, Son] My cousin had been with dad and mom, and she'd gone outside the house, and she saw the black duster coming. She was just a little tyke in the grades, I don't know, probably six, seven years old.



So she headed for home, which was about five or six blocks away.



By the time the duster hit, dad discovered that she was gone.



He hoped that she had gotten home all right, but when one of those black dusters hit, the static electricity was so terrible that you couldn't make a telephone call. There wasn't such a thing as ringing up your brother and asking if their child had gotten home all right.



So dad got his flashlight. He got down on his stomach, and he elbowed his way underneath the dust. The visibility was slight. You could see a little bit underneath the dust. And so he elbowed his way those five blocks to his brother's house. Fortunately, Carol was there, and she had arrived home safely.



But dad didn't want to worry mom, so he crawled on his stomach the five blocks back to the funeral home.



In the meantime, the funeral procession that had started to Texhoma turned around and returned.



In order to find a road back, there were four men in white shirts that held hands and stretched themselves across the width of the road, and the lead car got right behind them.



It took them a number of hours to get back that way the six or so miles they had to walk back. That's as fast as the procession came back.



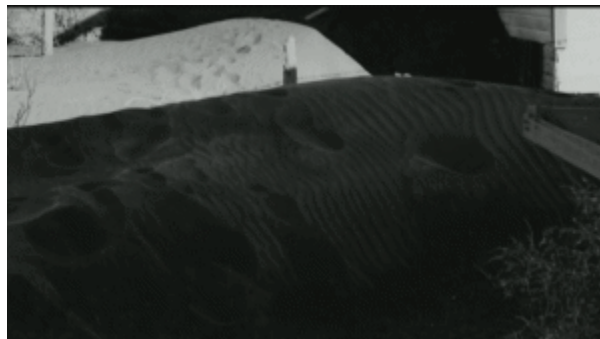
I think they got back about 10:00 that night.



[Narrator] April 14, 1935, came to be called "Black Sunday," and no one who lived through it would ever forget the storm's size or ferocity -- or what they did to survive it.



After huddling in their parked car while the blackness engulfed them, Trixie Brown's family inched their way home.



[Trixie Travis Brown, Lipscomb County, TX] We couldn't get into the house. The dust and dirt was so high that we couldn't open the screen door.



So dad had to go to the garage to get a shovel, and he had to shovel the dirt away from the screen door before we could get in.



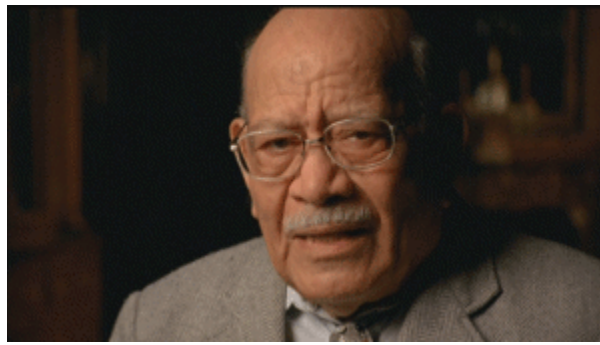
We had left the house open because mother said, "We'll air out things." [Laughs]



So the house was totally loaded with dirt.



[Sam Arguello, Union County, NM] By sundown, because this happened about 1:30 when that thing came off the top of that canyon, and by sundown, it had gone past and it was just as red as it could be to the West, you know, where the sun was hitting it. But it was just red all over. My grandmother scared the tar out of me.



I went out there, and I said, "What is that, all that red out there, coming on the West side?" She said, "It's fire, fire. The world's coming to an end."



And I went and crawled under the bed.



[Robert "Boots" McCoy, Texas County, OK] They were tough times -- really, really tough times.



Deathly scary, you know. An eerie, eerie time for older people and us kids, you know. We didn't know what the devil was going to happen next.



[Narrator] Within a month, both Boots McCoy and his sister Ruby Pauline would come down with dust pneumonia.



He would suffer lung ailments the rest of his life.



She died before summer arrived.

[Robert "Boots" McCoy, Texas County, OK] She was my best buddy. Yeah. We went through them hard times together, you know?



[Narrator] "At least," her mother said, "she won't have to live through another dust storm."

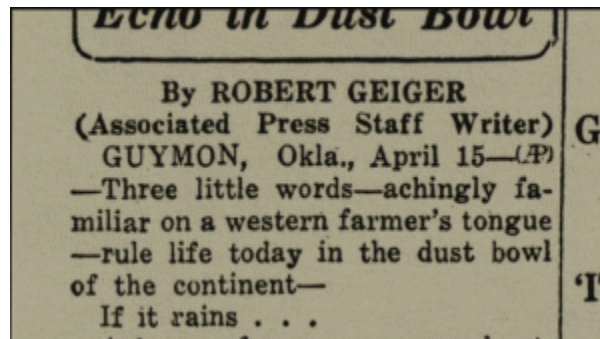


By chance, a reporter from the Associated Press named Robert Geiger had been in No Man's Land on Black Sunday

...



and managed to find shelter in Boise City during the worst of the storm.



[THREE LITTLE WORDS. IF IT RAINS. ECHO IN DUST BOWL. BY ROBERT GEIGER. (ASSOCIATED PRESS STAFF WRITER) GUYMON, OKLA., APRIL 15 -- (AP) -- Three little words -- achingly familiar on a western farmer's tongue -- rule life today in the dust bowl of the continent -- If it rains ... Ask any farmer, any merchant, any banker, what the outlook is ...]

The story Geiger filed the next day began, "Achingly familiar on a western farmer's tongue -- rule life today in the dust bowl of the continent -- If it rains ..."

—rule the today
of the continent
If it rains . .
Ask any farm

But instead of focusing on those three little words, "If it rains," more people fastened onto the three words he had used to describe the place that rain had forsaken:

ords—achingly ia-
n farmer's tongue
in the dust bowl

"The Dust Bowl." It was the first time anyone had used that term.



[Pamela Riney-Kehrberg, Historian] Black Sunday is the dirt storm that everybody remembered.



It was so much darker, so much more intense,



so much scarier than most of the others had been.



And I don't think that it's really any coincidence that the outward migration of those who were going to go came after Black Sunday.



[Narrator] In the months to come, dust storms would continue to wreak havoc across the Southern Plains,



while the President and his administration would struggle to come up with new strategies to meet the crisis.



In the heart of the Dust Bowl, many families would desperately try to hang on,



but some would reluctantly decide to leave their homes behind and try to begin a new life somewhere else.



Among them would be a 22-year-old itinerant songwriter who had found refuge from the fury of Black Sunday in a small house with his family and friends in Pampa, Texas, just south of No Man's Land.



His name was Woody Guthrie.



[Woody Guthrie] We watched the dust storm come up, like the Red Sea closing in on the Israel children,



and I'm telling you, it got so black when that thing hit, we all run into the house.



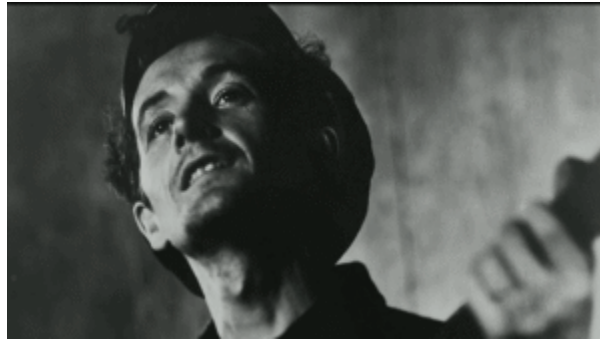
And a lot of the people in the crowd that was religious-minded and they was up pretty well on their scriptures, and they said, "Well, boys, girls, friends, and relatives, this is the end.



This is the end of the world."



And everybody just said, "Well, so long. It's been good to know you."



I made up a little song.

*[Music] So long, it's been good to know ya;
So long, been good to know ya;
So long, it's been good to know ya;
This dusty old dust is a-blowin' me home'
I've got to be rollin' along'
I'll sing this song, but I'll sing it again;
Of the place that I lived on the West Texas Plains;
In the city of Pampa in the County of Gray;
Here's what all of the people there say;
Well, it's so long, been good to know ya;
So long, it's been good to know ya;
So long, it's been good to know ya;
This dusty old dust is a-drivin' me home;
And I've got to be driftin' along;
The church houses were jammed and packed;
People was settin';
From front to the back;
It was so dusty;
The preacher couldn't read his text;
So he folded his specks, and he took up collection;
Said, so long, been good to know ya;
So long, it's been good to know ya;
So long, it's been good to know ya;
This dusty old dust is a-drivin' me home;
And I've got to be driftin' along;
The telephone rang, an' it jumped off the wall;
That was the preacher, payin' his call
He said;
Look at the shape that the world is in*

*I've got to cut price on salvation and sin;
Well, it's so long, it's been good to know ya;
So long, it's been good to know ya;
So long, it's been good to know ya;
This dusty old dust is a-rollin' me home
Got to be drifin' along*

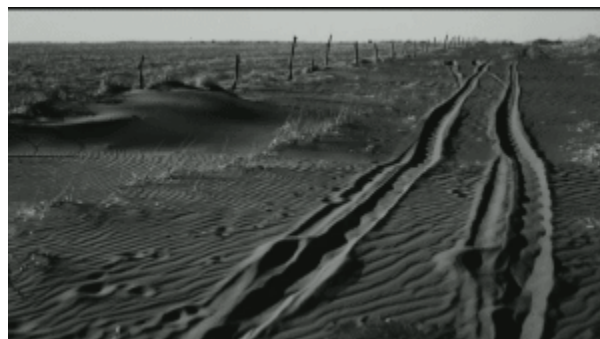
TO BE CONTINUED



Directed by Ken Burns

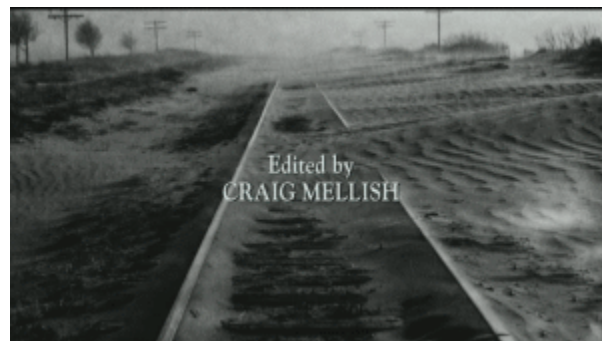


Written by Dayton Duncan

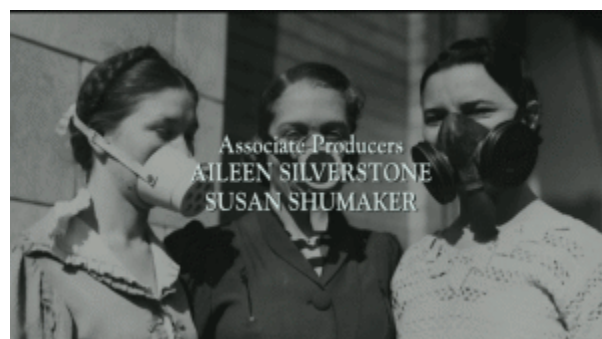




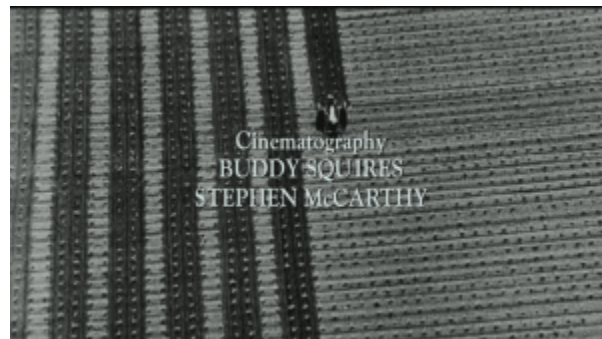
Produced by Dayton Duncan, Ken Burns, Julie Dunfey



Edited by Craig Mellish



Associate Producers: Aileen Silverstone, Susan Shumaker



Cinematography: Buddy Squires, Stephen McCarthy



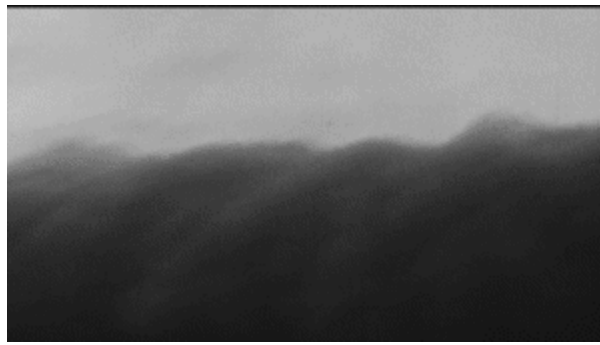
Narrated by Peter Coyote



Voice of Caroline Henderson: Carolyn McCormick
Voice of Hazel Lucas Shaw: Patricia Clarkson



DISC 2



[WIND BLOWING]

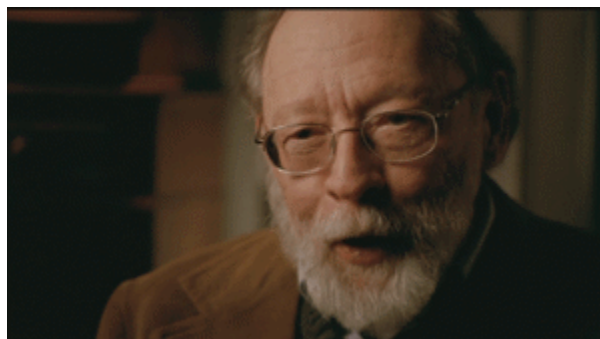




*[Woody Guthrie] [Music]
On the 14th day of April
of 1935
There struck the worst of dust storms
that ever filled the sky
You could see that dust storm coming
The cloud looked death-like black
And through our mighty nation
It left a dreadful track*



[Donald Worster, Historian] We have many words for what's under our feet.



The good earth -- we like to talk about the good earth and pick it up and smell it and taste it. Oh, this is the soil of our productivity, our prosperity.



But when it's loose and blowing and it's getting into your attic, and it's covering your laundry on the clothes line, it's dirt, or when you're breathing it, it's dust.



I think we all realize that where dirt belongs is under our feet, not up in the air.



[Wayne Lewis, Beaver County, OK] We made so much money at raising wheat in the late twenties ...



that we broke everything out to raise more wheat.



And then the climate changed and the Depression came along, and the wheat wasn't worth much. But we still had the land broken out.



We were just too selfish,



and we were trying to make money and get rich quick off of the wheat, and it didn't work out.



[Pamela Riney-Kehrberg, Historian] This is one of the worst ...



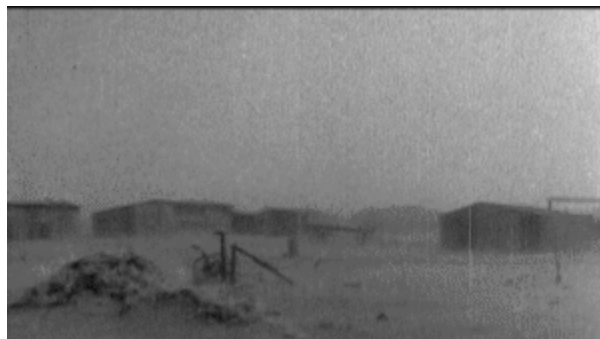
sustained environment disasters in American history.



It's not something that happens in just one year. It's not something that just lasts for three or four years. It's a decade.



Because of the combination of extreme drought and extreme high temperatures,



this is the worst ten-year period in recorded history on the plains.



*[Woody Guthrie] [Music]
We saw outside our window
Where wheat fields they had grown
Was now a rippling ocean
Of dust the wind had blown*



[Narrator] In the summer of 1935, at her homestead in the Oklahoma Panhandle, Caroline Henderson, a farm wife and writer, sat down and composed a letter to the Secretary of Agriculture, Henry Wallace,



to let him know what she, her husband, and so many of her neighbors were going through.



[Caroline Henderson] We are now facing a fourth year of failure. Since 1931, the record has been one of practically unbroken drought.



There can be no wheat for us in 1935.



In one respect, we realize that some farmers have themselves contributed to this reaping of the whirlwind.



A revival preacher -- a true Job's comforter -- proclaimed that the drought is a direct punishment for our sins.



The future promises only hopeless and permanent desert conditions.



Special prayers for rain were offered at our county seat last Sunday morning.



The afternoon brought one of the most sudden, dense, and suffocating dust storms of the season.

Despite the massive response by homesteaders, or settlers on this free land, private speculators and railroad and state government agents sometimes used the law for their own gain. Cattlemen fenced open lands, while miners and woodcutters claimed national resources. Only about ten percent of the land was actually settled by the families for whom it was intended....

The federal government supported farmers by financing agricultural education. The Morrill Act of 1862 and 1890 gave federal land to the states to help finance agricultural colleges, and the Hatch Act of 1887 established agricultural experiment stations to inform farmers of new developments....

Railroad companies and investors created bonanza farms, enormous single-crop spreads of 15,000–50,000 acres. The Cass-Cheney-Dalrymple farm near Cassleton, North Dakota, for example, covered 24 square miles.... Between 1885 and 1890, much of the plains experienced drought, and the large single-crop operations couldn't compete with smaller farms, which could be more flexible in the crops they grew. The bonanza farms slowly folded into bankruptcy.

-- Section 2: Settling on the Great Plains, by olympia.osd.wednet.edu

[Donald Worster, Historian] In the 1920s, there was a concerted movement at the highest levels of American society, to turn agriculture into an industrial model, to make every farm into a factory. Well, you could never have plowed up 30-some million acres of land with horse and a wooden plow, or even a steel plow. Tractors were going all night long with headlights burning to plow up this land, to get it into production.

-- The Dust Bowl, directed by Ken Burns



[Narrator] By 1935, Caroline Henderson and her neighbors needed all the help they could find.



Like everyone else in the United States, they were suffering as the greatest economic cataclysm in the Nation's history -- the Great Depression -- lingered on.



But they were also caught in the midst of the Nation's greatest ecological catastrophe --



where "black blizzards" blotted out the sun, created drifts against their homes, ruined their crops, choked their livestock,



and took the lives of their children.



And just when it seemed things could not get any worse, on Sunday, April 14, 1935, the biggest storm of all had struck with a surprising vengeance.





[Pamela Riney-Kehrberg, Historian] I think it really scared a lot of people.



It's also scary enough that it gets the attention of the rest of the country.



If people weren't paying attention prior to Black Sunday,



this is an event that is so monumental that people can't ignore it.



[Narrator] In the Dust Bowl, the survivors of Black Sunday ...



worried that they had become a forgotten people ...



in a forgotten land.



They weren't forgotten.



While President Franklin Roosevelt struggled ...



to get the whole country back on its feet,



he was also profoundly concerned ...



about the fate of the Southern Plains.



But over the next few years, the drought would only deepen,



and the "black blizzards" that added immeasurably to people's miseries would only intensify.



Many would fight desperately to hold on to their land and their lives.



Others would be forced to join an exodus ...



toward a promised land ...



that offered both water and work.



In the crucible of dust and drought and Depression,



some families would be torn apart,



others uprooted from their homes,



and some brought closer together than ever before.



[Dorothy Williamson, Prowers County, CO] Well, I think to be a dry land farmer,



you have to be a certain kind of a person,



and deep down inside of themselves, they must have had the feeling, "If we just stick it out and stay here, times are bound to get better," which did give them a little hope, but in the middle of a dust storm, it's very difficult to hope,



and it takes a lot of willpower and everything else to bring yourself back out time after time after time. So you had to admire those people who did stick it out.



They had come there, maybe they'd been born there, and they intended to stay.



This was their home.



EPISODE TWO

REAPING THE WHIRLWIND



[Dorothy Kleffman, Texas County, OK] We lived in a brown world.



The land was barren and brown. It seemed like most of the houses were weather-beaten.



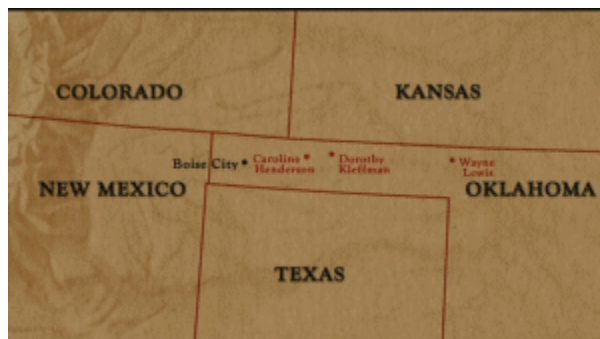
In my life, it was a brown world. The ground was brown. Everything was brown. And I didn't know any difference. It was all I knew.



[Narrator] During the 1930s, 46 of the 48 states had experienced some form of drought, and farmers everywhere were hurting,



but none more than those in the area surrounding the town of Boise City, Oklahoma,



which the Federal Government had declared as the geographic center of the Dust Bowl, where conditions were the worst -- a place once known as No Man's Land.



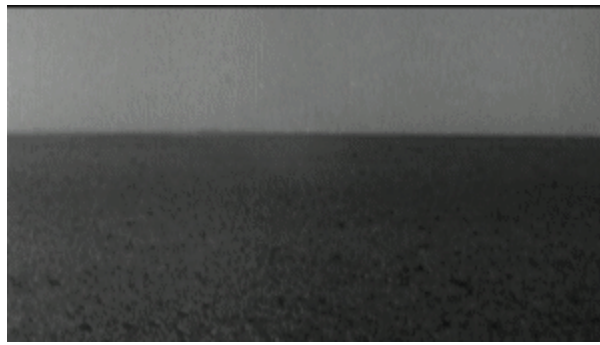
In 1935, Boise City received fewer than ten inches of precipitation,



the official definition of a desert.



Farmers in nearby Baca County, Colorado,



who had once harvested wheat on 237,000 acres, now had successful crops on only 516.



In the Texas and Oklahoma Panhandles, the absentee "Suitcase Farmers" who had hoped to strike it rich in wheat ...



simply abandoned nearly four million acres of exposed fields, leaving them to blow with each new wind.



In Southwestern Kansas, vegetable gardens were producing 90% less than normal,



and more than a quarter of the children were reported to be at least 10% underweight.



People here "have given up trying to be civilized," a local minister said. "We are merely trying to exist."



[Virginia Frantz, Beaver County, OK] We had a little heifer that had a new calf.



And I went down to see the calf, and it was laying there kicking, and my dad was walking away with a hammer. He had killed it.



And I ran to my mother just bawling about it, because my dad was so tender-hearted, and she said, "He had to." She said, "We've just got the one milk cow. There's not enough milk for you kids and the calf, too." And she said, "You kids have got to have milk." So he killed the calf.



[Imogene Glover, Texas County, OK] Well, it was pretty bad.



My mother saved sugar sacks and flour sacks for material to make my panties, and I had a dress made out of flour sacks.



It wasn't good percale. It was just cotton that had been printed, like little flowers on the sugar sacks.



And that's why they were used for my panties.



And the flour sacks might be plaid or have big flowers, and that's why they made dresses out of them.



[Virginia Frantz, Beaver County, OK] Mother could get us a dress out of three feed sacks.



They made them real pretty -- pretty prints because they found out the farmers' wives were using them for that.



We found out some of the neighbors wore the same dresses we did,



but we always laughed at each other and went on because we had a new dress. And it was fine.



[Clarence Beck, Cimarron County, OK] My family, in terms of eating, could have eggs, our own eggs,



and then start borrowing from the grocer.



And when he would quit lending you money, you were down to eating lard and bread or an egg.



We ate so poorly that the hobos wouldn't come to our house. I was down to eating lard and bread.



[Calvin Crabill, Prowers County, CO] We lived in four different places when I was in elementary school to survive.



Every year my first, second, and third grade, we moved to a different farm every time, and every time, we lost it.



One summer, we needed a loaf of bread, and there was this little country store a half-mile away from where we lived. And we looked for a dime in the house. We couldn't find a dime. We couldn't find a dime in the house to buy a loaf of bread.



[Imogene Glover, Texas County, OK] I think it was probably harder on my mother than it was my dad ...



because she worried about what she was gonna be able to fix for us to eat.



So it was rare for anyone to have money, but my granddad was pretty resourceful, and he had given me three dimes -- and I was rich!



And I hid them, and my mother wanted to know where. And I said, "I buried them in the sand out around the South window." And she said, "Well, you come show me."



And she looked until she found those three dimes.



One time my brother swallowed two dimes,



and my mother made him use a can or a slop jar to go to the bathroom ...



until she dug those dimes out.



[Narrator] South of Boise City, Don Wells and his family were struggling to survive on their 160-acre farm.



[Don Wells, Cimarron County, OK] There was ten of us kids, and we lived in a two-room house.



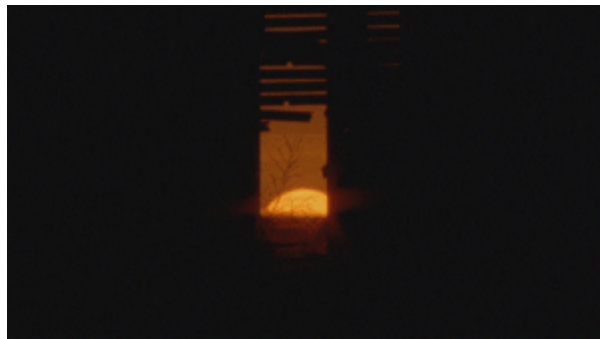
At night, we had wall-to-wall mattresses. At daytime, we scooted them under the bed.



We had two rooms -- the kitchen, and then there was a bed in there, and then the rest of us all slept in the other room.



[Narrator] One Sunday, Wells learned that his father had died in a distant hospital, from what had started as strep throat and ended with him choking to death.



Don's mother, age 35, was now a widow with a grade-school education and ten mouths to feed.



[Don Wells, Cimarron County, OK] We couldn't stay out on the farm because the bank came and got what little machinery we had,



and we didn't have any cows left. We didn't have any pigs to eat.



So my uncles loaded us up in a truck, put all of our clothes and furniture in the back of it,



and they took us to Boise City.

[Narrator] The family lived in one house after another, forced to move whenever they couldn't pay the rent, until they finally found something they could afford --



a chicken coop.



Down in Amarillo, the Dust Bowl's biggest city, Walter Lucius Durrett had lost his insurance business and then his health. The strain of it all proved too much for his wife.



[Pauline Durrett Robertson, Potter County, TX] And my mother began to despair that things were never going to get better; in fact, they were getting worse.



It affected her ... it affected her outlook on life, and she began to ... well, she had a nervous breakdown, actually.



So we three girls were pretty motherless during the Depression.



At one time, when we didn't have anything to eat, we had to apply for relief, and that was hard for us to do.



The brown truck with the marking on the side came to the front of our house ...





and brought some food.



It was really hard for us to see that.



I guess we were sorry for the neighbors to see that we needed that brown truck.



[Pauline Hodges, Beaver County, OK] We could go to the courthouse in Beaver and get commodities if we wanted to.



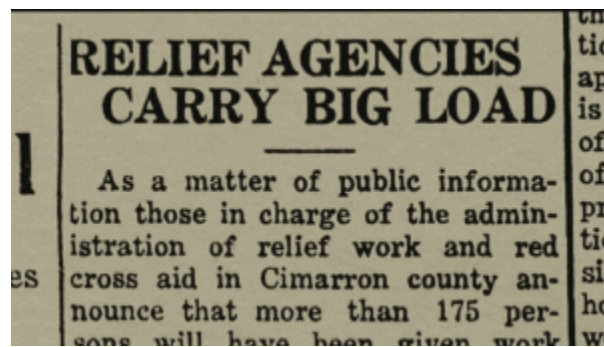
The problem was that people like my father and some of our neighbors were too proud to go do that.



And I remember my mother raising such a ruckus because she wasn't too proud,

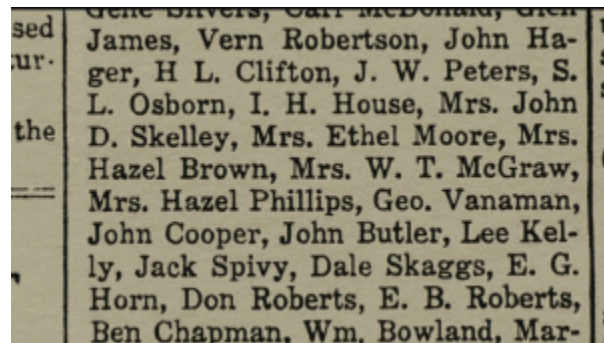


and we did get some grapefruit and some other kinds of commodities that helped out with food.



[RELIEF AGENCIES CARRY BIG LOAD: AS A MATTER OF PUBLIC INFORMATION THOSE IN CHARGE OF THE ADMINISTRATION OF RELIEF WORK AND RED CROSS AID IN CIMARRON COUNTY ANNOUNCE THAT MORE THAN 175 PERSONS WILL HAVE BEEN GIVEN WORK ...]

[Narrator] In many towns, the names of families on relief were published each month in the local newspaper.



In one county, 80% of the population now relied on some form of government assistance.



[Dorothy Williamson, Prowers County, CO] These people were ... were so needy, and you felt so sorry for them. You might feel like giving them a dollar out of your own pocket, but, you know, you just didn't do things like that.



It's not pro-fessional.



[Narrator] Fresh out of college, at age 21, Dorothy Williamson was hired as a social worker, trained by the federal government, and dispatched to Prowers County in Southeastern Colorado.



She was assigned a 50-square-mile territory, and went from one dust-ravaged farm to another.



[Dorothy Williamson, Prowers County, CO] So we sat across the table and talked to each other. It was almost as if they were in the middle of something that they could see no way out. And that's why they looked so hopeless, and also they looked stunned, as if, "Can this really be happening?"



It kind of left me with a bad feeling, too, to have to go out there and see these people because you felt you were helping them what you could, but you really couldn't help them. But what they really needed was an inner thing that nobody could give them.



They needed a ... a trust again in something which they had lost.



[Narrator] What help there was came from Washington now,



and the flood of New Deal programs ...



President Roosevelt had create.



The Civilian Conservation Corps put young men to work in National parks, State parks, and National forests,



and paid them \$30 a month,





25 of which they were required to send home to their families.



Thousands of CCC workers were also dispatched ...



to plant rows of trees up and down the Great Plains,



as potential windbreaks against the fierce dust storms.



By the end of the decade, 18, 600 miles of shelterbelts,



with 217 million trees, had been planted.

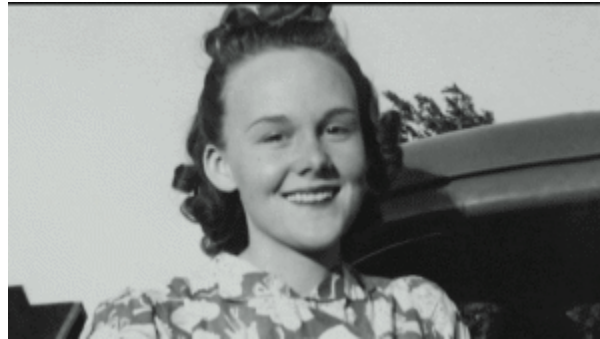


[THE NATIONAL YOUTH ADMINISTRATION: GIRLS -- ARE YOU INTERESTED IN A JOB? FIND OUT WHAT AN OCCUPATION HAS TO OFFER YOU IN PAY-EMPLOYMENT-SECURITY AND PROMOTION. FREE CLASSES IN OCCUPATIONS]

The National Youth Administration, open to both boys and girls,



let students remain at home and earn a little money through work study projects.



In Amarillo, Pauline Durrett Robertson was paid 25 cents an hour to grade papers.



In Boise City, Don Wells and his older brother stayed after school to help the janitor clean classrooms.



As a bonus, he let them take showers in the locker room -- a luxury for boys who lived in a chicken coop.



In Southwestern Kansas, Lorene White's mother received a pressure cooker from the Federal Emergency Relief Administration,



and her father reluctantly enrolled with the Works Progress Administration, the New Deal's biggest and most controversial program.



[Lorene White, Stanton County, KS] My dad was a proud man. He didn't want anything to do with government programs. He thought he could handle it on his own. He found out later that he needed to take part in them.



Dad worked on WPA, I think, about a year, and they were building a bridge not too far from home.



It's a beautiful bridge. It's still there.



[Narrator] During the depths of the Depression, the WPA became the largest employer in the nation,



creating eight million jobs in virtually every corner of the country.



"The prairie, once the home of the deer, buffalo, and antelope," one newspaper wrote,



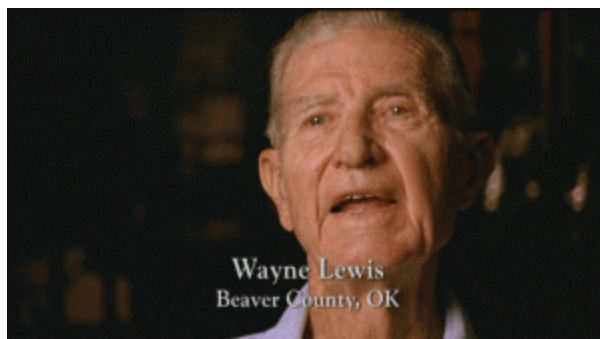
"is now the home of the Dust Bowl and the WPA."



Many people considered it make-work and a waste of money.



[Wayne Lewis, Beaver County, OK] It made a lot of difference on which side you were on. If you didn't have a job, they were boondoggles -- do-nothings, leaned on their shovels and got money for it, and so they resented it very much.



But if you were the ones that had the shovel, it was the difference between starving and having food to eat. If we got paid enough, it saved -- it kept us alive.



[Narrator] The WPA built a dam ...



on Rita Blanca Creek near Dalhart, Texas,



to create a reservoir and recreation area.



In Union County, New Mexico, using only local materials, 6,000 of the 10,000 area residents ...



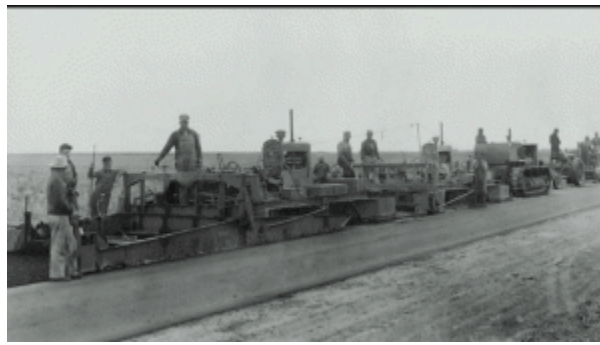
found temporary employment working on a new high school that would still be in use three-fourths of a century later.



[Pauline Hodges, Beaver County, OK] With my family, we would have starved to death because we had no other way to make any money.



The New Deal for us, the WPA in particular, was just a lifesaver for us. Most of our neighbors felt that way.



[Narrator] Pauline Hodges' father helped build Highway 64 through the Oklahoma Panhandle. It passed within a few miles of Caroline Henderson's homestead.



[Caroline Henderson] If mere dollars were to be considered, the actually destitute in our section could undoubtedly have been fed and clothed more cheaply than the works projects that have been carried out.



But in our national economy, manhood must be considered as well as money.



People employed to do some useful work may retain their self-respect to a degree impossible under cash relief.



If we must worry so over the ruinous effects of "made work" on people of this type,



why haven't we been worrying for generations over the character of the idlers to whom some accident of birth or inheritance has given wealth unmeasured, unearned, and unappreciated?



MEMORY AND HOPE



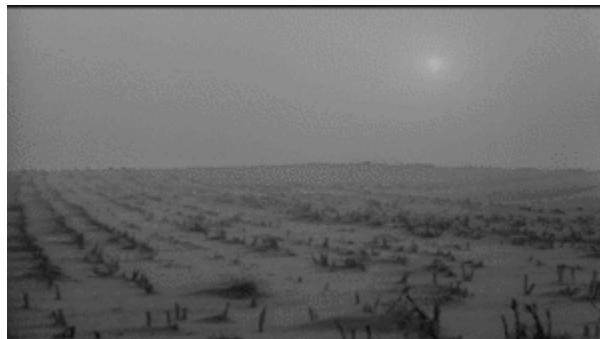
[Ernie Pyle] If you would like to have your heart broken, just come out here. This is the Dust Storm country. It is the saddest land I have ever seen.



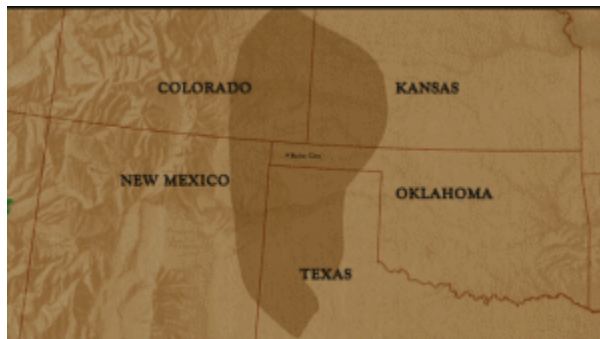
They say that in twenty years, our farmland is going to be pretty well shot unless something is done,



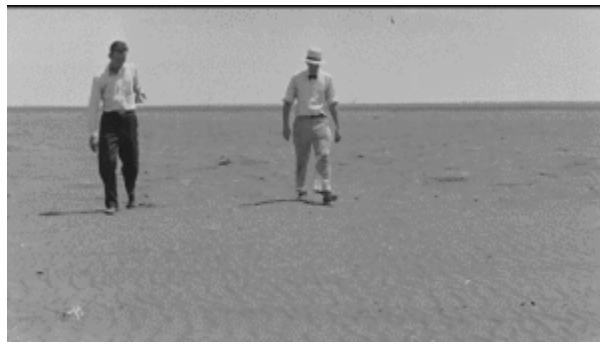
and that in 75 years, even a self-respecting cactus wouldn't be seen on most of it.



[Narrator] In 1935, an estimated 850 million tons of topsoil were being swept off the naked fields of the Great Plains,



where four million acres in 100 counties were blowing.



Predictions called for a million more acres to do the same in 1936.



"Unless something is done," one government report concluded,



"the Western Plains will be as arid as the Arabian Desert."



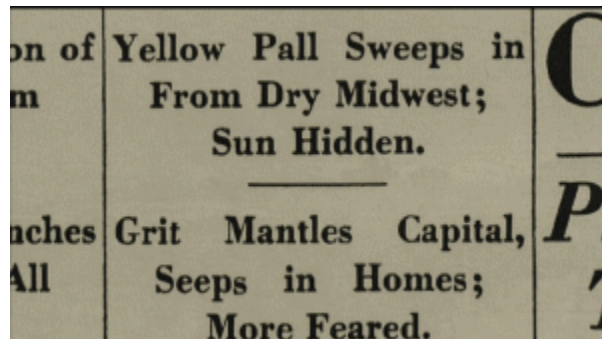
[Donald Worster, Historian] There were many people in that era who thought ...



this is not going to stop with Western Kansas, the Texas Panhandle. It's going to start creeping Eastward.



How do you stop this? What's going to be the barrier you put up to keep it from undermining agriculture in Illinois?



[DUST STORM BLOTS LIGHT FROM CITY. YELLOW PALL SWEEPS IN FROM DRY MIDWEST; SUN HIDDEN. GRIT MANTLES CAPITAL, SEEPS IN HOMES; MORE FEARED. A THICK CLOUD OF DUST, SWIRLING AT ...]

[Timothy Egan, Writer] Now it had a huge effect on American policy, too, because four or five days later, the remnants of Black Sunday blew into Washington, D.C.



You could go like this on your desk, as Franklin Roosevelt did,



and get a little bit of Oklahoma in the Oval Office.



[Narrator] Within President Roosevelt's inner circle of advisers,



there was no consensus on what to do about the crisis.



Henry Wallace, the Secretary of Agriculture, thought new policies could keep farmers on their land,



but Interior Secretary Harold Ickes questioned whether any attempt should be made to save the Dust Bowl.



[Timothy Egan, Writer] It was a character struggle within the Administration the same way it was a character struggle out on the prairie itself. And Ickes says in his diary, "Let's just get out. Let's pull out."



Mr. President, it's not worth the effort. Why should we try to save the people or the land? I mean, let it re-wild.



Let's not fool these people into thinking they can stay there. Perhaps settlement was a mistake.

Historical Background

Settlement in the Great Plains did not fully develop until technological advances allowed this area, once considered a treeless wasteland, to be a viable destination for settlers. These advances included the steel plow, sod houses, railroads, and dry farming techniques. With these advances the potential for settlement of the "wasteland" was forever altered. This great settlement, between 1870 and 1920, has had an everlasting effect on the nation.

The growth of the cattle industry in the Southeast was strongly aided by technological advances, such as the railroad and barbed wire. This growth was felt over the entire nation from the slaughterhouse in Chicago to the steakhouses of New York City. It also led to the rise of the great American folk hero—the cowboy.

It is also important to understand the many reasons why many Americans, native-born or immigrant, moved westward. These reasons, from land ownership to adventure, provide a better understanding of the people who would endure the harsh conditions of the Great Plains at the turn of the 20th century. This will serve as a preview of the next unit that will deal with immigration to America that is taking place at this time.

In addition, it is essential to recognize that this land newly settled by Americans was not empty when the settlers arrived. The Native Americans who occupied this land faced many changes and challenges during this era.

The settlement of the Great Plains affected the United States in various ways. The growth of the cattle industry and the Great Plains farming helped fulfill the essential requirement of feeding the population. It also helped us conquer the land from coast to coast fulfilling what many people considered our "Manifest Destiny."

Major Understanding

Due to new labor saving technologies the center of America, once considered a vast "wasteland," was opened up to new settlement. This settlement led to the growth of new businesses and industries that affected the entire nation.

-- American Settlement of the Great Plains, by Dominick Cavalier

Settling the Great Plains

In the early 1800s, few people lived on the Great Plains. The Great Plains are in the middle of the United States. People did not think the land was good for farming. It was very dry and flat. In 1862, the Homestead Act was passed. The government helped people to settle on the Great Plains. The government sold adults

160 acres of land for a small amount of money. If they could farm the land for five years, they could own it. A settler's home and land was called a homestead. Many homesteaders came from the eastern United States, where farmland cost a lot. In the Great Plains, land was cheaper. Settlers also came from Europe, where there was not much land to buy. There was a lot of land to buy in the Great Plains. African Americans also wanted to start farms. Many African Americans were poor. They faced prejudice and violence after the Civil War. They started their own towns in Kansas. African American settlers were called Exodusters, after a book in the Bible that tells the story of how people escaped slavery.

Settlers Face Hardships

Settlers had to learn how to farm on the Great Plains. The soil was held together by grass roots. It was called sod. Settlers were called sodbusters because they had to break through the sod to plant crops. There was not a lot of wood, so settlers used sod to build homes. Winters were long and cold. Summers were hot and dry. There were many droughts. There were grass fires because it was so dry. Farmers had to grow crops that did not need much water. They carried water from streams. Some farmers used windmills to pump water from underground. In the 1870s, millions of grasshoppers ate the crops. There weren't many people in the area to do farm work, so farmers used new and better farm machines. New machines made it faster and easier to grow more crops.

-- Summary: Moving to the Plains, Practice Book, Chapter 5, Lesson 2, copyright Houghton Mifflin Company

One American's Story



When Esther Clark Hill was a girl on the Kansas prairie in the 1800s, her father often left the family to go on hunting or trading expeditions. His trips left Esther's mother, Allena Clark, alone on the farm.

Esther remembered her mother holding on to the reins of a runaway mule team, "her black hair tumbling out of its pins and over her shoulders, her face set and white, while one small girl clung with chattering teeth to the sides of the rocking wagon." The men in the settlement spoke admiringly about "Lenny's nerve," and Esther thought that daily life presented a challenge even greater than driving a runaway team.

A PERSONAL VOICE: ESTHER CLARK HILL

"I think, as much courage as it took to hang onto the reins that day, it took more to live twenty-four hours at a time, month in and out, on the lonely and lovely prairie, without giving up to the loneliness."

—quoted in Pioneer Women

As the railroads penetrated the frontier and the days of the free-ranging cowboy ended, hundreds of thousands of families migrated west, lured by vast tracts of cheap, fertile land. In their effort to establish a new life, they endured extreme hardships and loneliness.

Settlers Move Westward to Farm

It took over 250 years—from the first settlement at Jamestown until 1870—to turn 400 million acres of forests and prairies into flourishing farms. Settling the second 400 million acres took only 30 years, from 1870 to 1900. Federal land policy and the completion of transcontinental railroad lines made this rapid settlement possible.

RAILROADS OPEN THE WEST

From 1850 to 1871, the federal government made huge land grants to the railroads—170 million acres, worth half a billion dollars—for laying track in the West. In one grant, both the Union Pacific and the Central Pacific received 10 square miles of public land for every mile of track laid in a state and 20 square miles of land for every mile of track laid in a territory.

In the 1860s, the two companies began a race to lay track. The Central Pacific moved eastward from Sacramento, and the Union Pacific moved westward from Omaha. Civil War veterans, Irish and Chinese immigrants, African Americans, and Mexican Americans did most of the grueling labor. In late 1868, workers for the Union Pacific cut their way through the solid rock of the mountains, laying up to eight miles of track a day. Both companies had reached Utah by the spring of 1869. Fifteen years later, the country boasted five transcontinental railroads. The rails to the East and West Coasts were forever linked.

The railroad companies sold some of their land to farmers for two to ten dollars an acre. Some companies successfully sent agents to Europe to recruit buyers. By 1880, 44 percent of the settlers in Nebraska and more than 70 percent of those in Minnesota and Wisconsin were immigrants.

GOVERNMENT SUPPORT FOR SETTLEMENT

Another powerful attraction of the West was the land itself. In 1862, Congress passed the Homestead Act, offering 160 acres of land free to any citizen or intended citizen who was head of the household. From 1862 to 1900, up to 600,000 families took advantage of the government's offer. Several thousand settlers were exodusters—African Americans who moved from the post-Reconstruction South to Kansas.

Despite the massive response by homesteaders, or settlers on this free land, private speculators and railroad and state government agents sometimes used the law for their own gain. Cattlemen fenced open lands, while miners and woodcutters claimed national resources. Only about ten percent of the land was actually settled by the families for whom it was intended. In addition, not all plots of land were of equal value. Although 160 acres could provide a decent living in the fertile soil of Iowa or Minnesota, settlers on drier Western land required larger plots to make farming worthwhile.

Eventually, the government strengthened the Homestead Act and passed more legislation to encourage settlers. In 1889, a major land giveaway in what is now Oklahoma attracted thousands of people. In less than a day, land-hungry settlers claimed 2 million acres in a massive land rush. Some took possession of the land before the government officially declared it open. Because these settlers claimed land sooner than they were supposed to, Oklahoma came to be known as the Sooner State.



THE CLOSING OF THE FRONTIER

As settlers gobbled up Western land, Henry D. Washburn and fellow explorer Nathaniel P. Langford asked Congress to help protect the wilderness from settlement. In 1870, Washburn, who was surveying land in northwestern Wyoming, described the area's geysers and bubbling springs as: "objects new in experience . . . possessing unlimited grandeur and beauty."

In 1872, the government created Yellowstone National Park. Seven years later, the Department of the Interior forced railroads to give up their claim to Western landholdings that were equal in area to New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia combined. Even so, by 1880, individuals had bought more than 19 million acres of government-owned land. Ten years later, the Census Bureau declared that the country no longer had a continuous frontier line—the frontier no longer existed. To many, the frontier was what had made America unique. In an 1893 essay entitled "The Significance of the Frontier in American History," the historian Frederick Jackson Turner agreed.

A PERSONAL VOICE: FREDERICK JACKSON TURNER

"American social development has been continually beginning over again on the frontier. This perennial rebirth, this fluidity of American life, this expansion westward with its new opportunities, its continuous touch with the simplicity of primitive society, furnish the forces dominating American character."

—"The Significance of the Frontier in American History"

Today many historians question Turner's view. They think he gave too much importance to the frontier in the nation's development and in shaping a special American character.

Settlers Meet the Challenges of the Plains

The frontier settlers faced extreme hardships—droughts, floods, fires, blizzards, locust plagues, and occasional raids by outlaws and Native Americans. Yet the number of people living west of the Mississippi

River grew from 1 percent of the nation's population in 1850 to almost 30 percent by the turn of the century.

DUGOUTS AND SODDIES



Since trees were scarce, most settlers built their homes from the land itself. Many pioneers dug their homes into the sides of ravines or small hills. A stovepipe jutting from the ground was often the only clear sign of such a dugout home.

Those who moved to the broad, flat plains often made freestanding houses by stacking blocks of prairie turf.

Like a dugout, a sod home, or soddy, was warm in winter and cool in summer. Soddies were small, however, and offered little light or air. They were havens for snakes, insects, and other pests. Although they were fireproof, they leaked continuously when it rained.

WOMEN'S WORK

Virtually alone on the flat, endless prairie, homesteaders had to be almost superhumanly self-sufficient.

Women often worked beside the men in the fields, plowing the land and planting and harvesting the predominant crop, wheat. They sheared the sheep and carded wool to make clothes for their families. They hauled water from wells that they had helped to dig, and made soap and candles from tallow. At harvest time, they canned fruits and vegetables. They were skilled in doctoring—from snakebites to crushed limbs.

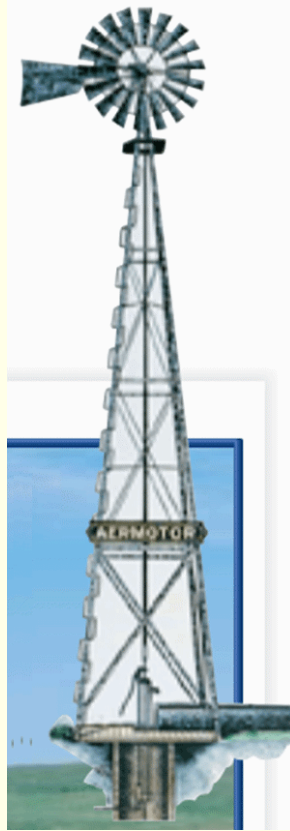
Women also sponsored schools and churches in an effort to build strong communities.

TECHNICAL SUPPORT FOR FARMERS

Establishing a homestead was challenging. Once accomplished, it was farming the prairie, year in and year out, that became an overwhelming task. In 1837, John Deere had invented a steel plow that could slice through heavy soil. In 1847, Cyrus McCormick began to mass-produce a reaping machine. But a mass market for these devices didn't fully develop until the late 1800s with the migration of farmers onto the plains.

Other new and improved devices made farm work speedier—the spring-tooth harrow to prepare the soil (1869), the grain drill to plant the seed (1841), barbed wire to fence the land (1874), and the corn binder (1878). Then came a reaper that could cut and thresh wheat in one pass. By 1890, there were more than 900 manufacturers of farm equipment. In 1830, producing a bushel of grain took about 183 minutes. By 1900, with the use of these machines, it took only 10 minutes. These inventions made more grain available for a wider market.

AGRICULTURAL EDUCATION



The federal government supported farmers by financing agricultural education. The Morrill Act of 1862 and 1890 gave federal land to the states to help finance agricultural colleges, and the Hatch Act of 1887 established agricultural experiment stations to inform farmers of new developments. Agricultural researchers developed grains for arid soil and techniques for dry farming, which helped the land to retain moisture. These innovations enabled the dry eastern plains to flourish and become “the breadbasket of the nation.”

FARMERS IN DEBT

Elaborate machinery was expensive, and farmers often had to borrow money to buy it. When prices for wheat were higher, farmers could usually repay their loans. When wheat prices fell, however, farmers needed to raise more crops to make ends meet. This situation gave rise to a new type of farming in the late 1870s. Railroad companies and investors created bonanza farms, enormous single-crop spreads of 15,000–50,000 acres. The Cass-Cheney-Dalrymple farm near Cassleton, North Dakota, for example, covered 24 square miles. By 1900, the average farmer had nearly 150 acres under cultivation. Some farmers mortgaged their land to buy more property, and as farms grew bigger, so did farmers’ debts. Between 1885 and 1890, much of the plains experienced drought, and the large single-crop operations couldn’t compete with smaller farms, which could be more flexible in the crops they grew. The bonanza farms slowly folded into bankruptcy.

Farmers also felt pressure from the rising cost of shipping grain. Railroads charged Western farmers a higher fee than they did farmers in the East. Also, the railroads sometimes charged more for short hauls, for which there was no competing transportation, than for long hauls. The railroads claimed that they were merely doing business, but farmers resented being taken advantage of. "No other system of taxation has borne as heavily on the people as those extortions and inequalities of railroad charges" wrote Henry Demarest Lloyd in an article in the March 1881 edition of Atlantic Monthly.

Many farmers found themselves growing as much grain as they could grow, on as much land as they could acquire, which resulted in going further into debt. But they were not defeated by these conditions. Instead, these challenging conditions drew farmers together in a common cause.

-- Section 2: Settling on the Great Plains, by olympia.osd.wednet.edu

In the late 1800s, white Americans expanded their settlements in the western part of the country. They claimed land traditionally used by native Indians. The Indians were hunters. And they struggled to keep control of their hunting lands. Both the settlers and the Indians were guilty of violence.

The federal government supported the settlers' claims. It fought, and won, several wars with Indian tribes. It forced the Indians to live on government-controlled reservations.

I'm Steve Ember. Today Larry West and I tell about the people who settled on the old Indian lands after the wars.

After the Indians were defeated, thousands of settlers hurried west. Some hoped to find new, rich farmland. The soil they left behind was thin and overworked. Their crops were poor. Some simply hoped to buy any kind of farmland. They did not have enough money to buy farmland in the east.

Others came from other countries and hoped to build new lives in the United States.

All the settlers found it easy to get land in the west. In 1862, Congress had passed the Homestead Act. This law gave every citizen, and every foreigner who asked for citizenship, the right to claim government land. The law said each man could have sixty-five hectares. If he built a home on the land, and farmed it for five years, it would be his. He paid just ten dollars to record the deal.

Claiming land on the Great Plains was easy. Building a farm there and working it was not so easy. The wide flat grasslands seemed strange to men who had lived among the hills and forests of the east.

Here there were few hills or trees. Without trees, settlers had no wood to build houses. Some built houses partly underground. Others built houses from blocks of earth cut out of the grassland. These houses were dark and dirty. They leaked and became muddy when it rained.

There were no fences on the great plains. So it was hard to keep animals away from crops.

Settlers in the American west also had a problem faced by many people in the world today. They had little fuel for heating and cooking. With few trees to cut for fuel, they collected whatever they could find. Small woody plants. Dried grass. Cattle and buffalo wastes.

Water was hard to find, too. And although the land seemed rich, it was difficult to prepare for planting. The grass roots were thick and strong. They did not break apart easily. The weather also was a problem. Sometimes months would pass without rain, and the crops would die. Winters were bitterly cold.

Most of the settlers, however, were strong people. They did not expect an easy life. And as time passed, they found solutions to most of the problems of farming on the great plains. Railroads were built across the west. They brought wood for homes. Wood and coal for fuel.

Technology solved many of the problems. New equipment was invented for digging deep wells. Better pumps were built to raise the water to the surface. Some of the pumps used windmills for power.

The fence problem was solved in 1874. That was the year "barbed wire" was invented. The sharp metal barbs tore the skin of the men who stretched it along fence tops. But they prevented cattle from pushing over the fences and destroying crops.

New farm equipment was invented. This included a plow that could break up the grassland of the plains. And farmers learned techniques for farming in dry weather.

Most of the problems on the plains could be solved. But solving them cost money.

A farmer could get wood to build his house. But he had to buy the wood and pay the railroad to bring it west. To farm the plains, he needed barbed wire for fences, and plows and other new equipment. All these things cost money. So a plains farmer had to grow crops that were in big demand. He usually put all his efforts into producing just one or two crops.

The farmers of the plains did well at first. There was enough rain. Huge crops of wheat and corn were produced. Much of the grain was sold in Europe and farmers got good prices.

The farmers, however, were not satisfied. They were angry about several things. One was the high cost of sending their crops to market. The only way to transport their grain was by railroad. And railroad prices were very high for farm products. Higher than for anything else.

The railroads also owned the big buildings where grain was stored. Farmers had to pay to keep their grain there until it was sold. They said storage costs were too high.

The farmers were angry about the high cost of borrowing money, too. They opposed the import taxes -- tariffs -- they had to pay on foreign products. Some of the tariffs were as high as sixty percent. Congress had set the levels high to protect American industry from foreign competition. But farmers said they were the victims of this policy, because it increased their costs.

Farmers as individuals could do nothing to change the situation. But if they united in a group, they thought, perhaps they could influence government policy.

Farmers began to unite in local social and cultural groups called "granges." As more and more farmers joined granges, the groups began to act on economic problems.

Farmers organized cooperatives to buy equipment and supplies in large amounts directly from factories. The cost of goods was lower when bought in large amounts. The granges also began to organize for political action. Local granges became part of the national grange movement.

Grange supporters won control of state legislatures in a number of middle western states. They passed laws to limit the cost of railroad transportation and crop storage.

Railroads refused to obey these laws. They fought the measures in the courts. They did not win. Finally, they appealed to the United States Supreme Court.

The railroads said the laws were not constitutional, because they interfered with the right of Congress to

control trade between the states. The railroads said states could not control transportation costs. To do so would reduce profits for the railroad. And that would be the same as taking property from the railroad without legal approval.

The Supreme Court rejected this argument. In a decision in 1876, the Supreme Court said states had a legal right to control costs of railroad transportation. It said owners of property in which the public has an interest must accept public control for the common good.

The farmers seemed to have won. But the powerful railroad companies continued to struggle against controls. They reduced some transportation costs, but only after long court fights.

The granges tried to get Congress to pass laws giving the federal government power to control the railroads. Congress refused to act.

Many farmers lost hope that the granges could force the railroads to make any real cuts in their costs. They began to leave the organization. Others left because the economy had improved. They no longer felt a need to protest. Within a few years, the national grange had lost most of its members. Some local groups continued to meet. But they took no part in politics.

New protests groups would be formed in a few years when farmers once again faced hard times. But for now -- in the late 1870s -- times were good. Most people were satisfied.

-- How the Western United States Was Settled, THE MAKING OF A NATION, by Frank Beardsley

Settlement of the Great Plains: Land, Climate and New Technology

During the early 1800s, the large interior region of the United States was called the “Great American Desert” and a “treeless wasteland.” The land consisted of a vast, flat, plateau that rose gradually from the Mississippi River to the foothills of the Rocky Mountains. Its climate was harsh with freezing cold winters and hot, dry summers. Although rainfall was infrequent, hail, blizzards, tornadoes, and dust storms were common. The soil, or sod, was held together by grass roots, but could be easily eroded by water and wind when farmed. In spite of these conditions, thousands of people began to move to the Great Plains region during the mid-1800s, and adapted to a new life in a very challenging environment!

The expansion of the nation’s railroad system played an important role in the westward movement of people into the Great Plains region. Over the years, the government had given the railroad companies millions of acres of land to encourage railroad construction into the western territories. After the Civil War, these companies began to sell the land surrounding the tracks to settlers at affordable prices. The railroad companies knew that the land would bring settlers who would farm the land and start new businesses. These new businesses and new farmlands would need railroads to transport products, crops, and livestock to market.

As the settlers arrived and claimed their homesteads, they had to adjust to a very different environment. With lumber being very expensive and in short supply, they built their homes out of sod instead of wood. Hand-cut sod squares that contained long grass roots made flexible “bricks” that were strong enough to form walls and roofs. Although they were dusty and prone to leaks, sod homes were well-insulated. They kept families warm in the winter and cool in the summer.

As thousands of settlers began to move west, new technological advances helped people see the Great Plains not as a “treeless wasteland” but as a vast area to be settled! One of these new technologies was the windmill powered water pump. Windmills allowed settlers to use the wind to tap into underground water.

This water supply was used to meet the daily needs of households and livestock as well as to irrigate crops. Windmill water pumps also supplied water to railroads for their engines and allowed cattle ranchers to create green pastures for their growing herds.

As farmlands expanded, new technologies were needed to plant and harvest in the dry, dusty soil. One such advance was the steel plow. An Illinois blacksmith, by the name of John Deere, designed the first steel plow. These large plows, called grasshopper plows, were made to cut through the tough sod of the Plains.

Another advance in the area of agriculture was called dry farming. This method was developed in the late 1800s for use on the Great Plains. In dry farming, the soil was plowed deeply to break up the sod and help keep the moisture in the soil clumps. Farmers soon found that wheat was one of the few crops that did well on dry farms. It quickly became one of the major cash crops of the Great Plains. Hundreds of large farms called Bonanza farms grew wheat and made large profits for their investors back East.

As the farming industry grew and prospered in the Great Plains, so did the cattle industry. After the Civil War, cattle ranches stretched across the Great Plains. Railroads assisted in this growth by helping ranchers get their cattle to Northern cities where the demand for beef was high. As the ranches grew so did their need for land. Before long, ranchers were allowing their huge herds to graze on the open grasslands of the Great Plains. As the cattle industry grew, farmers and ranchers began to compete for land. As a result, farmers put up fences to keep the cattle out of their fields and many ranchers did the same to keep their cattle from wandering off. There was a need for cheap fencing materials to close in huge areas of land. Before long a new type of fencing called barbed wire was developed. It consisted of twisted steel wires strung between wooden fence posts. Barbed wire fencing was easier and cheaper to build than fences made of wood or stones.

Natural Resources, Transportation & Industrial Development after 1865

Following the Civil War, great changes began to occur in the United States. Railroads crossed the nation, new industries were formed, natural resources were plentiful, and cities became manufacturing and transportation centers. How did advances in transportation link resources, products, and markets in America after the Civil War?

With advances in transportation, such as the completion of the Transcontinental Railroad in 1869 and improvements to the steamship, the movement of natural resources and finished products began to crisscross the country. Following the discovery of gold in California, the transporting of copper and lead to eastern factories began. These two valuable metals were byproducts of gold mining. Soon, new mining industries sprang up to meet the growing demand for them. In addition, eastern factories began to rely on railroads to supply them with these much needed raw materials.

Iron ore was another natural resource that was in demand during this period of industrial growth. It was used in the production of steel. Steel was stronger and lasted longer than iron. The need for iron ore increased dramatically after a cheaper method of producing steel was invented in the mid-1850s. As a result, Pittsburgh, Pennsylvania became a major steel and railroad center. Nearby deposits of iron ore were transported to its many mills and the finished product, steel, was shipped out to the nation.

Advances in transportation also made it possible for finished products to reach a national market. Textiles from New England, steel from Pittsburgh, and automobiles from Detroit could now be loaded on trains and delivered to manufacturers, stores, and consumers all over the country.

In addition to linking resources, products, and markets, advances in transportation also played an important part in the birth, growth, and prosperity of American cities. Before the industrial development of the mid-1800s, most cities grew up alongside waterways that could be used to transport needed goods and resources. With the growth of the railroad, cities began to grow and prosper far from the coastlines. These new

industrial cities could be found closer to the natural resources needed by their factories and mills. Before long, manufacturing areas were clustered around these cities. Entire regions became known for their products and industries.

New England, in the Northeast region of the U.S., was a manufacturing area known for its textile industry. New inventions such as the cotton gin, the mechanical loom, and the sewing machine led to increased Southern cotton production, new textile mills, and a growing demand for textile products such as cloth or fabric.

The growing automobile industry was centered around the city of Detroit, Michigan in the Midwest region of the U.S. Detroit was located near waterways, railroads, and raw materials. It was also home to many skilled laborers. As a result, it soon became the birthplace of the American automotive industry. Three famous Detroit automotive companies include General Motors, Ford, and Chrysler.

In addition to textiles and automobiles, the steel industry also prospered after the Civil War. In the Mid-Atlantic region, Pittsburgh, Pennsylvania became one of the first steel centers in the nation. It was located near deposits of iron-ore and coal as well as railroads that could bring in raw materials and carry out finished products.

Another kind of industry was also located in the Midwest region of the country. After the Civil War, Chicago became the center of the meat-packing industry. Meat products could now be delivered quickly because of Chicago's meat-packing plants and the city's expanding network of canals and railroads.

Westward Expansion: Reasons and Impact

Following the Civil War, Americans started moving west in growing numbers. Brave men and women set out to explore and settle the vast territories beyond the Mississippi River in search of cheap land, new methods of transportation, the possibility of wealth, adventure, and the hope of a new beginning.

The rapidly growing railroad system played a major part in this westward expansion. Before the start of the Civil War the United States had approximately 40,000 miles of track. Forty years later that number had risen to nearly 200,000 miles! In addition, the first Transcontinental Railroad was completed in 1869. This technological accomplishment successfully linked the East and West coasts. By 1900, four more railroads crisscrossed the nation! This growing transportation network moved people, created cities, and started industries.

During the 1800s, people's perceptions of the Western territories began to change. The government believed that the nation's "manifest destiny" was to expand westward. As a result, the Homestead Act of 1862 was passed. This act opened up the West to homesteaders by giving 160 acres of land to anyone who would live and work on the land for 5 years. In addition, railroad owners sold the land beside their tracks at very low prices. They knew that settlers and farmers would use their railroads and bring new businesses with them. As a result, thousands of settlers came from the Eastern states and Europe for the opportunity to own their own homestead. By the late 1800's, over five million Americans had reached their dreams of becoming landowners!

Another factor that influenced westward expansion was the discovery of gold and silver. In 1847, during the construction of a sawmill in California, gold nuggets were found in a nearby river bed. By 1849 the California Gold Rush had begun and gold fever was epidemic. As the news spread across the continent, thousands of "forty-niners" charged west in search of riches and new lives. Although some returned to their homes after a short stay in California, many remained. As a result, the population of California swelled from 18,000 to 165,000 in three short years. The discovery of silver deposits in other western states, such as Arizona, Colorado, and Nevada, caused many more prospectors to travel west in hopes of getting rich.

Following the Civil War, the West represented a new beginning for former enslaved African Americans. Although they were now free, most African-Americans were forced to return to the only life they knew: farming. Some owned their own farms, but most were tenant farmers or farm laborers. Poor wages and sharecropping laws made survival difficult. As a result, thousands of African-Americans migrated, or moved westward in hopes of getting their independence from white landowners, safety for their families, and prosperity. These former slaves became homesteaders, miners, cattle-drivers, cowboys, teachers, nurses, business owners, and lawmen.

Regardless of why Americans moved westward after the Civil War, they all had something in common. Risking their lives and their futures, they headed into the unknown in search of land, wealth, a new beginning, and a chance to participate in this adventure called the Westward Expansion.

Westward expansion was positive for many Americans, but it had a negative impact on one group of people—the American Indians. At the time of the Civil War, the number of American Indians living in the United States was approximately 300,000. Over half were living on the Great Plains and were generally tolerant of the white man as he crossed their lands on the way to the West Coast. Before long homesteaders, ranchers, and railroad men came and began to claim the land as their own. They built houses and towns, fenced in the land, and crisscrossed it with railroads. More threatening to the American Indian, however, was the killing of buffalo for their hides and for sport. Since these animals were used for food, clothing and shelter, the slaughtering of buffalo meant death for the American Indians and their way of life.

As more and more settlers moved onto Indian lands, war broke out. In an effort to control the situation, the United States government entered into a number of treaties with the Indians. Many treaties created reservations, large areas of land reserved exclusively for American Indian use. In these treaties the Indians usually agreed to trade part of their lands for a promise that the government would provide support for their reservation, such as food, financial aid, health care and schools. However, the U. S. government often broke these treaties.

One of the reservations included all of western South Dakota. This land was sacred to a powerful tribe of the Northern Plains, the Sioux. Six years after the Great Sioux Reservation was established, gold was discovered in the Black Hills of Dakota. The United States government offered to buy the land, but the Sioux, encouraged by a young leader named Sitting Bull, decided not to sell. As a result the government sent soldiers to take the land by force. Lieutenant Colonel George Custer and his soldiers attacked the Sioux and their allies at Little Big Horn River. During the Battle of Little Big Horn, Custer and his men were surrounded and killed by Sioux warriors.

In the Southwest, the Navajo and Apache Indians retaliated, or fought back, when settlers took their lands and destroyed their animals and gardens. The U. S. Army arrived, and soon most of the Navajo and Apache people were forced onto reservations. Some small groups of Indians, however, refused to obey. Led by the Apache leader Geronimo, these small bands of Indians continued to raid the new settlements. When Geronimo finally surrendered, the Indians of the Southwest had no choice but to give up their struggle.

The United States Government continued to use force against other Indian tribes. One such tribe was the Nez Perce. In 1877 they were told to leave their lands in Oregon and relocate to a small reservation in Idaho. Their leader, Chief Joseph, said no. Instead, he and a group of 800 men, women, and children headed north in an attempt to escape to Canada. Before they could reach the border, however, they were captured by U.S. soldiers. Chief Joseph ordered his people not to fight and said, “My heart is sick and sad. From where the sun now stands, I will fight no more forever.”

By the turn of the century only 225,000 Indians were living on American soil. This population decline was caused by warfare and disease. Thousands of Indians lost their lives during the hundreds of battles fought. The Battle of Wounded Knee is one such example where 300 Indians—men, women, and children—were killed in a massacre. This was the last armed conflict between the Sioux and the U. S. Army. With the

westward expansion also came the introduction of diseases unknown to the American Indians. It has been said that more American Indian lives were lost due to disease than were lost in the wars fighting for their homelands.

Some reformers tried to help the Indians become full American citizens and to assimilate, or blend into the general culture. They wanted the Indians to become more like the white people and give up their own distinctive culture. With the decline of the buffalo, American Indians were encouraged to become farmers.

However, many Indians had no knowledge of farming, and others had no interest in it. In addition, reservations were typically created on land that appeared to be of little economic use. As a result, the assimilation approach proved unsuccessful for most American Indians. The lives of the American Indians had been changed forever by the westward expansion of the United States.

-- Unit 3: Standards of Learning (SOL USII.2a), by Interactive Reading & Notetaking, www.IRNcorp.com,
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LAND LAWS AND SETTLEMENT

In both Canada and the United States, the federal governments acted as huge real-estate dealers transferring the public domain to settlers who would, ostensibly through their labor, enrich both themselves and their respective nations. The problem with these land-transfer systems, at least as far as the Great Plains was concerned, was that the basic 160-acre settlement unit was devised for a humid environment, not for a subhumid environment where agriculture was a more extensive—and more precarious—enterprise. There was also the problem of speculation, which held land out of actual settlement; many of the land laws were easily manipulated for such a purpose and some seemed to be actually designed for it.

The United States' system had its origins in the Land Ordinance of 1785 which, after subsequent modifications, established an orderly procedure for the alienation of public lands: acquire the lands through cessions from Native Americans; survey them into townships of thirty-six one-square-mile sections, each containing quarter sections of 160 acres; reserve sections 16 and 36 for future sales to support schools (such lands are still being sold off for this purpose); and sell the remaining land to settlers through public auction or through regional public land offices. The exception to this general land alienation system in the Great Plains was Texas, which kept title to its own public lands when it entered the Union. There, the land was sold as a source of revenue and disposed of in land grants for various social purposes. Texas did, however, adopt the same survey system.

Before the Homestead Act of 1862, the main type of sale was through preemption, which was codified in the Preemption Act of 1841. By the terms of the act, an adult could settle on the public domain and secure title to 160 acres by improving the land and paying \$1.25 an acre within twelve months. Preemption and the much-abused military bounty land warrants, which were designed to provide soldiers with homes but were transferable and could therefore be amassed in bulk by speculators, were the principal methods of acquiring land in areas of eastern Nebraska and Kansas settled before 1862.

That year, the Homestead Act inaugurated the era of virtually free land for the settler, providing 160 acres for a minimal registration fee and the promise to live on the land and improve it for five years, at which time a patent was issued. After six months settlers who wanted to secure title could purchase the land at \$1.25 an acre (perhaps to sell at a profit later). Settlers soon had other options for securing Plains land. Following the 1862 Morrill Act, which allocated public lands to the states for the purpose of supporting agricultural colleges, settlers could purchase scrip, which then could be used to buy land at \$1.25 an acre. Again, speculators acquired large amounts of the scrip and bought considerable acreages in the Plains, which they held until land values rose and then sold for a profit. Settlers also had the option of adding to their holdings by locating in railroad land grants, which were given to railroad companies to subsidize construction. By the

acts of 1862 and 1864, for example, the Union Pacific Railroad was granted all the odd-numbered sections in every township in a twenty-mile zone on either side of the tracks. Clearly, land near the railroads, the connection to markets and supplies, was in great demand; free homestead sections in the land grants were taken first, giving the characteristic checkerboard settlement pattern, until filled in by the later purchase of railroad sections.

In the Canadian Plains, the Dominion Lands Act of 1872, which followed the Canadian government's acquisition of Rupert's Land from the Hudson's Bay Company, was modeled on the American land survey and free homestead system. The same 640-acre section and thirty-six-section township survey was adopted, and so the rectangular grid came to dominate the entire Great Plains, with profound and inestimable effects on ways of living ever since. A similar free homestead system was inaugurated, but with a "proving-up" time of only three years. Also, as in the United States, two sections (11 and 29) were designated school lands in each township, and following its 1881 charter the Canadian Pacific Railway was given the odd-numbered sections in a land grant extending twenty-four miles on either side of the tracks across the Prairies. "Indemnity selection" allowed the Canadian Pacific to go outside the forty-eight-mile strip if there was not sufficient good land within it. Significant differences from the United States' system were evident in the provision of 160 acres of lands, or \$160 in scrip, for Métis, who had preceded the survey, and the reservation of lands—section 8 and three-quarters of section 26 in each township, amounting to more than seven million acres in Manitoba, Saskatchewan, and Alberta—for the Hudson's Bay Company as compensation for the relinquishment of Rupert's Land. The Canadian government, determined to attract immigrants to the Prairies, also made block settlement grants to ethnic groups such as Russian Mennonites and Icelanders, a practice that was not endorsed in the U.S. Great Plains.

Even before John Wesley Powell, in his 1878 Report on the Lands of the Arid Region of the United States, drew attention to the unsuitability of the standard land system for the country west of the 100th meridian, new land laws were being specifically adapted to the Great Plains. In 1873 Congress passed the Timber Culture Act, which was designed to promote the planting of trees in the Great Plains and also, theoretically, to increase rainfall by accelerating transpiration rates. The act stipulated the planting and cultivation of forty acres of trees (later reduced to ten acres) over a period of ten years (later reduced to eight), after which the settler would receive a patent for 160 acres. Most timber claims were filed in the Central and Northern Great Plains. (After 1873, therefore, the Plains settler could legally acquire 480 acres of public domain through the Homestead, Preemption, and Timber Culture Acts for only \$200.) However, the fact that only a small proportion of timber entries were carried through to patent indicates the difficulty of fulfilling the provisions of the act in a subhumid environment, but it indicates even more the convenience of the law for the small-scale speculator: settlers could use 160 acres rent-free and tax-free for ten years with no intention of acquiring a patent. At the Cheyenne Land Office in Wyoming Territory, for example, 290,278 timber filings had been made by 1888 but only 65,265 were ever patented. The flawed legislation was repealed in 1891.

Other acts enlarged the size of the holdings that settlers could obtain cheaply or without cost. The Desert Land Act of 1877, which applied to the territories of New Mexico, Wyoming, Montana, and Dakota (and more generally throughout the West), allowed settlers to file on 640 acres for a payment of twenty-five cents an acre. Title could be obtained in three years for an additional payment of \$1 an acre and proof of irrigated cultivation. Only one-fourth of the entries in the Great Plains resulted in titles. In 1904 the Kinkaid Act offered settlers in the Nebraska Sandhills 640 acres on homestead terms, and in 1909 the Enlarged Homestead Act increased the free acreage more widely to 320 acres. Under the stimulus of the 1909 act, the plains of eastern Montana in particular filled up with farmers hoping to make a future by dry-farming wheat on their 320 acres. More homestead entries were made there in 1910 alone than in all of the preceding three decades. Montana and the High Plains states of Wyoming, Colorado, and New Mexico were also the main targets of the Stock Raising Homestead Act of 1916, by which settlers could acquire 640 acres of non-irrigable land for the purposes of stock raising and the cultivation of forage crops. But often the settlers had no experience in farming, and almost always they were undercapitalized. In Montana the drought of 1918 put an end to the dreams of many, and many others who "stuck" through that crisis failed in the 1920s and

1930s.

In the Prairie Provinces also, attempts were made to ensure that settlers could acquire a 320-acre holding rather than the clearly inadequate 160 acres. Successful settlers were allowed, through "preemption rights," to file on an adjacent quarter if it was not occupied. Settled farmers, having accumulated some capital, were also encouraged to buy Canadian Pacific Railway lands, and many did, especially after 1908 when the remaining odd-numbered sections were put on the market at reasonable prices. Still, by 1910 in much of the Prairie Provinces and elsewhere in the Plains, even 320 acres was a small holding and hardly adequate for efficient production.

The rate of failure in both the Canadian and U.S. Great Plains points to the overextension of farming that the liberal land laws had encouraged. The gap between the number of land entries and the number of patents issued was glaring: in the Dominion Lands, for example, only 40 percent of homestead entries culminated in a title, and an unknown portion of those that did quickly passed into the hands of speculators. The end of the

Dominion policy came in 1930, with the completion of transfer of remaining lands and resources to the provincial governments. In the United States the Taylor Grazing Act of 1934 withdrew from homesteading virtually all the remaining desirable land, though the 1862, 1909, and 1916 acts, which had drawn so many settlers to the Plains, were not repealed.

Notes:

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-- LAND LAWS AND SETTLEMENT, by David J. Wishart University of Nebraska-Lincoln



[Narrator] Another New Deal program,



The Resettlement Administration,



was already providing farmers on the most marginal lands with loans to encourage them to move somewhere else,



taking their land out of production.



[Timothy Egan, Writer] It was homesteading in reverse. It was very controversial because first of all, it was an acknowledgement that we'd failed.



Perhaps they were right when Stephen Long said in 1820 that this is a land "wholly uninhabitable by a people who are dependent on agriculture."



[Narrator] But the President refused to go that far.



[Timothy Egan, Writer] Remember, Roosevelt, by his nature, in his character, was an optimist. He didn't want to be known as the only President who gave up a big section of land on his watch. He thought he could save both the land and the people. And they felt a similar attachment to him.



[Narrator] Roosevelt turned to Hugh Hammond Bennett, a straight-talking North Carolinian, to create a new soil conservation service,



an agency whose job it was ...



to study better agricultural practices ...



and teach them to the Nation's farmers.

As late as 1900, the U.S. Bureau of Soils claimed that "The soil is the one indestructible, immutable asset that the nation possesses. It is the one resource that cannot be exhausted, that cannot be used up."

-- The Great Plains Region, by Amanda Rees



[Hugh Hammond Bennett] We Americans have been the greatest destroyers of land ...



of any race or people, barbaric or civilized.



Unless immediate steps are taken to restore these sun-scorched, wind-eroded lands,



we shall have on our hands a new, manmade Sahara where formerly was rich grazing land.

The notion of communal responsibility, of the responsibility of every individual for the sins of the society to which he belongs, is one that needs to be more firmly apprehended.

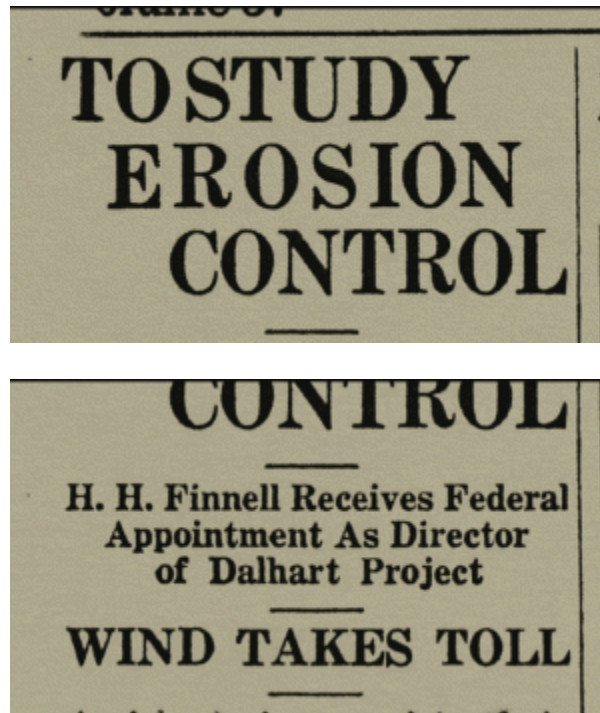
-- The idea of a Christian Society, by T.S. Eliot



[Timothy Egan, Writer] Hugh Bennett was this tall, big-armed, flap-eared, funny, jovial doctor of dirt. Nobody knew more about soil in the United States than Hugh Bennett.



So when Roosevelt gave him the job of trying to save the land, he was arguably the perfect man for it.



[TO STUDY EROSION CONTROL. H.H. FINNELL RECEIVES FEDERAL APPOINTMENT AS DIRECTOR OF DALHART PROJECT. WIND TAKES TOLL.]

[Narrator] For the Agency's largest and hardest-hit-region -- the nearly 100 million acres of the Southern Plains -- Bennett knew just the man for the job.



Howard Finnell was a soil scientist who had been running the Agricultural Experiment Station in Goodwell, Oklahoma -- about 25 miles south of Caroline Henderson's homestead.



Finnell had pioneered new techniques to double the odds of a good crop by capturing as much moisture as possible --



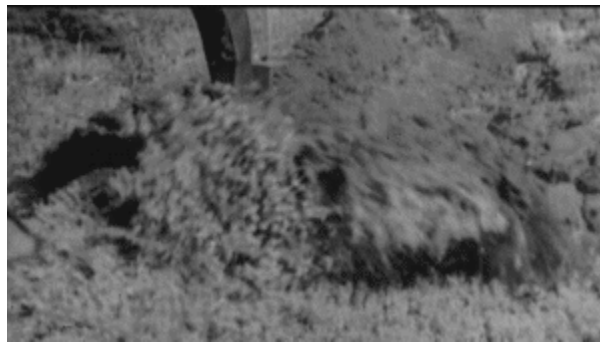
using terraces and plowing along the land's contour to minimize runoff,



planting different types of crops,



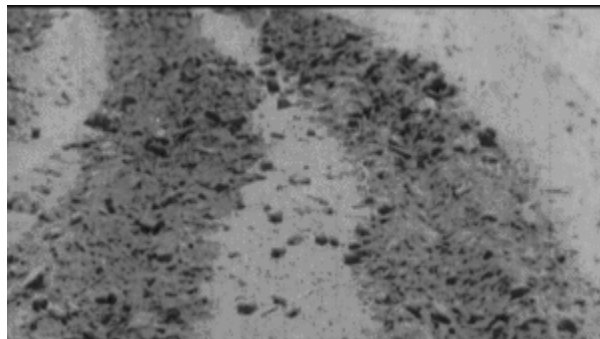
and using the old-fashioned plow,



called a lister, to make deeper rows,



rather than employing the more popular one-way plow ...



that pulverized the soil.



Hugh Bennett sent Finnell to Dalhart, Texas,



where he set up "Operation Dust Bowl" to prove to skeptical farmers that his new techniques were worth following.



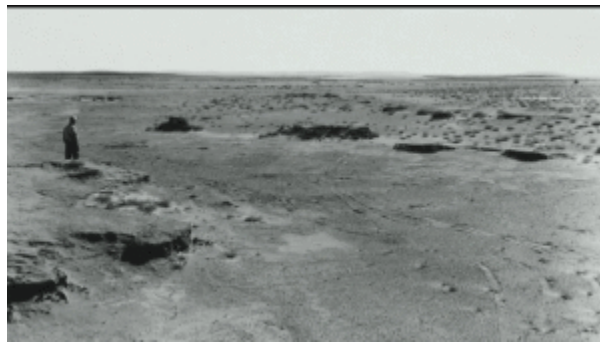
"We do not want a changed climate," Finnell said.



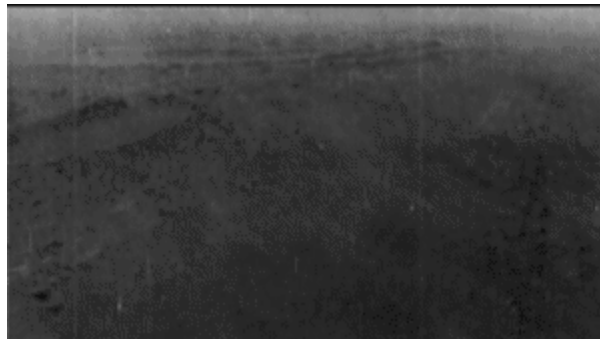
"Much of the land could still produce crops, if the farmers would only change their attitudes."



The President and his administration may have decided not to abandon the Dust Bowl, but any solutions would take time,



and for the people living there, time was running out.



[Clarence Beck, Cimarron County, OK] You go broke gradually.



You know, it doesn't happen like jumping off of a cliff.



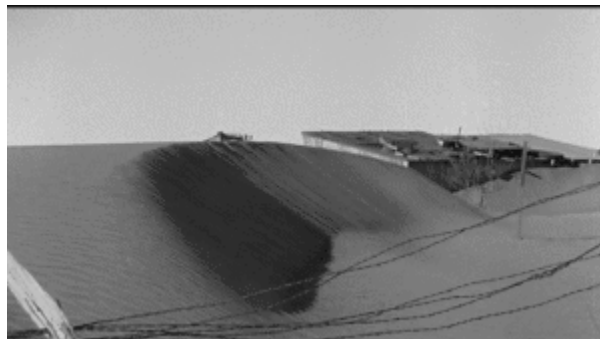
You exhaust your savings,



you exhaust your borrowings,



you exhaust your equipment,



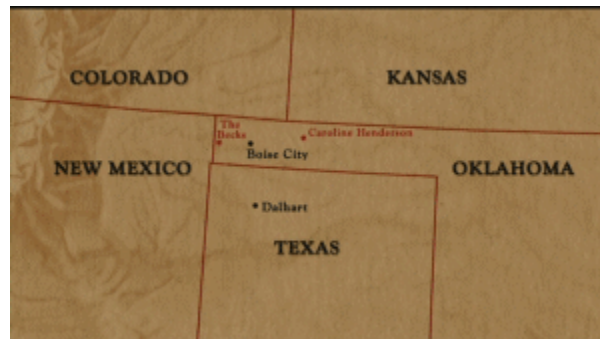
you exhaust yourself, and you give up. That takes about five years.



Then you're starting to look at the wolves.



[Narrator] Clarence Beck's father had moved his family to a farm West of Boise City just as the 1920s were ending.



His timing couldn't have been worse. By 1935, he had suffered repeated crop failures,



and the Depression meant there were no jobs, though he found temporary work with the WPA to keep his wife and children from starvation.



Like many other families, they started talking about moving somewhere else.



[Clarence Beck, Cimarron County, OK] People didn't leave early because there was no place to go. You have no money, and you don't have any place to go.



Where can you go when you're penniless? At least where you are, you have the feel-at-home-ness.



[Narrator] Meanwhile, the hard times placed a strain on the Becks' marriage.



[Clarence Beck, Cimarron County, OK] My mother would have been a playgirl, really,



and my father's a drudge. And he would be perfectly happy to work from dawn till dusk.



[Narrator] One morning, before Clarence's younger sister Irene headed for school, her mother took her aside to deliver some news.



[Irene Beck Hauer, Cimarron County, OK] Well, she just said, "I won't be home when you come home tonight" -- from school, in other words, or whatever. "I won't be home. I'm leaving." And my mother just left.



So, that was it. She didn't care. She didn't care about me that much or anything.



[Narrator] Long long afterwards, their father's tractor --



the only possible means for him to stay on the land -- was repossessed.



Sam Beck decided he had to move. Clarence would stay with uncles back in Central Kansas. Irene wasn't sure what her father had in mind for her.



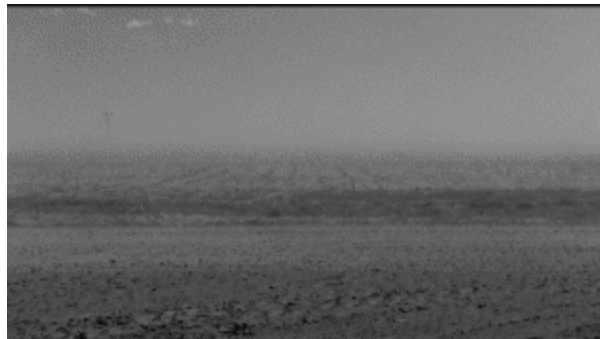
[Irene Beck Hauer, Cimarron County, OK] At first I asked him, "Are you leaving, too?" You know, I was kind of crying, like, you know, because naturally I was sad. So he said, "No. We're going to California."



[Narrator] Not far from the Becks, Harry Forester had also lost his farm, and was living on someone else's land.



He had once dreamed of prospering enough to give each of his five sons 640 acres. Now he could barely feed his nine children.



[Louise Forester Briggs, Texas County, OK] The one time he came in from the wind blowing and dust, and he was pacing the floor and saying,



"I don't know whatever will become of us."



And that just frightened me. That just -- my heart just clutched from that.

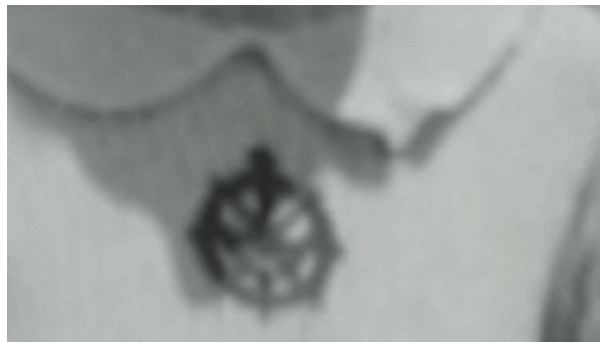


[Narrator] With his fields ruined by dust, and what was left of his livestock reduced to skin and bones, Forester had no choice but to give up farming.

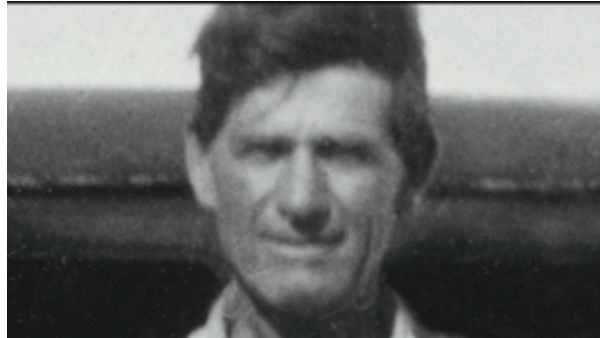


His plan was to move his large family to Goodwell, Oklahoma, where they could stay with his wife's mother.





He had read about a place where jobs were plentiful, where he could make good money and save enough to send for his family.



He, too, would head to California.



In Southeastern Colorado, Calvin Crabill's father, John, was coming to the same conclusion.



[Calvin Crabill, Prowers County, CO] We lost all our stock. We lost everything in six months. And so when we had nothing left, we left. We had nothing left. There was no reason to stay.



[Narrator] But first, John Crabill would have to sell his horses.



[Calvin Crabill, Prowers County, CO] My mother and others who knew him said once he sold his horses, he was never the same again the rest of his life.



He never was the same again. He would be staring off into space, and we knew he was thinking about his stock.



[Narrator] In Texas County, Oklahoma, Dorothy Kleffman's father thought he could hang on to his farm,



but his wife had come down with the dust pneumonia.



[Dorothy Kleffman, Texas County, OK] I think she would have died. He could see that she was failing, so he knew he had to do something, you know, because there were people here who did die.



I really didn't want to go. This was my home, and even though we had the dust storms and we were in a Depression, a "Great" Depression, I would loved to have just stayed right here. But because we had to save her life, we had to move.

[Narrator] Her father and an older brother would try to stay on the farm, but he moved his wife and younger children, including Dorothy, not to California,



but East, to Arkansas, well out of the brown world of the Dust Bowl.



[Dorothy Kleffman, Texas County, OK] And when we got down there, we had a green grass lawn.



We kids like the chickens because they would raise their legs up so high -- they were not used to that grass.



Mother raised a huge garden down there. And there was enough rain that, you know, we didn't have to water it like we did out here.



And she would can about 600 quarts of food a year.



But we wanted to come back. This was our home out here. We wanted to come back.



[Caroline Henderson] Some of our neighbors with small children,



fearing the effects upon their health,



have left temporarily "until it rains."



Others have left permanently,



thinking doubtless that nothing could be worse.



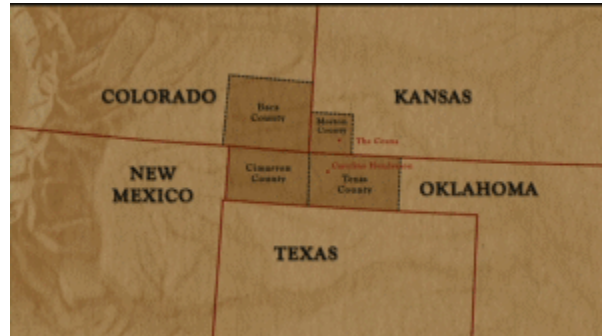
Thus far, we and most of our friends seem held -- for better or for worse --



by memory and hope.



[Narrator] Texas County, Oklahoma, where Caroline Henderson had been homesteading since 1907, lost 30% of its population in the 1930s.



Nearby Cimarron County lost 32%. And Baca County, just across the line in Colorado, saw 41% of its residents move somewhere else. Hardest hit was Morton County, Kansas, where Edgar and Rena Coen were raising their large family,



now diminished by two with the death of a daughter and grandson from dust pneumonia.



The Coens were determined to stick it out, but their county would lose nearly half of its population,



and would close eleven of its seventeen rural schools because the dust storms refused to relent.



[Floyd Coen, Morton County, KS] You never got used to them. You just hated every one of them because you knew it was going to do damage outside, and you knew you was probably gonna lose some more neighbors. We was in school then, and you'd go to school one day, your neighbors was there at school, and next day, they'd moved away. It was kind of a sad time that way.



[Imogene Glover, Texas County, OK] My aunt and uncle, they had to go to California to get away from the dust.



We all went over to see them off, and they took everything that they could in their car.



The last thing daddy said to my Uncle Jack was,



"Do you have enough money for gas to get there?"



And Jack told him however much he had.



And daddy said, "Well, I've just got \$17 on me, but I want you to take this so you'll have enough money for gas."



[Pauline Hodges, Beaver County, OK] Every day, all day long, those cars passed our house. They often stopped and asked for food.



We didn't have very much, but my mother thought we were better off than other people, and we were because of the WPA, and she always fed them something. I still remember it was often bread and butter sandwiches, but it was something. She never, ever turned anybody down.



[Wayne Lewis, Beaver County, OK] When I was in the eighth grade, we had a practical lesson in geography. How many people live in the district? And it was one-hundred people. How many people are in school? Twenty-five.



And then my brother get to the same place ten years later. How many people in the district? twenty-five. How many kids in the school? Maybe ten.



The rest of them had left.



[Narrator] But in the end, for every family that left the Dust Bowl, three families -- 75% of the population -- would hang on.



[Donald Worster, Historian] Why didn't everybody leave? For a lot of these people, well, there was no other place to go. They, in their minds, they had invested their lives there. They had family buried in cemeteries. Why did they stay?



The Plains can lay a hold on your affections, if you're there for a generation or two, and they're a glorious place to live at times. The great skies and the openness and the sense of freedom there were powerful draws for these people.



[Caroline Henderson] I cannot act or feel or think as if the experiences of our 27 years of life together had never been,



and they are all bound up with the little corner to which we have given our continued and united efforts.



I can look backward and see our covered wagon drawn up by the door of the cabin in the early light of that May morning long ago,



can feel again the sweet fresh breath of the untrodden prairie and recall for a moment the proud confidence of our youth.



But when I try to see the wagon or the old Model-T truck, headed in the opposite direction, away from our home and all our cherished hopes, I cannot see it at all.



Perhaps it is only because the dust is too dense and blinding.



[Donald Worster, Historian] My parents left. They couldn't find a living anymore in rural countryside. Their farms were devastated.



They could see no future in this.



They decided in the late 1930s to follow the trek to California to see what they could find there to support themselves.





CANAAN LAND



[CALIFORNIA OR BUST]



[Donald Worster, Historian] The biggest percentage of people who moved into another state were going to California.



There were hundreds and hundreds of thousands of people pouring into California.



They weren't all poor, and they weren't all from the Great Plains. So there was a river of people flowing into California in the 1930s.



You could just see all of these cars pulling out from little side roads along the way ...



joining this brigade going out Route 66,



stopping at motels, sleeping under billboards. that's the way my parents essentially went from New Mexico across to Arizona.



[NEXT TIME TRY THE TRAIN: SOUTHERN PACIFIC. TRAVEL WHILE YOU SLEEP.]

They stopped in Needles, California, and didn't get any farther. That was the end of the road for them.



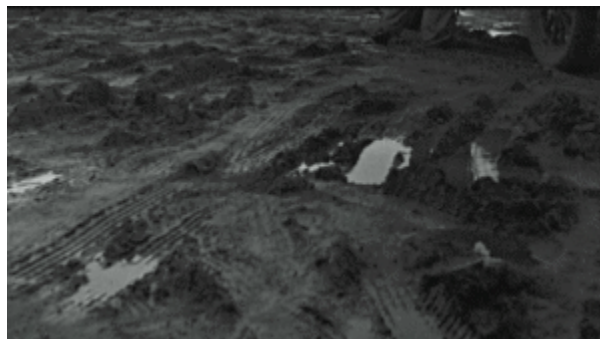
[Narrator] Those who did leave the Dust Bowl for California were joining an even larger exodus of Americans displaced by the Depression and the agricultural crisis that extended far beyond the Southern Plains.



[Timothy Egan, Writer] Now, the folks who left, the diaspora,



the Exodusters, they were called -- these refugees were largely from the Eastern fringe of the Dust Bowl. They were from arguably not even the Dust Bowl itself.



They were Arkies from Arkansas. They were from Missouri. And they were tenant farmers.



When the farm economy collapsed, when the prices collapsed and you couldn't make a living, if you were a tenant farmer, you had nothing, because you didn't even own the dirt. So they left.



[Woody Guthrie] These people didn't have but one thing to do, and that was to just get out in the middle of the road.



These people just got up,



and they bundled up their little belongings,



they threwed in one or two little things they thought they'd need, had heard about the land of California,

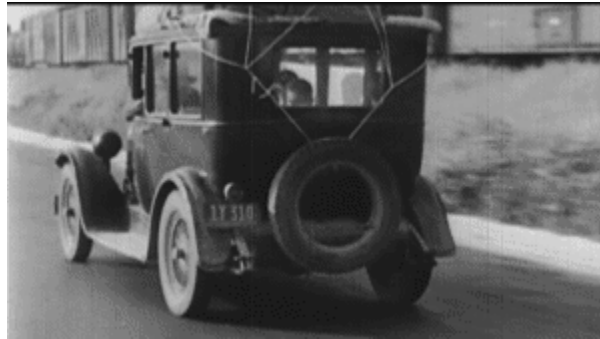


and according to the handbills they passed out down in that country,



you're supposed to have a wonderful chance to succeed in California.





*[Singing] I'm blowing down this old dusty road
I'm blowing down this old dusty road*

*I'm blowing down this old dusty road, lord, lord
And I ain't gonna be treated this way*



[Narrator] Back in Colorado, with the money from selling his horses in his pockets, Calvin Crabill's father loaded what he could into their sedan and a little two-wheeled trailer,



and joined the stream of cars rattling down Highway 66, with his 11-year-old son and asthmatic wife.



[Calvin Crabill, Prowers County, CO] When you came down that grade in San Bernardino,



my mother, she was so happy, and you saw the green valley there -- that was a beautiful, beautiful sight.



You see the trees. You see the trees.



So my mother that day picked an orange, a ripe orange, and ate it,



and that was something for her.





[Donald Worster, Historian] The migration out of the Great Plains in the 1930s ...



was one of the biggest folk migrations in American history.



It dwarfs the movement along the Oregon trail in the 19th century,



the covered wagon era,



which we've so idealized and romanticized.



But we've forgotten this migration of the 1930s. Nobody celebrates it.



There are no California Trail associations.



We're ashamed of it, basically, because it was a migration of the defeated.



[Narrator] Out in Oakland, California, Harry Forester, who had left his family in Goodwell, Oklahoma, was now working a variety of jobs,



sometimes making a dollar a day and sending as much of it as possible back to his ailing wife and children.



Everything he held dear was half a continent away. The separation from his family made him miserable,



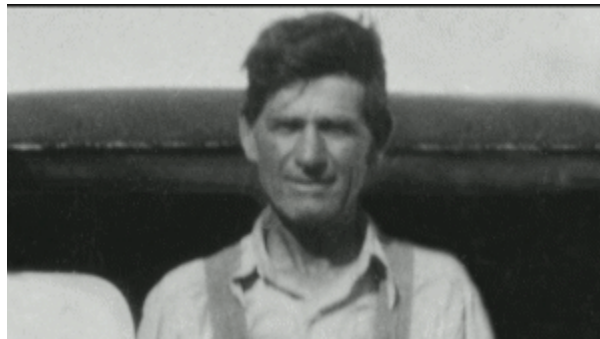
and then came news from home that added to his woes -- one of his five sons, Slat, had come down with dust pneumonia.



[Louise Forester Briggs, Texas County, OK] My oldest brother god dust pneumonia, was at death's door, and my dad didn't know whether to come home or not because he thought he was gonna die.



I imagine he was absolutely the loneliest man on the planet.



[Narrator] Forester decided his family should join him in Oakland as soon as they could.



Back in Goodwell, the Forester children mobilized for the move.



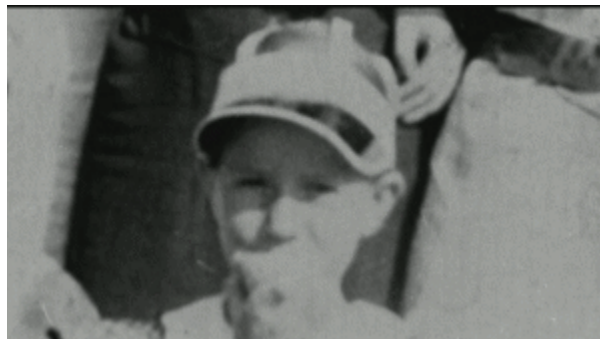
They added hoops and tarps and a hand-built box for storing and serving food to a 1928 Chevy truck, converting it into a modern-day covered wagon.



But Mrs. Forester's aged and blind mother refused to leave, so Slat, who had recovered, was left behind to care for her.



They made their goodbyes, and brother Clois took the wheel with his frail mother in the front seat next to him. Then the other seven Forester children scrambled aboard, and they set off for California.



[Louise Forester Briggs, Daughter, Texas County, OK] It was pretty exciting for me because it was hope ... in a hopeless little heart.



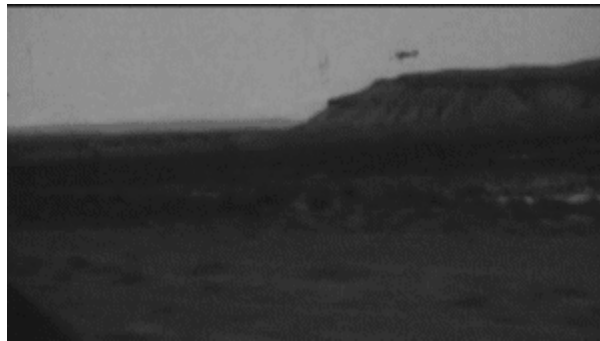
We were going to California and have oranges and stuff, you know? And we would have fruit, and we would live happily. And it was just an exciting time. I just couldn't wait to get there.



[Shirley Forester McKenzie, Daughter, Texas County, OK] We sat in different places. We'd move around.



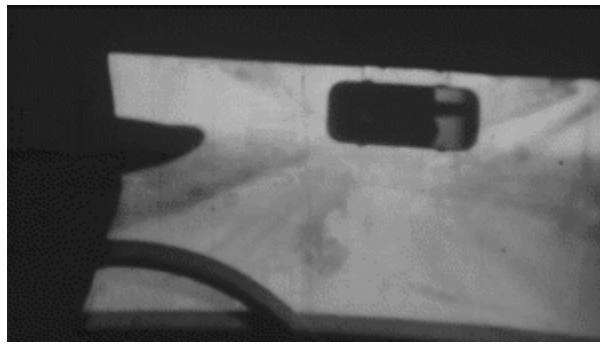
The mattresses were rolled up, and stuffed in the truck bed, so we had those soft mattresses to sleep on.



[Louise Forester Briggs, Daughter, Texas County, OK] And my favorite spot seemed to be right over the wheel of the truck.



And we had the side tarps rolled up so you could see out. And one thing I remember, I was so glad -- we saw a weeping willow tree, and I'd never seen one.



[William Forester, Son, Texas County, OK] My brother was obsessed ...



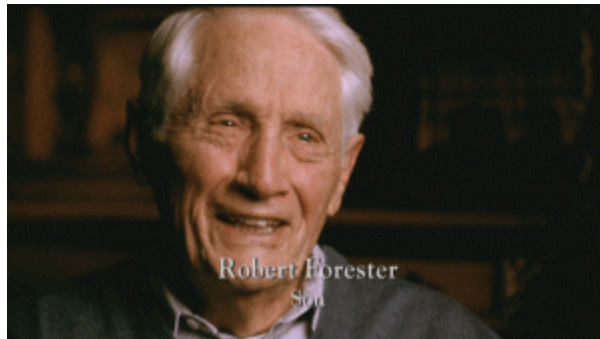
with the potential that we might run out of gas,



so he stopped at damn near every gas station to top off the tank.



It was a little four-banger Chevy, and he drove it at about maximum of 35 miles an hour, and it took a long time.



[Robert Forester, Son, Texas County, OK] He had a goal in mind and that was to get this crew safely through. He was a nervous Nelly anyway, and he had lots of tribulations when he had to take this job --



well, because it was a big job. He's a 21-year-old guy, and he's taking his sick mother and a bunch of kids all the way to California,



across that big ol' desert.



It was a ... a real worry for him, I know.



[Narrator] They were all anxious about their mother's fragile health, which prompted them to stop a number of times so she could recoup her strength, especially when a dust storm overtook them in New Mexico.



[William Forester, Son, Texas County, OK] And she was worn down by the travails of the previous years,



and she was just in bad shape, and she was very feeble all along the way.



Instead of camping one night in New Mexico, we used a little of our scarce money to rent a motel so that she could be sleeping out of the dust.



[Narrator] But in Eastern Arizona, despite her condition, she insisted that Clois detour through the Painted Desert and Petrified Forest, which she had always yearned to see.



[William Forester, Son, Texas County, OK] My mother's health got worse after that.



We felt that it was necessary to just stop and not travel so that she could have time being still and resting in a cool, shaded place.



[Narrator] Farther on, they had to descend to the Colorado river on a winding road unlike anything on the Southern Plains.



[Louise Forester Briggs, Daughter, Texas County, OK] But I had a great disappointment when we went and hit the California border down at Needles.



[Laughing] You're in the desert, and I felt, oh ..., I just went, "Oh, my God, no," because I was just broken-hearted, because I thought there'd be orange groves right there, you know.



[Narrator] They crossed the Mojave Desert at night,



then turned north, up the Central Valley, and finally made it to Oakland, on the moist San Francisco Bay,



where Harry Forester had rented a house, and was waiting anxiously for them to arrive.



[Louise Forester Briggs, Daughter, Texas County, OK] And we got into Oakland, and we went to Lake Merritt,



and went up Grand Avenue, and turned right on Moraga and went up Moraga Avenue.



We're in the hills now, in the Oakland Hills, which are pretty steep for someone like us.



[William Forester, Son, Texas County, OK] When we stopped in the canyon, telephoned that we were coming up the road, we were a mile and a half from the house, we started driving, and dad started hustling,



and he raced down to the bottom of the canyon so that he was standing beside the road as we came driving by ten minutes later.



[Louise Forester Briggs, Daughter, Texas County, OK] And my dad met us at the corner of Pine Haven Road and Heather Ridge Way, and he had a house rented on the corner just up the corner a ways.



I remember sitting in the back of the truck ...



waiting for my dad to come and greet us while he was greeting mom and my brother and whoever had been riding with them.



[William Forester, Son, Texas County, OK] And he went around to the back, and he took each of the kids in turn, and he gave us a hug, and we laughed, [choking up] and it was great.



[Louise Forester Briggs, Daughter, Texas County, OK] And then he came around back and started lifting us out one at a time and giving us a hug and putting us down. And I looked around, and I thought, "Oh, yes, we have come to Canaan Land."



[Narrator] Then Harry Forester, who had once dreamed of amassing so much land he could bestow each of his sons with one square mile of rolling Oklahoma prairie, showed them all their new home --



a rented house of three rooms, on a hill so steep the buildings needed stilts to be level.



[Robert Forester, Son, Texas County, OK] And there were big pine trees -- oh, 60-, 70-foot, 80-foot tall, big trees, and that was spectacular. It wasn't Oklahoma, you know?



[Laughing] Toto, we aren't in Oklahoma anymore. [Laughing]



[Shirley Forester McKenzie, Daughter, Texas County, OK] [Laughing] Especially to a fair-skinned, freckle-faced, red-headed youngster that I was, where that hot wind always just burned me.



The mist and the rain was so light often that we kids would go off to school that first year without a hat or a coat or anything, because we just loved the feeling of that moisture on us.



We were parched, too.



[Wayne Lewis, Beaver County, OK] There weren't any crops. It was dry, and so we didn't get any crops.



One of those years, we put our entire wheat crop in one wagon, which was maybe 50 bushels.



[Clarence Beck, Cimarron County, OK] They were good people.



There was nothing about the population that was bad. Everybody was hard-working, trying to make an honest living,

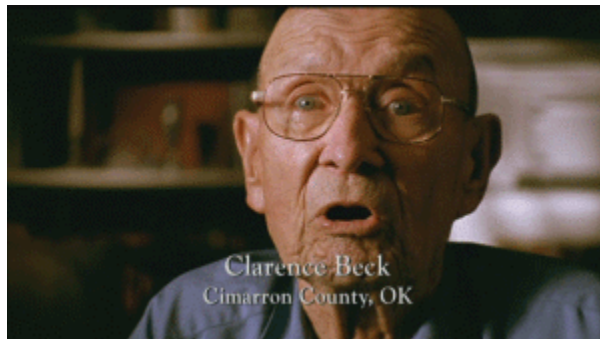




and nature just wouldn't let them do it. So there were failures,



and there were also people that were awful hard to knock off of the bush.



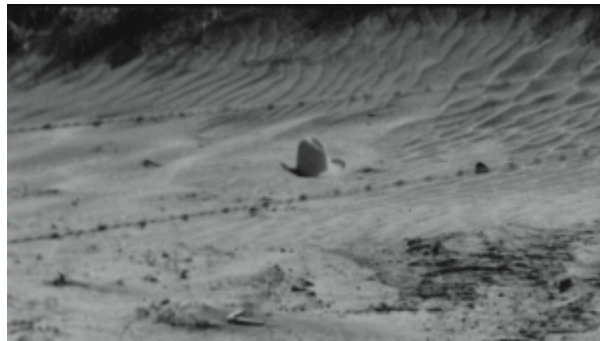
And it ended up a Depression, the Dust Bowl didn't get them all. It left quite a few. But it left the hardy ones.



[Pauline Durrett Robertson, Potter County, TX] Oh, there were many jokes about the dust, of course. So that we laughed so we wouldn't cry, I guess.



One of them was, a rancher, after a big dust storm, walked out to see about his land, and he was trying to find the barbed-wire fence that had been covered with dirt. But he saw the tops of it, and there was the cowboy's hat over there.



So he walked over and picked up the cowboy's hat, and underneath was a cowboy.



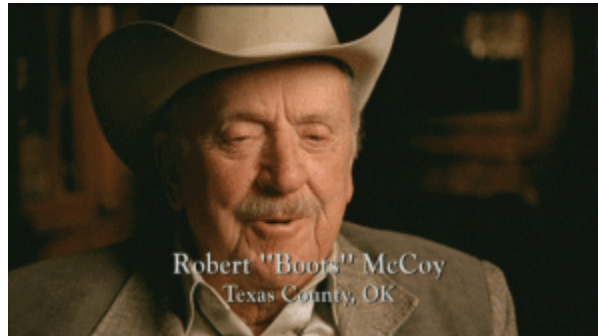
And he said, "Oh, my goodness. Aren't you in trouble there?" He's covered with dust.



And he said, "Well, I think I'm gonna be okay, but this horse I'm riding is in a little trouble."



[Narrator] By now, those who remained in the Dust Bowl had found that one way to deal with what was happening to them was to poke fun at it.



[Robert "Boots" McCoy, Texas County, OK] Well, there's an old saying there that one of the old-timers was telling the people that ...



they'd had a chain wrapped around a corner post, and said when that chain got sticking out straight, that was a pretty good wind, but when it went to snapping the links off, it was damn windy.



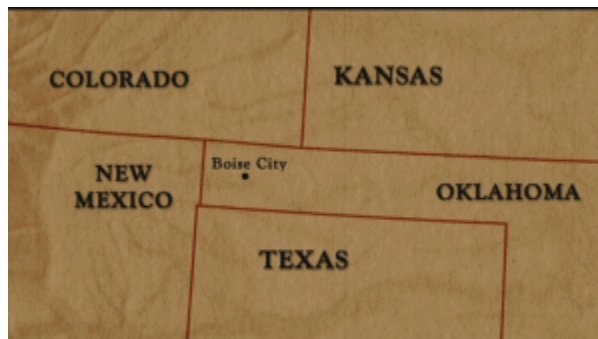
[Laughing] Of course, that wasn't true. That was just a saying. [Laughing]



[Narrator] 1936 would prove to be as dry as 1935,



with even more dust storms.



In April, an outsider showed up in Boise City.



Arthur Rothstein was 21 years old, the son of Jewish immigrants, born and raised in New York City.



He was in No Man's Land to take photographs for the federal government's resettlement administration.



Rothstein's boss, Roy Stryker, believed that pictures could be a powerful tool to show not only the multitude of problems the nation was facing,



but what the government was doing about them.



Over the course of seven years, as the Agency became part of the Farm Security Administration,



Stryker would launch an unprecedented documentary effort,



eventually amassing more than 200,000 images of America in the 1930s,



taken by a talented cadre of photographers, including Walker Evans,



Russell Lee,



Marion Post Walcott,



John Vachon,



and Dorothea Lange.



[Timothy Egan, Writer] And he sent them out there with a very simple set of instructions -- I want to see their eyes. I want to see their faces. I want to see emotion.



I want people to look at these pictures and not see abstraction.



I want them to see folks struggling in the land.



[Narrator] Prior to arriving in Oklahoma, Arthur Rothstein's assignment had taken him on a nationwide tour of the Depression.



He had documented rural people being dispossessed to create Shenandoah National Park,



desperate tenant farmers in Arkansas,



hard-luck ranchers in Montana,



and slum dwellers in St. Louis.



But the most distressing situation he ever encountered, he remembered later, was what he saw driving through the Dust Bowl.



"It was like a landscape of the moon," he said,



populated by "hard-working people who, through no fault of their own, needed assistance,



and the only place they could get that assistance was from the government."



About fourteen miles south of Boise City, he came across Art Coble, digging out a fence post from a sand drift.



Rothstein chatted with him and his two young sons, snapped a few pictures,



and was getting back into his car when the wind suddenly picked up.



Looking back, he saw them bending into the storm, pointed his camera at them,



and clicked the shutter. The image that Rothstein captured touched emotional chords with everyone who saw it,



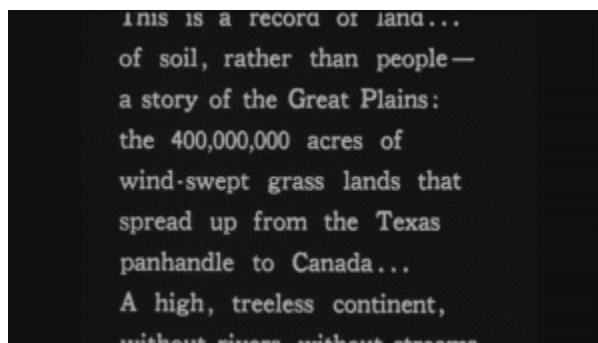
becoming the iconic picture of the Dust Bowl, and one of the most widely reproduced photographs of the 20th century.



In addition to hiring photographers, the federal government also underwrote a documentary film, and that summer it premiered at the Mission Theatre in Dalhart, Texas.



"The Plow That Broke the Plains,"



directed by Pare Lorentz,



was meant to describe the causes of the Dust Bowl and what Roosevelt's New Deal was trying to do about it.



[Film Narrator] The grasslands -- a treeless, windswept continent of grass ...



a country of high winds and sun, high winds and sun.

THE PLOW THAT BROKE THE PLAINS

written and directed by Pare Lorentz

© MCMXXXVI by Pare Lorentz -- Resettlement Administration

PROLOGUE

This is a record of land...
of soil, rather than people—
a story of the Great Plains:
the 400,000,000 acres of
wind-swept grass lands that

[Transcribed from the movie by Tara Carreon]

PROLOGUE: This is a record of land, of soil, rather than people -- a story of the Great Plains: the 400,000,000 acres of wind-swept grass lands that ...

spread up from the Texas
panhandle to Canada...
A high, treeless continent,
without rivers, without streams...
A country of high winds,
and sun...
and of little rain...

spread up from the Texas panhandle to Canada. A high, treeless continent, without rivers, without streams.
A country of high winds, and sun, and of little rain.

By 1880 we had cleared
the Indian, and with
him, the buffalo, from
the Great Plains, and
established the last frontier...
A half million square
miles of natural range...

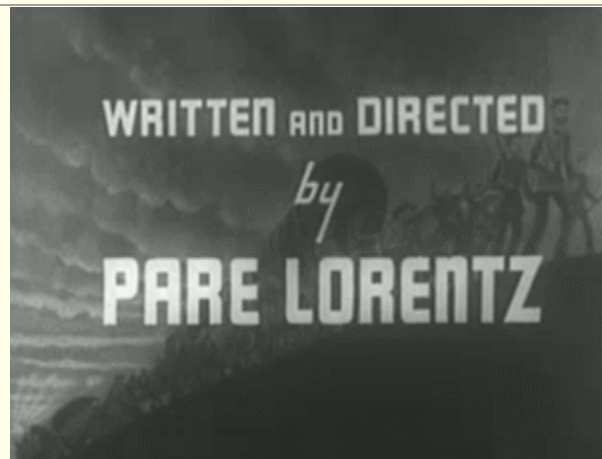
By 1880, we had cleared the Indian, and with him the buffalo, from the Great Plains, and established the last frontier. A half million square miles of natural range.

him, the buffalo, from
the Great Plains, and
established the last frontier...
A half million square
miles of natural range...
This is a picturization of
what we did with it.

This is a picturization of what we did with it.



THE PLOW THAT BROKE THE PLAINS
A U.S. DOCUMENTARY FILM
COPYRIGHT MCMXXXVI BY PARE LORENTZ -- RESETTLEMENT ADMINISTRATION
WESTERN ELECTRIC NOISELESS RECORDING
RECORDED BY EASTERN SERVICE STUDIOS, NEW YORK, N.Y.



WRITTEN AND DIRECTED BY PARE LORENTZ



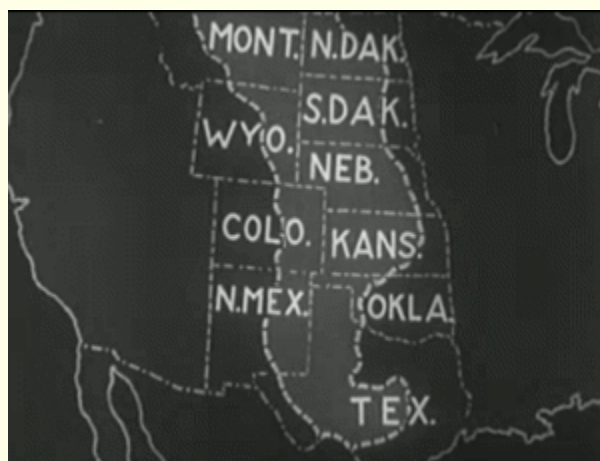
PHOTOGRAPHY: RALPH STEINER; PAUL IVANO; PAUL STRAND; LEO T. HURWITZ
MUSIC: COMPOSED BY VIRGIN THOMSON; CONDUCTOR: ALEXANDER SMALLENS



NARRATOR: THOMAS CHALMERS
RESEARCH EDITOR: JOHN FRANKLIN CARTER, JR.
FILM EDITOR: LEO ZOCHLING
SOUND TECHNICIAN: JOSEPH KANE



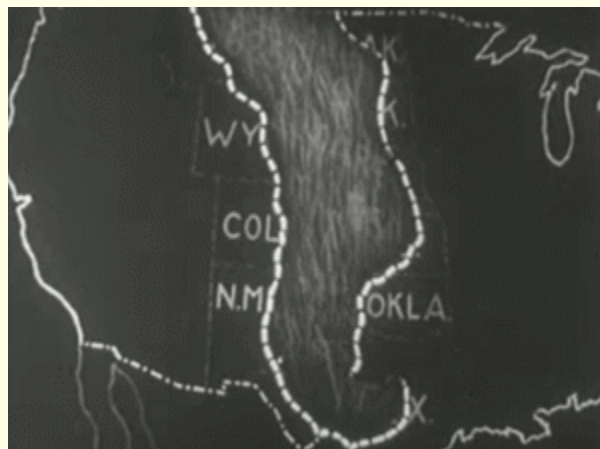
[GREAT PLAINS AREA]



[MONTANA; N. DAKOTA; WYOMING; S. DAKOTA; NEBRASKA; COLORADO; KANSAS; N. MEXICO; OKLAHOMA; TEXAS]



[625,000 SQUARE MILES
400 MILLION ACRES]





[Narrator] The Grasslands: the treeless, windswept continent of grass ...



stretching from the broad Texas Panhandle, up through the mountain reaches of Montana, to the Canadian border.



A country of high winds and sun, high winds and sun.



Without rivers; without streams; with little rain.





[Music] [Crescendos]



[Narrator] First came the cattle ...



an unfenced range 1,000 miles long, an uncharted ocean of grass ...



the Southern range for winter grazing, and the mountain plateaus for summer.

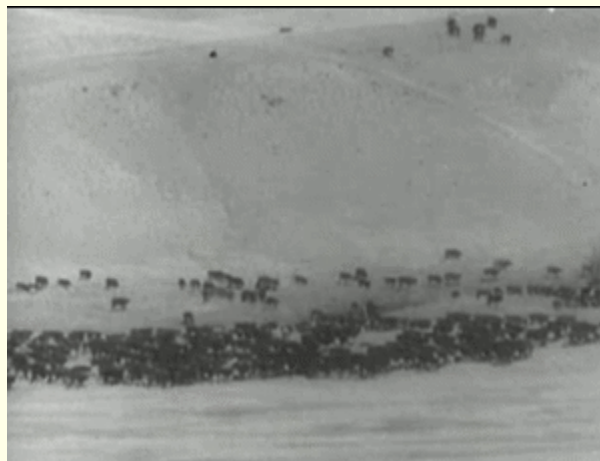


It was a cattleman's paradise.





Up from the Rio Grande, in from the rolling prairies ...



down clear from the Eastern highlands ...



the cattle roamed into the old Buffalo range. Fortunes in beef. For a decade, the world discovered the grasslands, and poured capital into the Plains. The railroads brought markets to the edge of the Plains.



Land syndicates sprang up overnight, and the cattle rolled into the west.







The railroad brought the world into the plains. New population, new needs crowded the last frontier.



Once again, the plowman followed the herder ...



and the pioneer came to the Plains.

[Trumpets]

[Narrator] Make way for the plowman!

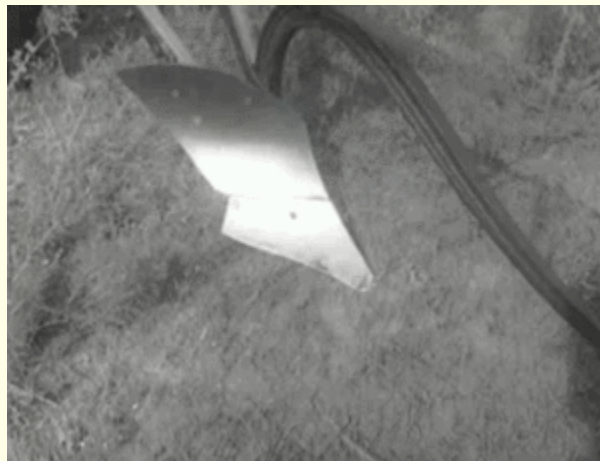




The first fence.



Progress came to the Plains.







High winds and sun, high winds and sun. A country without rivers, and with little rain. Settler: plow at your peril!



200 miles from water!



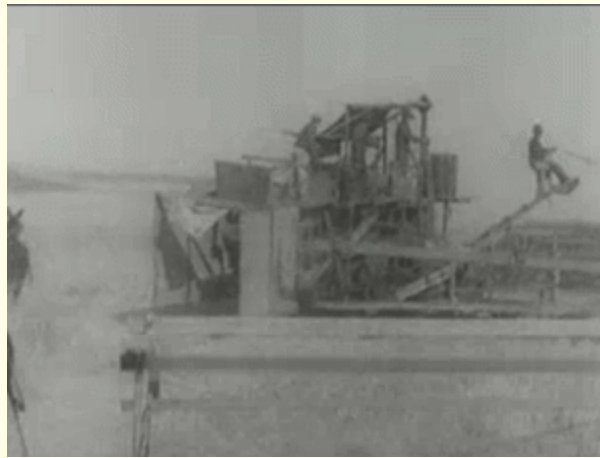
200 miles from town!



But the land is new!

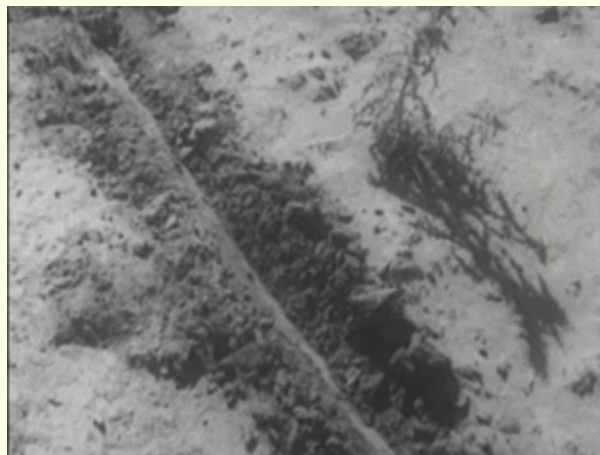
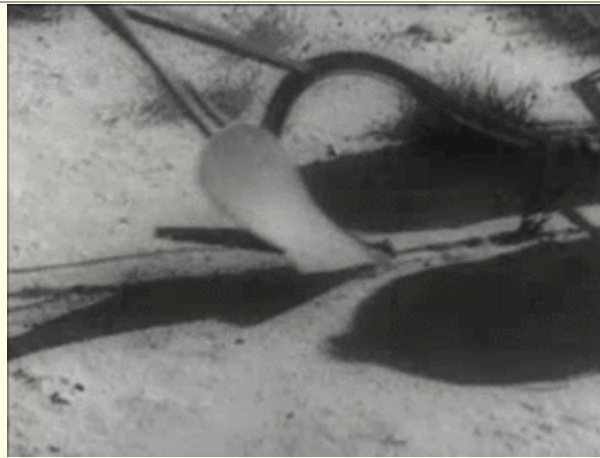






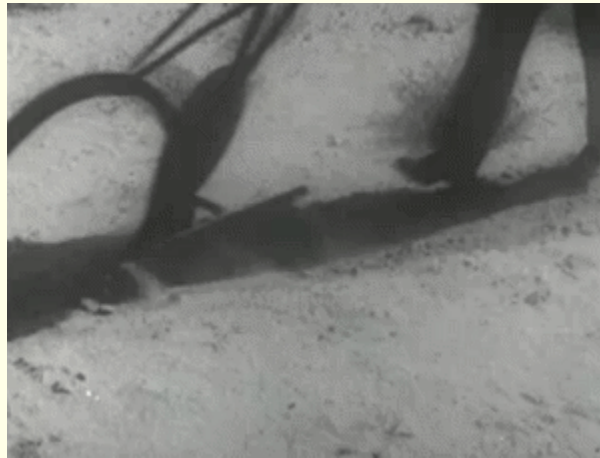








Many were disappointed.



The rains failed, and the sun baked the light soil.





Many left.



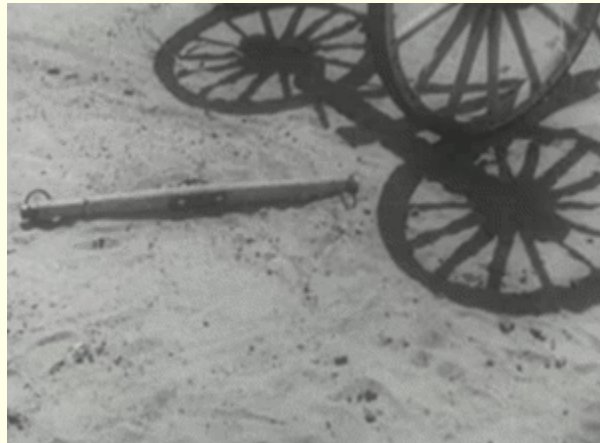
They fought the loneliness ...



and the hard years.



The rains failed them.





Many were disappointed.



[Farmer] [Angrily kicks stick across the ground]



[Narrator] But the great day was coming!



A day of new causes! New profits!



New hopes!



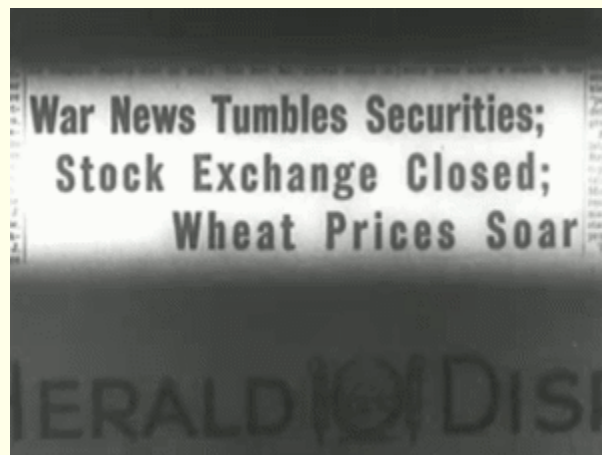
[EXPLOSION]



[TRUMPET]



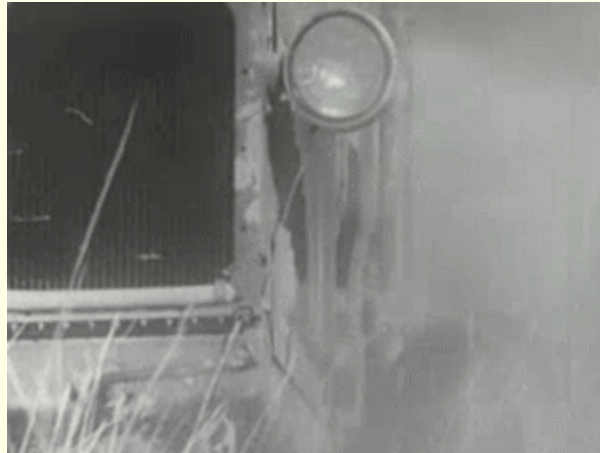
[HERALD DISPATCH: ENGLAND DECLARES WAR ON GERMANY. BELGIUM INVADED. FRENCH WIN AT SEA.]



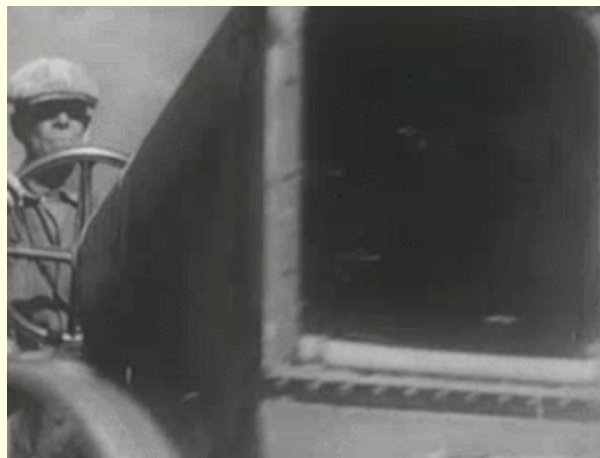
[WAR NEWS TUMBLES SECURITIES; STOCK EXCHANGE CLOSED; WHEAT PRICES SOAR.]

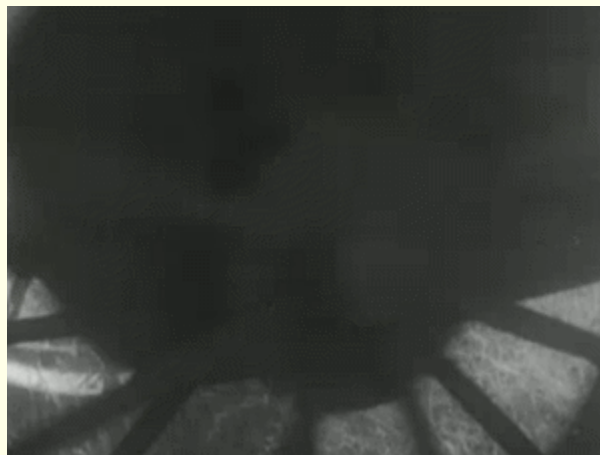


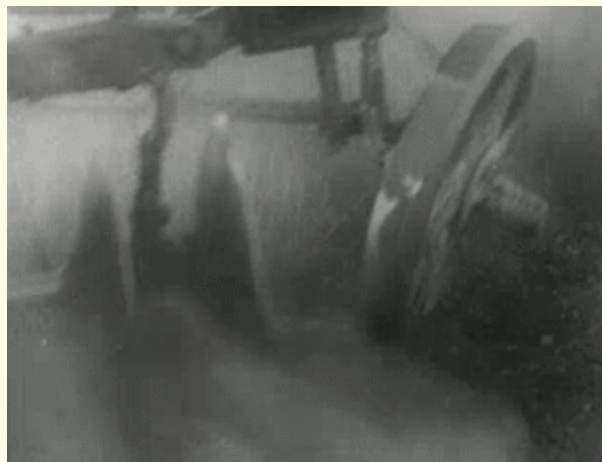
[WAR DRUMS]



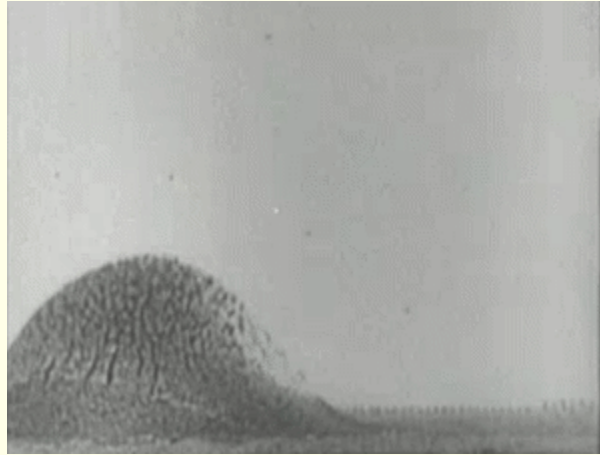
[FARMERS DRIVE THEIR TRACTORS]



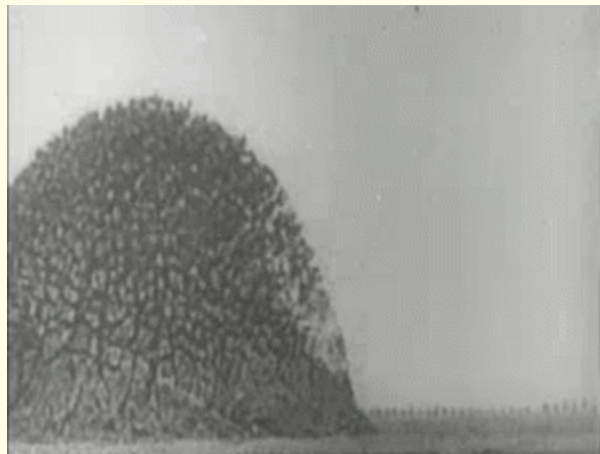


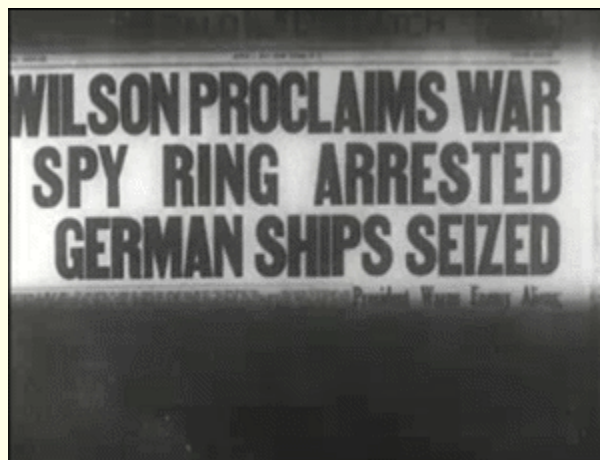
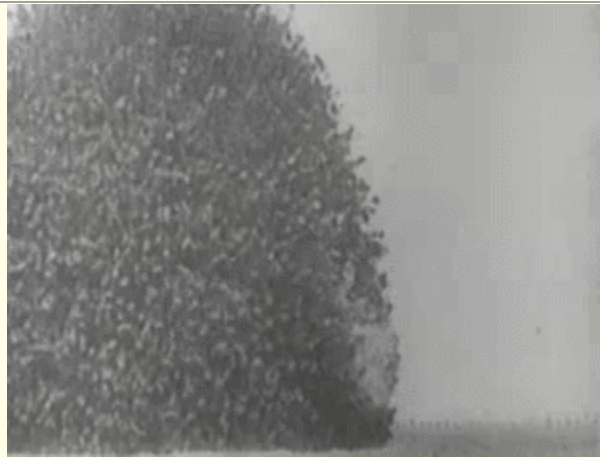




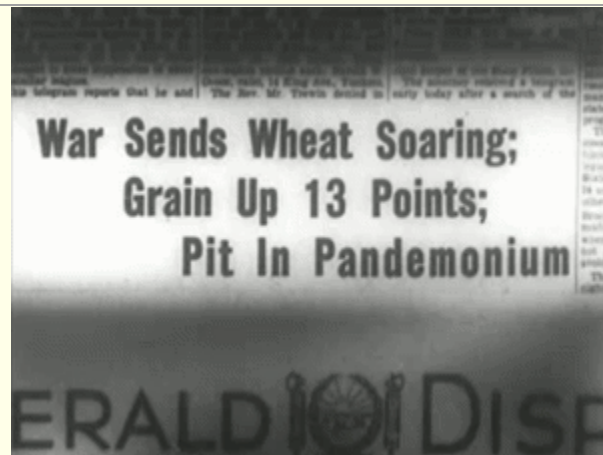


[EXPLOSION]





[WILSON PROCLAIMS WAR. SPY RING ARRESTED. GERMAN SHIPS SEIZED.]

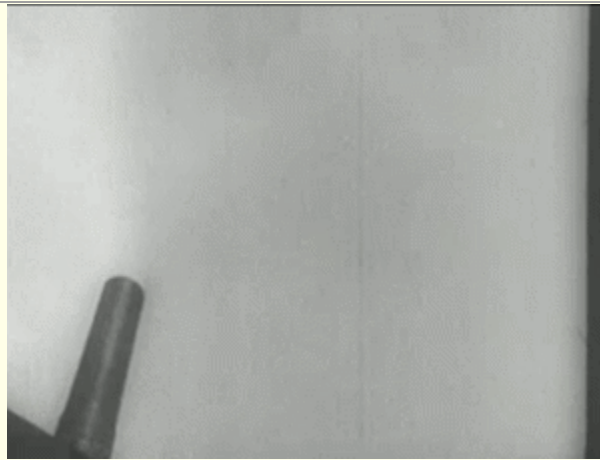


[WAR SENDS WHEAT SOARING; GRAIN UP 13 POINTS; PIT IN PANDEMONIUM.]

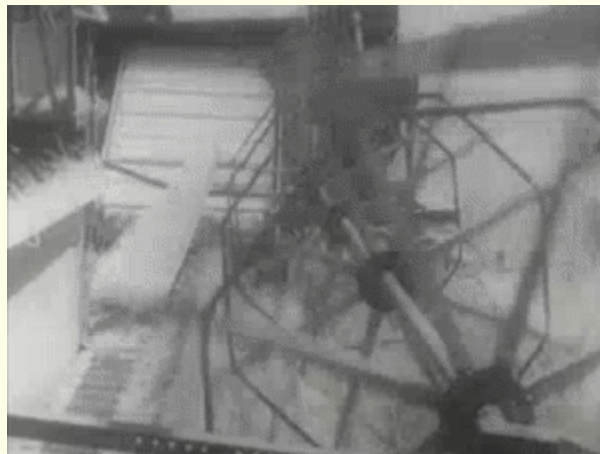


[FARMERS DRIVE THEIR TRACTORS]





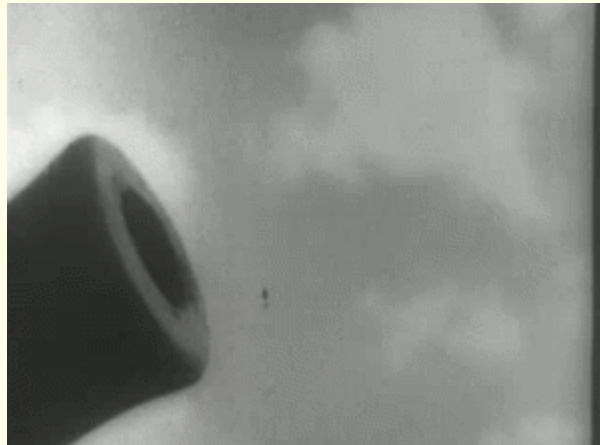
[CANNON EXPLODES]



[Narrator] Wheat will win the war! Plant wheat!



Plant the cattle feed!



[CANNON] [EXPLODES]





[Narrator] Plant wheat! Wheat for the boys over there!



Wheat for the allies! Wheat for the British! Wheat for the Americans!



Wheat for the French!



Wheat at any price!



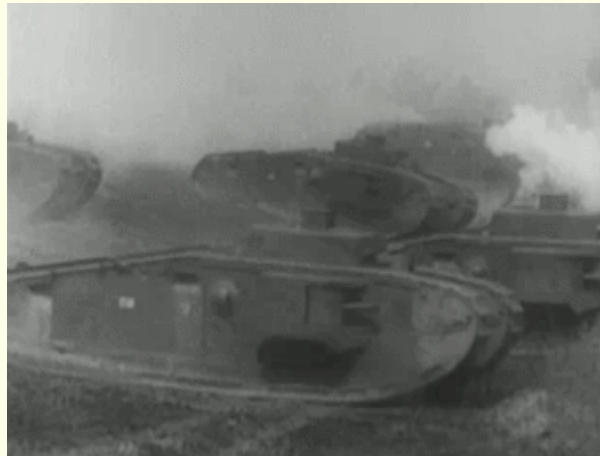
Wheat will win the war!



[SHOOTING]



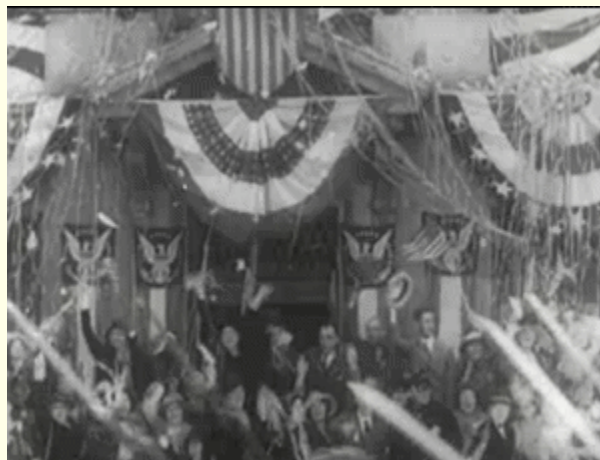
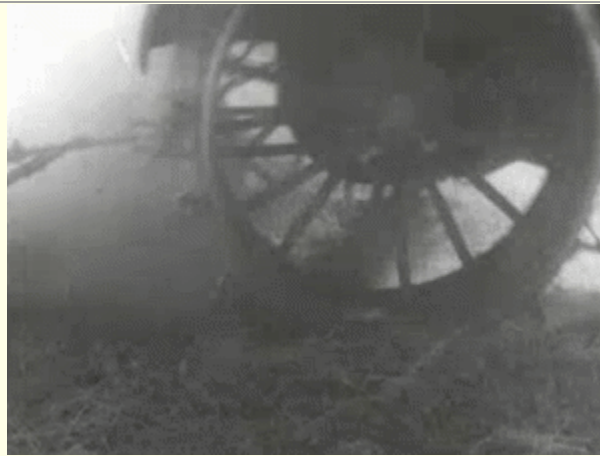
[FARMERS DRIVE THEIR TRACTORS]



[EXPLOSIONS]



[FARMERS DRIVE THEIR TRACTORS]

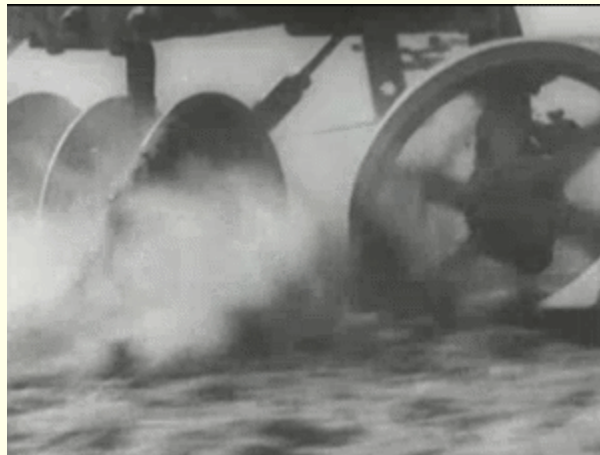


[WAR DRUMS]

[PEOPLE SHOUTING & CHEERING]



[FARMERS DRIVE THEIR TRACTORS]





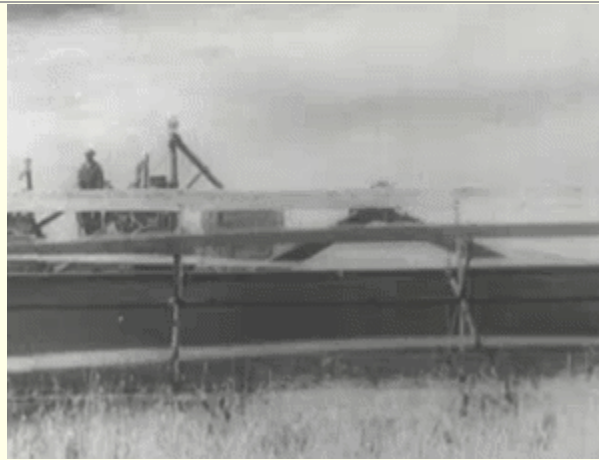
[JAZZ MUSIC]



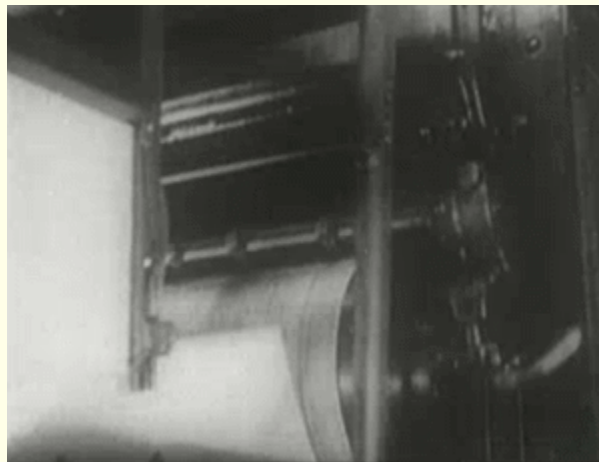
[Narrator] When we reaped the golden harvest, when we really plowed the Plains



[inaudible]. We had the manpower. We invented new machinery.



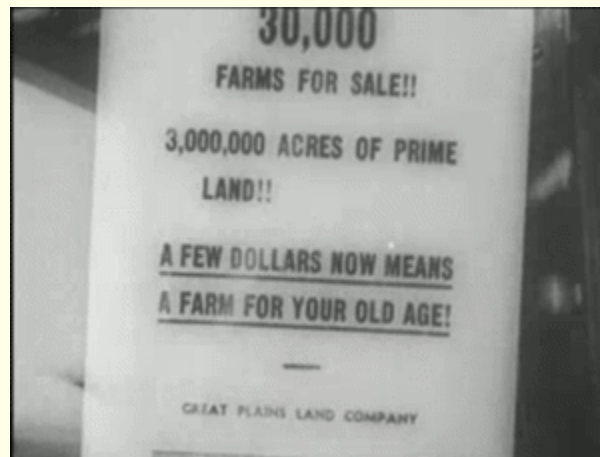
The world was our market.



*[SERVICE MEN!
FREE LAND!
GOVERNMENT HOMESTEADS IN THE PLAINS!!
OWN YOUR OWN FARM!!
APPLY
GENERAL LAND OFFICE
WRITE FOR PARTICULARS]*



*[RANGE LAND AT ROCK BOTTOM PRICES!
NEW SOD -- FINEST WHEAT LAND IN WEST!
A SECTION IN THE PLAINS -- YOURS FOR A DOWN PAYMENT!!
WESTERN CATTLE SYNDICATE]*



*[30,000 FARMS FOR SALE!!
3,000,000 ACRES OF PRIME LAND!!
A FEW DOLLARS NOW MEANS A FARM FOR YOUR OLD AGE!
GREAT PLAINS LAND COMPANY]*



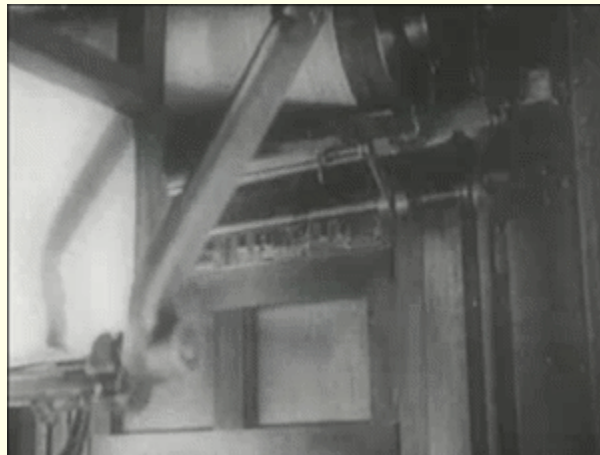
[Narrator] By 1933, the old grasslands had become the new wheat-lands.



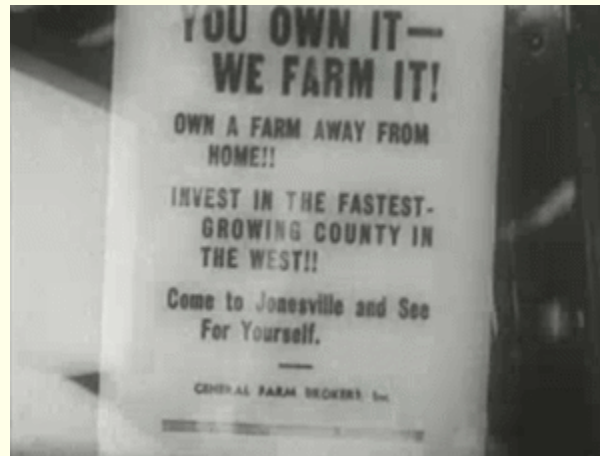
100 million acres ...



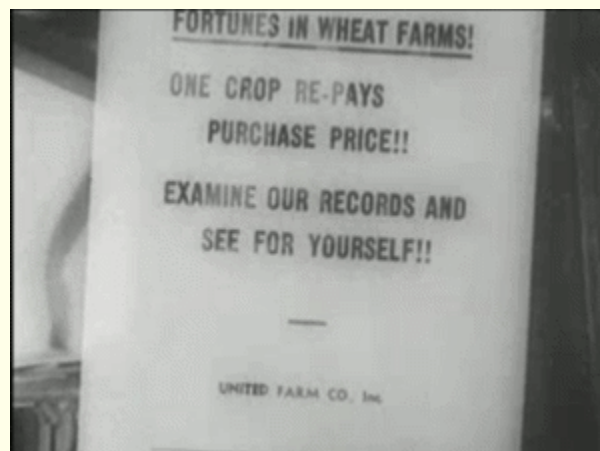
200 million acres.



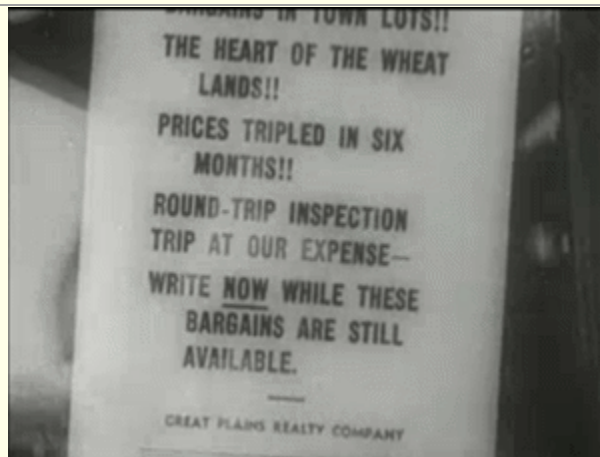
More wheat!



*[YOU OWN IT -- WE FARM IT!
OWN A FARM AWAY FROM HOME!!
INVEST IN THE FASTEST-GROWING COUNTY IN THE WEST!
Come to Jonesville and See For Yourself
GENERAL FARM BROKERS, INC.]*



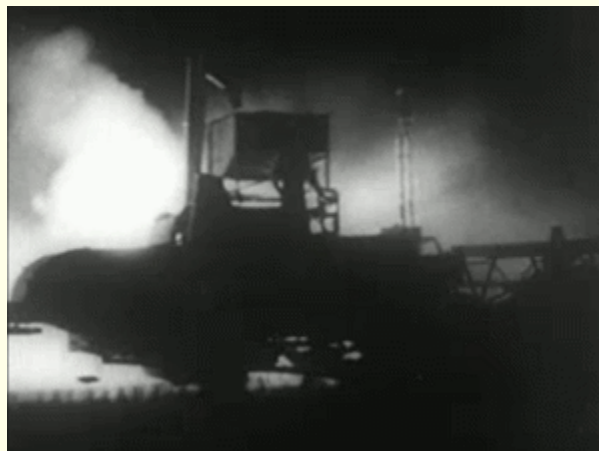
*[FORTUNES IN WHEAT FARMS!
ONE CROP RE-PAYS PURCHASE PRICE!!
EXAMINE OUR RECORDS AND SEE FOR YOURSELF!!
UNITED FARM CO., INC.]*

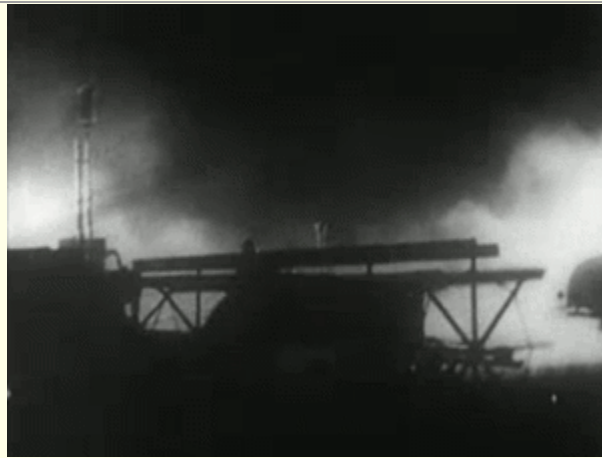


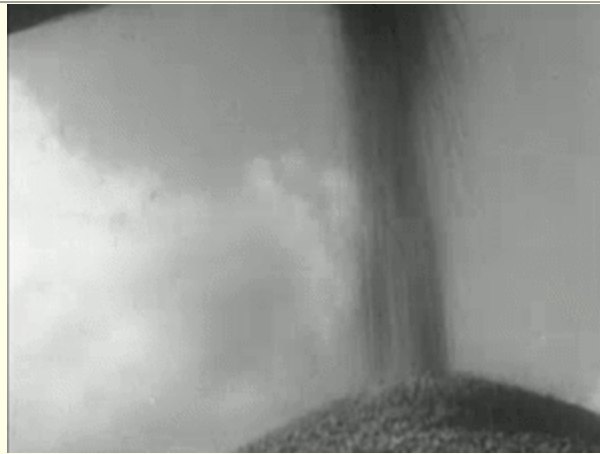
*[BARGAINS IN TOWN LOTS!!
THE HEART OF THE WHEAT LANDS!!
PRICES TRIPIED IN SIX MONTHS!!
ROUND-TRIP INSPECTION TRIP AT OUR EXPENSE --
WRITE NOW WHILE THESE BARGAINS ARE STILL AVAILABLE.
GREAT PLAINS REALTY COMPANY]*



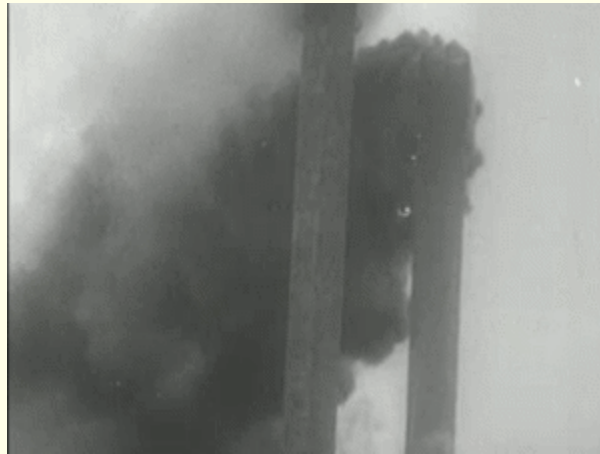
[FARMERS DRIVE THEIR TRACTORS AT NIGHT]

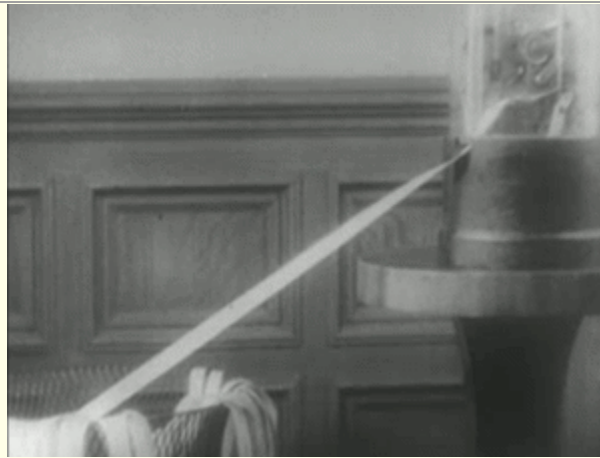




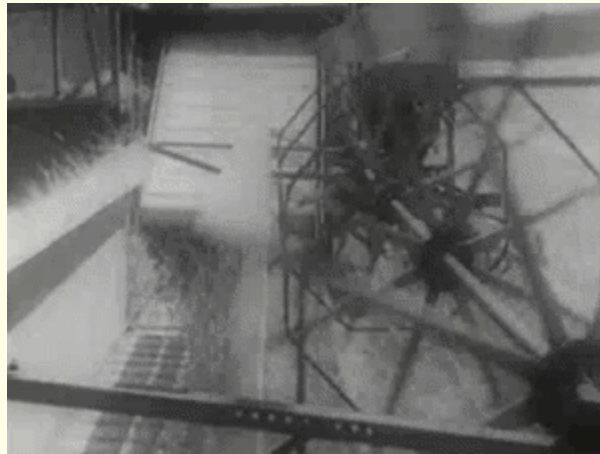


[GRAIN FLOWING]





[STOCK MARKET GOING UP]



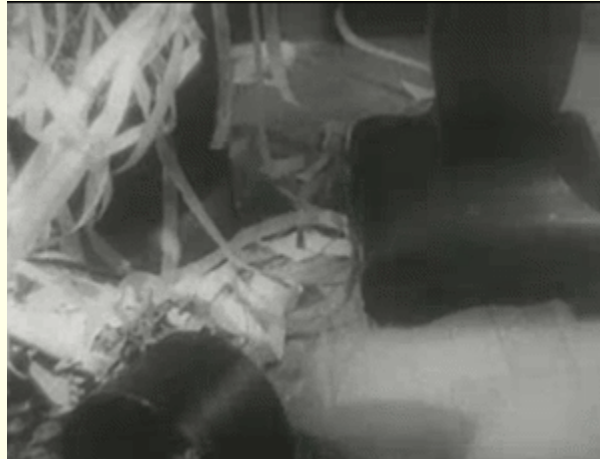


[GRAIN FLOWING]



[JAZZ MUSIC PLAYS WILDLY]





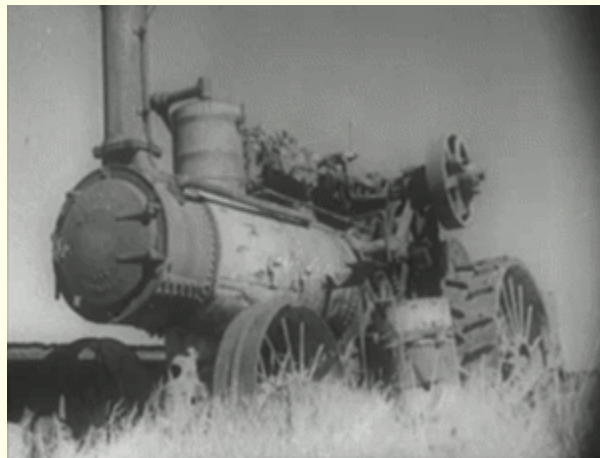
[STOCK MARKET CRASHES]

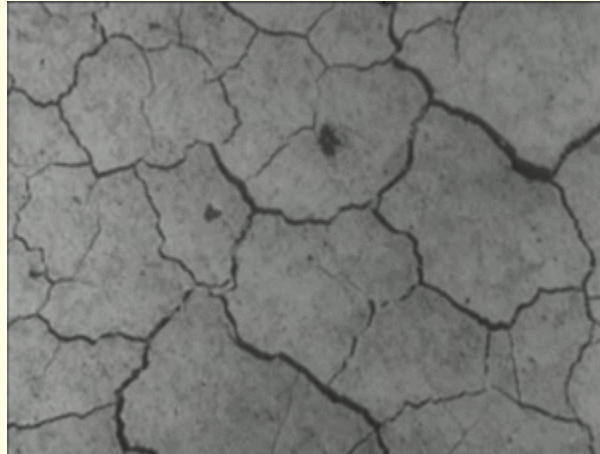
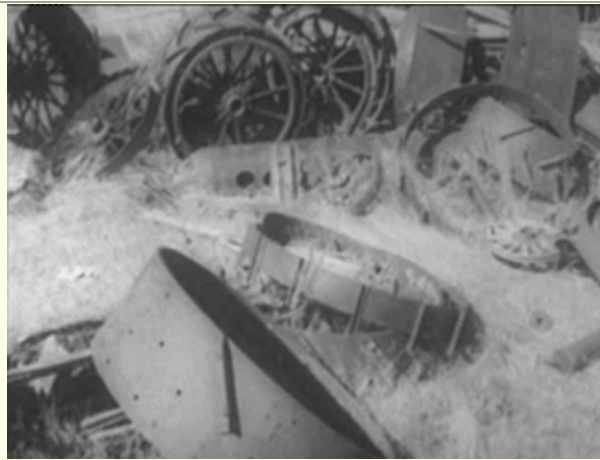


[SKULL AND BONES]



[IDLE MACHINERY]

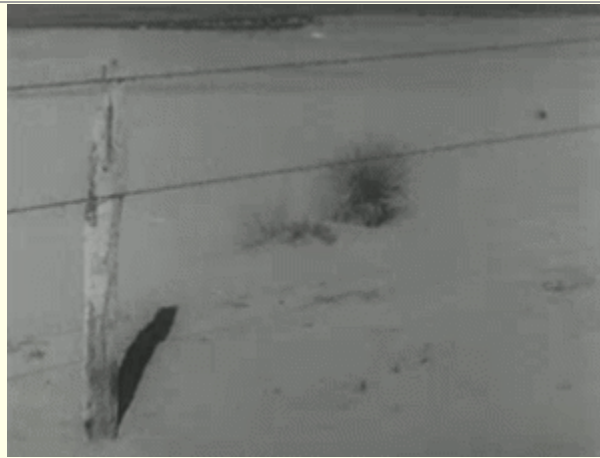




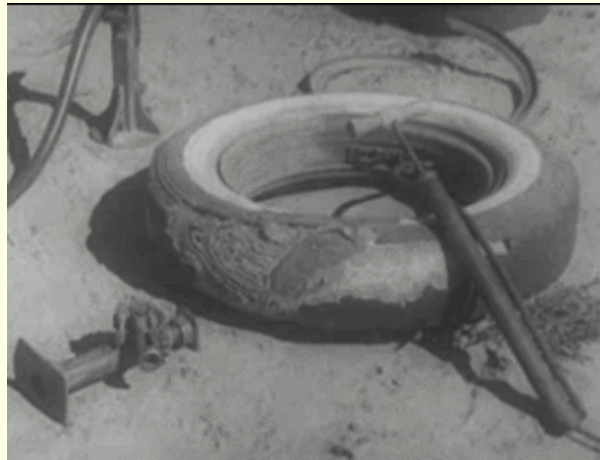
[SUN-BAKED EARTH]



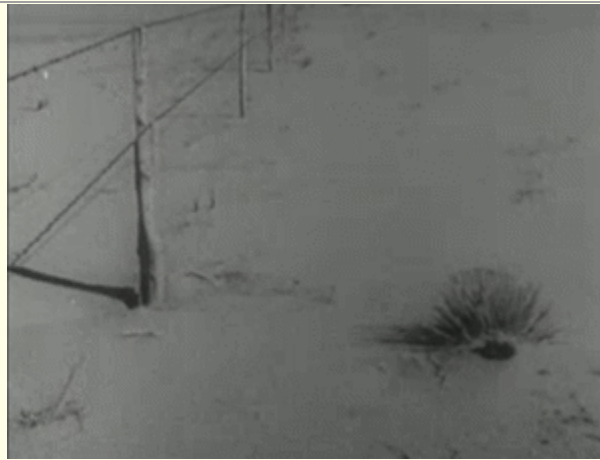
[Narrator] A country without rivers, without streams, with little rain.



Once again the rains held off, and the sun baked the earth.



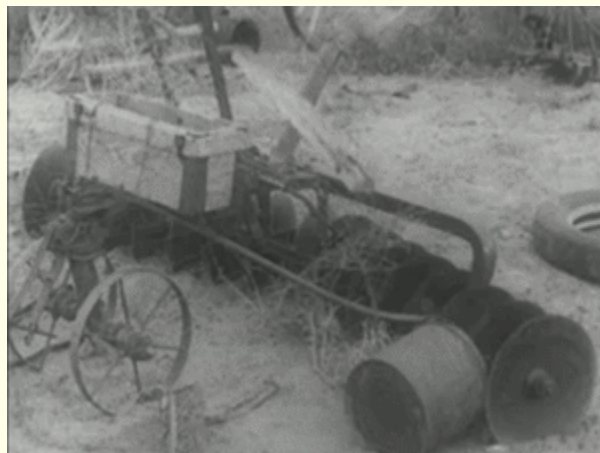
[DOG BREATHES HEAVILY]

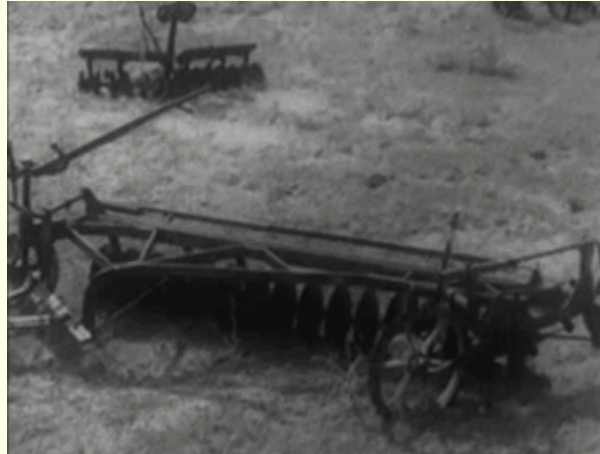


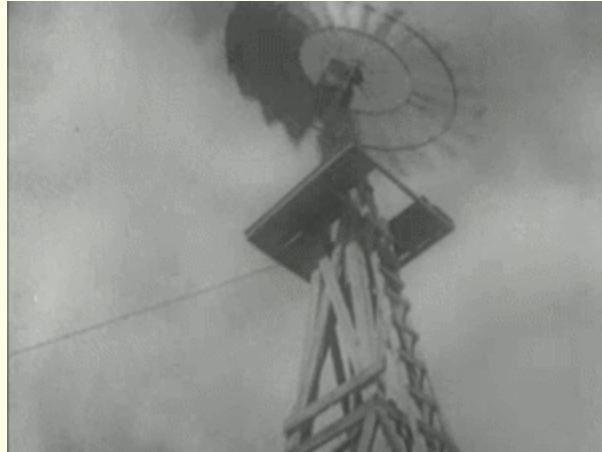
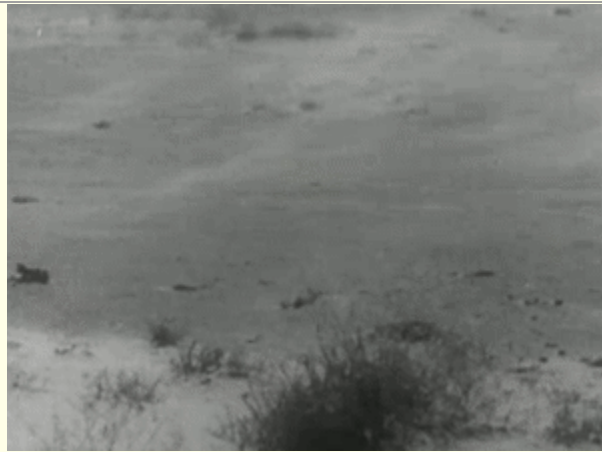
[Narrator] This time, no grass held moisture against the winds and the sun.



This time, millions of acres of plowed land lay open to the sun.







[LITTLE DUST DEVIL]



[HERALD]





[WIND BLOWING]



[CHILDREN RUN FOR COVER]





[WIND BLOWING]

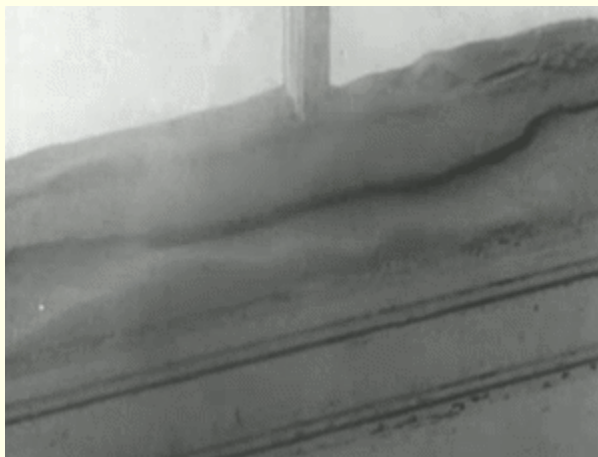


[MAN RUNS FOR COVER]





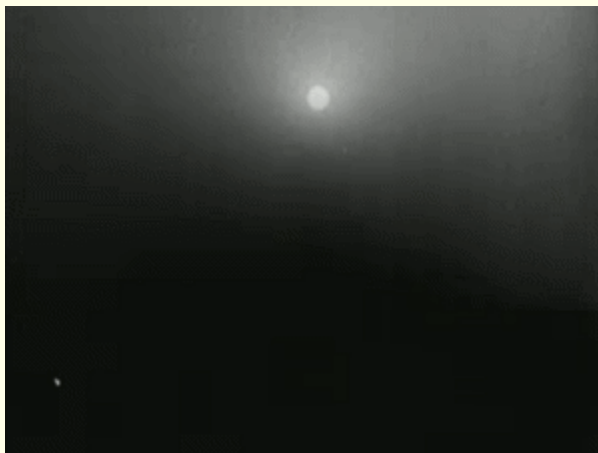
[WIND BLOWING]



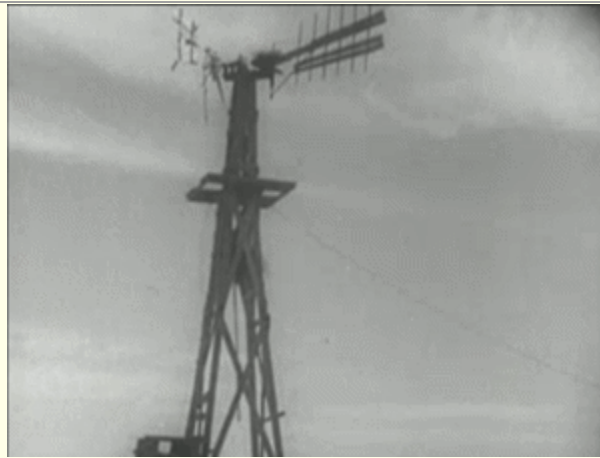




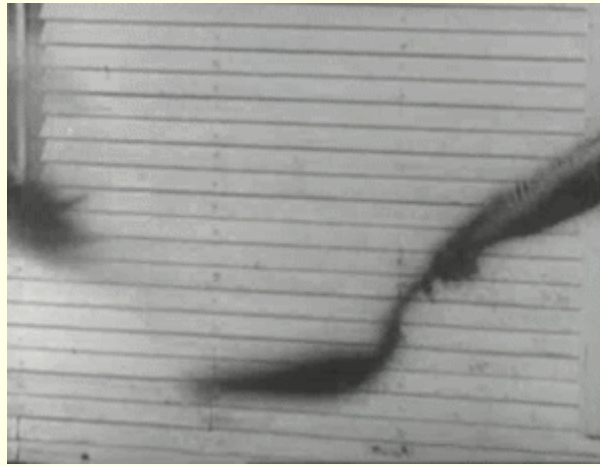
[ORGAN MUSIC]



[DAY AS DARK AS NIGHT]

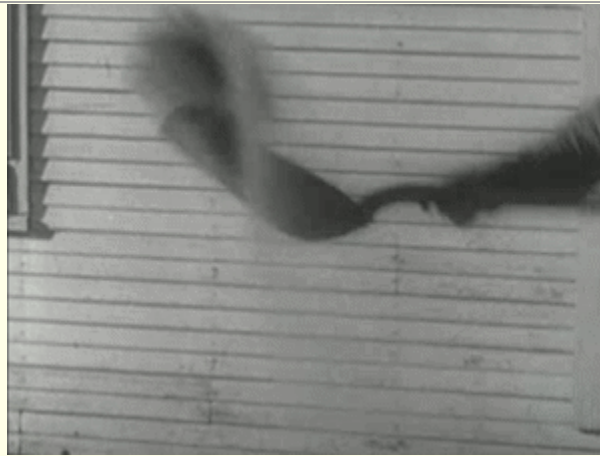


[Narrator] Baked out, blown out, and broke!



[Farmer] [Shoveling dust away from house]





[Narrator] Year in, year out ...



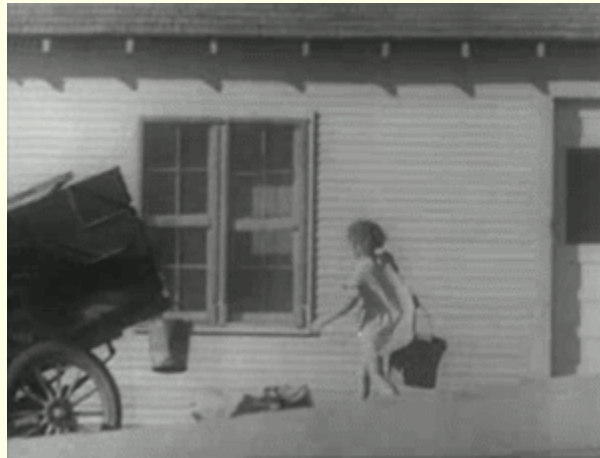
uncomplaining, they fought the worst drought in history.



Their stock choked to death on the barren land.



Their homes were nightmares of swirling dust night and day.



Many went to [inaudible]. But many stayed ...



until stock, machinery, homes ...



credit, food ...

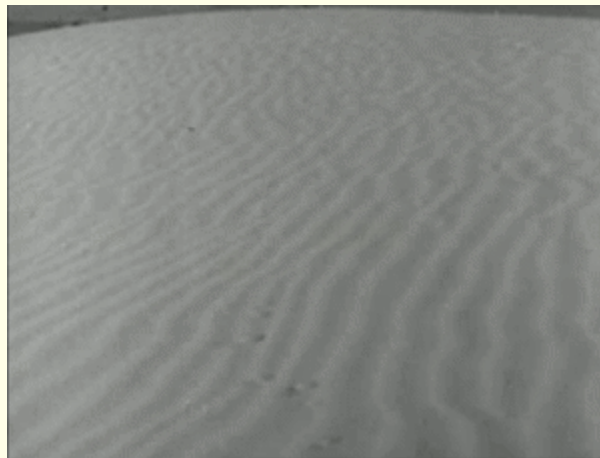


and even hope were gone.





On to the west! Once again they headed for the setting sun!





Once again they headed west.



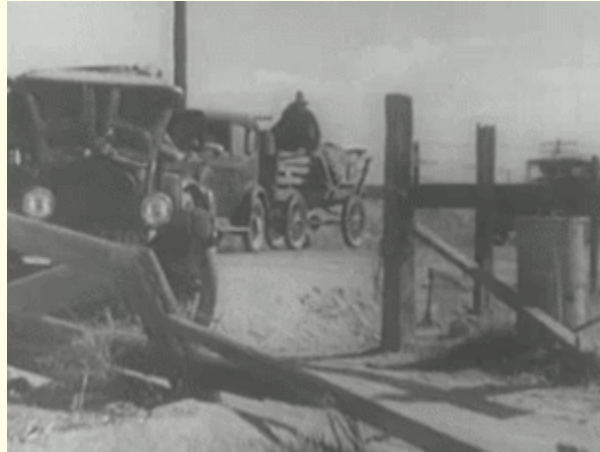
Last year, in every summer month, 50,000 people left the Great Plains ...



and hit the highways for the Pacific coast:



the last border.



Blown out, baked out, and broke.



Nothing to stay for ...



nothing to hope for.



Homeless, penniless, and bewildered ...



they joined the great army of the highway. No place to go, and no place to stop.



[Farmer] [Shakes dirt off his clothes]

[Narrator] Nothing to eat, nothing to do ...



their homes on four wheels ...



their work a desperate gamble for a day's labor in the fields along the highway ...



for the price of a sack of beans, or a tank of gas.



All they ask is a chance to start over, and a chance for their children to eat, to have medical care, to have homes again.



50,000 a month.



The sun and winds wrote the most tragic chapter in American agriculture.







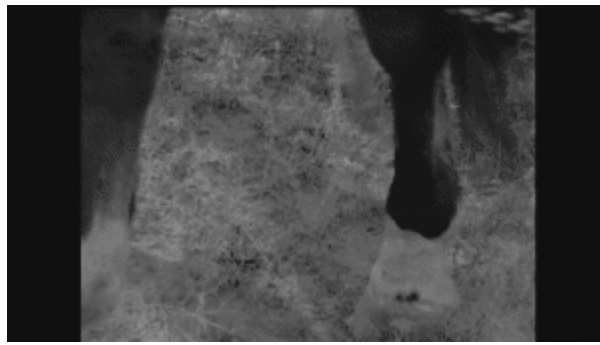
THE END



[Narrator] The film placed much of the blame of the Dust Bowl ...



on the arrival of the tractor to the Southern Plains,



and described how sturdy farmers ...



who had once slowly turned the soil ...



behind a team of mules,



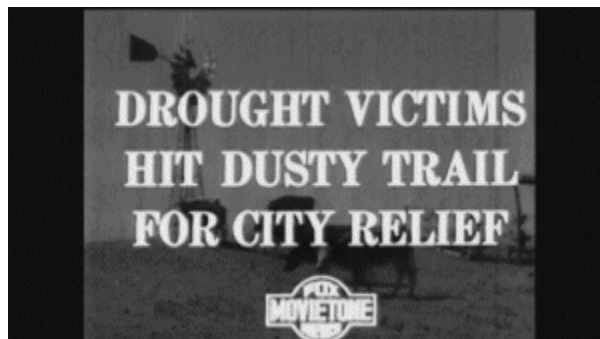
suddenly became a mechanized force arrayed against nature itself.



[Timothy Egan, Writer] The reaction inside the Dust Bowl itself was largely not good.



They didn't like seeing their land or themselves as characters on the bad end of a drama.



[DROUGHT VICTIMS HIT DUSTY TRAIL FOR CITY RELIEF]



[Pauline Durrett Robertson, Potter County, TX] Sometimes at the movies, the newsreel showed the Dust Bowl,



and that infuriated the local Boosters, because they said, "That's bad publicity.



We don't need that bad publicity."



The rest of us besides the Boosters thought, "Well, they got that right, and they're really telling it, what's happening to us -- they're really telling it right.



[Narrator] In the summer of 1936,



President Roosevelt took a 4,000-miles whistle-stop tour across the midwest and Northern Plains to see for himself the extent of the Nation's agricultural crisis.



[Franklin Roosevelt] My friends, I have been on a journey of husbandry.



I talked with families who had lost their wheat crop,



who lost their corn crop, lost their livestock, lost the water in their well,



and come through to the end of the summer without one dollar of cash resources,



facing a winter without feed or food,



facing a planting season ...

[Narrator] At the same time, Hugh Bennett, the head of the Soil Conservation Service, was on his own fact-finding tour ...



with a committee of experts expected to make a report to FDR on the future of the Great Plains.



Bennett's first stop was Dalhart, where Howard Finnell was making headway with the farmers he was trying to convert.



Earlier in the year, Finnell had petitioned Secretary of Agriculture Henry Wallace for \$2 million in emergency funds

...



to offer incentives of twenty cents an acre for those who would try his method of contour plowing on their own land.



Nearly 40,000 farmers had signed up and gone to work on 5.5 million acres.



[Donald Worster, Historian] The only program that was out there that was effective was this one,



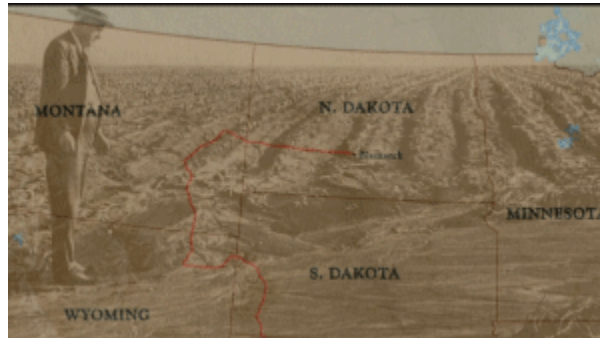
and Finnell was the point man to try to make it work among these farmers who had still not admitted that it was their fault,



farmers who basically said, "This is all nature's doing. Leave us alone. The rains will come back, and we will be back in business."



[Narrator] Bennett and his Committee moved on with their tour, planning to meet up with the President in North Dakota and give him their findings.



The final report estimated that 80% of the Great Plains was in some stage of erosion and pointed to what Bennett called "The Basic Cause" of the problem -- an attempt to impose upon the region a system of agriculture to which the Plains are not adapted."



But, it concluded, the Nation "cannot afford to let the farmer fail."



His boss was not about to let that happen.



[Franklin Roosevelt] Back East, there have been all kinds of reports that out in the drought area there was despondency, a lack of hope for the future,



and a general atmosphere of gloom. But I had a hunch -- and it was the right one -- when I got out here, I'd find that you people had your chins out ...



[Crowd] [Applause]



[Franklin Roosevelt] ... that you are not looking forward to the day when this country would be depopulated, but that you and your children expect to remain here.



[Crowd] [Applause]



[Virginia Frantz, Beaver County, OK] To us, he was a savior.



He just ... he gave us hope where we had none.



I can remember my dad saying that he normally didn't vote Democrat, but he thought he would that time, and I think he became a staunch Democrat after that. [chuckles]



[Franklin Roosevelt] No cracked earth, no blistering sun, no burning wind are a permanent match for the indomitable American farmers and stockmen,



and their wives and children, who have carried on through desperate days.



[Timothy Egan, Writer] Here's a land that God himself seems to have given up on ...



[Franklin Roosevelt] I shall never forget the fields of wheat ...

[Timothy Egan, Writer] ... and the fact that the President still gave it his attention -- so that was a very big deal at a time when they felt so abandoned,



and you can't understate the importance of just giving it some attention.



[Franklin Roosevelt] It was their fathers' task to make homes, it is their task to keep these homes,



and it is our task to help them win their fight.



*[IT'S THE AMERICAN WAY: FREEDOM OF RELIGION-SPEECH; OPPORTUNITY; REPRESENTATIVE DEMOCRACY; PRIVATE ENTERPRISE.
-- NATIONAL ASSOCIATION OF MANUFACTURERS.]*

[Man] We're continuing with Mr. Woody Guthrie's Dust Bowl songs from Texas, Oklahoma, and California.



[Woody Guthrie] As I rambled around over the country and kept looking at all these people, seeing how they lived outside like coyotes,



around in the trees and timber and under the bridges and along all the railroad tracks ...



and in their little shack houses that they built out of cardboard and toe sacks ...



and old corrugated iron that they got out of the dumps --



that just struck me to write this song.



[Singing] I ain't got no home, I'm just a-roamin' round



[Narrator] During the ten years of the Great Depression,



California's population would grow more than 20%.



Half of the newcomers came from cities,



not farms.



One in six were professionals or white-collar workers.



Of the 315,000 who arrived from Oklahoma,



Texas,



and neighboring states,



only 16,000 were from the Dust Bowl itself.



But regardless of where they actually came from,



regardless of their skills ...



and their education and their individual reasons for seeking a new life in a new place,



to most Californians -- and to the Nation at large -- they were all the same,



and they all had the same name.



[Louise Forester Briggs, Daughter, Texas County, OK] "Okies." And we were made fun of, and, "You talk funny," and, you know, all of that.



Or, "Talk some more. You talk funny." and you hated that because it set you apart.



[Donald Worster, Historian] There was a sign in a movie theater in the Central Valley of California which basically said ...



"Niggers and Okies Upstairs." That is, you can't sit down here with real people.



Timothy Egan, Writer] They were horribly mistreated. In some cases, they were treated the way Blacks were treated in the South.



There were signs similar to the signs they had in Dalhart, Texas, that said, "Black man, don't let the sun go down on you here." Similarly, there were signs all throughout the Central Valley saying, "Okie, go back. We don't want you."



[Narrator] About a third of all the recent arrivals, many of them former sharecroppers from the cotton belt, ended up in California's agricultural valleys,



where farmers had always relied on migrant labor to pick their cotton, vegetables, and fruits.



They settled in developments called "Little Oklahomas" and "Okieville" ...



or moved with the harvests, sometimes traveling 700 to 1,000 miles in the season,



staying in squalid roadside camps called "jungles" ...



or simply putting up a tent along the road or in an unused field.



And they found themselves at the mercy of the contractors, who conspired with the growers to drive down the field workers' wages.



[Sanora Babb] They have the simple and sturdy values often bemoaned as lost.



They are proud, strong people,



patient, uncomplaining, intelligent.



They want first of all to work, to have a home for their families, to educate their children.



These simple rights are part of the heritage of Americans.



It is difficult for them to understand that none of them remain.



Their whole lives are concentrated now on one instinctive problem -- that of keeping alive.



[Narrator] Sanora Babb, a former reporter who had grown up in the area around No Man's Land,



had found a new job with the Farm Security Administration.



With her boss, Tom Collins, she went up and down the Central Valley,



informing the newly arrived migrants about programs to provide them with food and medical assistance for their families,



education for their children, and better living conditions.



[Sanora Babb] Only a few days ago, we met a young man walking along the road to town in search of immediate work and help. His wife had had a baby three days before in an abandoned milk house separated from any camp, where they had taken refuge during the recent storms.



He was desperate. Since the birth, his wife, their other children, and he himself had not eaten for three days. If he did not get something for them at once, she and the baby would die.



[Narrator] When the refugees learned Sanora had grown up on the Southern Plains,



it helped establish a trust and respect that extended both ways.



The government had also asked the photographer Dorothea Lange ...



to come back to California to document the deplorable conditions among the migrants.



Tom Collins and the FSA used her photos to push for creation of a handful of government camps ...



with better shelter and sanitation ...



for the steady stream of refugees who were arriving every day.



Collins insisted that the camps be self-governed,



with elected committees responsible for everything ...



from sewing clubs and libraries ...



to childcare and cleanliness.



But only a lucky few ...



were able to find space there.



And while the growers depended on the migrants for cheap labor,



the locals, who were themselves suffering from the Depression,



didn't appreciate anything that encouraged the newcomers to stay.



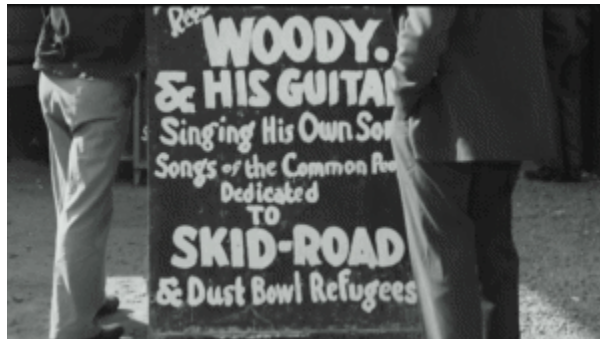
Nor did the growers once the harvest was over.



*[Woody Guthrie] [Singing]
It takes a worried man
To sing a worried song
Takes a worried man
To sing a worried song
I'm worried now ...*



He began spending time traveling and performing for free in the Central Valley,



where the treatment of the farm workers politicized him, and his music, for the rest of his life.

[WOODY & HIS GUITAR, SINGING HIS OWN SONGS, SONGS OF THE COMMON PEOPLE DEDICATED TO SKI-ROAD & DUST BOWL REFUGEES.]



He sang at picket lines of workers holding out for higher wages, and started a newspaper column, "Woody Sez," in the left-leaning "People's World."



"I ain't a Communist necessarily," he said, "but I've been in the red all my life."



*[Woody Guthrie] [Singing]
Lots of folks back East, they say
Is leavin' home every day
Beatin' a hot old dusty way
To the California line*



[Narrator] Guthrie was offended that the State legislature nearly passed a law closing the State's borders to people it called ...



"Paupers and persons likely to become public charges."





*[Woody Guthrie] [Singing]
Now, the police at the Port of Entry say
You're Number 14,000 for today*



[Narrator] Then, without any legal authority,



the Los Angeles Police Chief dispatched 125 of his officers ...



to the main entry points ...



from Arizona, Nevada, and Oregon.



For six weeks, they intimidated anyone they considered "vagrants,"



including Clarence and Irene Beck's father Sam, from Wheelless, Oklahoma.



[Clarence Beck, Cimarron County, OK] My father was a Dust Bowl okie. He got put in jail when he crossed into California because he didn't have 50 bucks.



When he was arrested, he was arrested as a vagrant and would have gone to jail except that one of his ex-neighbors in Oklahoma knew he was coming and was prepared for this and met him, arranged that he could stay with them so he no longer was a vagrant.



[Narrator] For a while, Beck was allowed to stay at a chicken farm, where he worked in exchange for eggs to eat.





But he finally landed a job with the Los Angeles Highway Department and started a new life for himself and his daughter.



[Irene Beck Hauer, Cimarron County, OK] It's a fresh start. I guess that's the words to use -- a fresh start, which it was. It really was.



So thank God of that.



I was blessed that way.



[Narrator] Sam Beck died of a heart attack in 1947, at age 54, spreading blacktop on a California highway.



[Clarence Beck, Cimarron County, OK] He had a tough life. A very tough life. He and his life was the reason that I said,



"God, what do I have to do to have money and not be a farmer, and I'll do it. And I don't care whether it's being a pimp. I don't care whether it's stealing. Whatever it takes, I'm not gonna farm, and I'm not going to be broke." And that's been my driving force. It has been. And I'm not a farmer, and I'm not broke. And I'm not a pimp, either, thank God.





*[FARM LABOR INFORMATION HERE! DEPARTMENT OF EMPLOYMENT. CALIFORNIA STATE
EMPLOYMENT SERVICE.]*

*[Woody Guthrie] [Singing]
I'm a Dust Bowl refugee*

[Narrator] Calvin Crabill's father, John, had rescued his wife and family from the dust of Eastern Colorado, but the hard times followed him to Southern California. He moved from one temporary job to another -- a Colorado cowboy, far from the Plains he loved.



[Calvin Crabill, Prowers County, CO] My father was called an Okie. He was a gentle, quiet man, so I think he could take it pretty well.



It made me with a chip on my shoulder that I probably carry to this day, that I was very aware that I thought I was the poorest kid in high school.



We rented a little house on the alley in Burbank, and the house in front, the people had more money, and they were very aware that we were the poor people on the block.



In those days, you could get something to put on your license plate that would be some kind of a slogan. Well, it said "Peaceful Valley," and so my father liked that place, so he put it on his license plate.



And the people at his job crossed out the "V" and wrote "Peaceful Alley" because they knew he lived on an alley.



So if you're down, they push you down, fella, they push you down, and that's what happened to him, over and over and over, over and over.



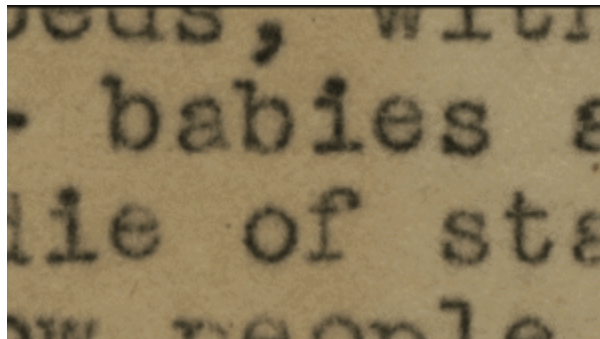
[Sanora Babb] How brave they all are. I have not heard one complaint.



They all want work and hate to have help.



[Narrator] As she moved from camp to camp, Sanora Babb kept a nightly journal, which she planned to turn into a novel, about the people she had met and what they had gone through.



She also wrote detailed reports for her boss Tom Collins, who was regularly sharing her notes with a writer working on a muck-raking article for the San Francisco News named John Steinbeck.



[Sanora Babb] When Steinbeck first came, he had to stop seeing them before the day was out.



Tom Collins said he said, "By God, I can't stand anymore. I'm going away and blow the lid off this place."



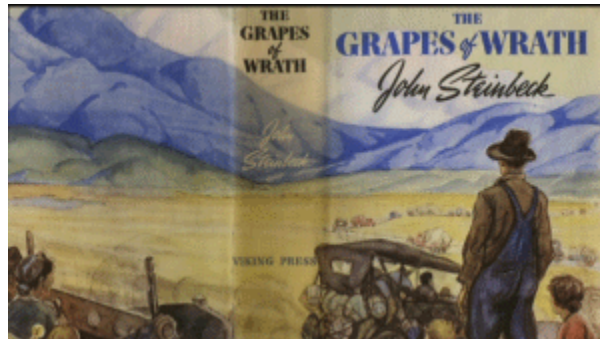
[Narrator] Sanora Babb would eventually send some chapters of her novel to Bennett Cerf, a prominent editor of Random House in New York City,



who was so impressed he asked her to come East to talk about it.



But by the time she arrived, in the winter of 1939,



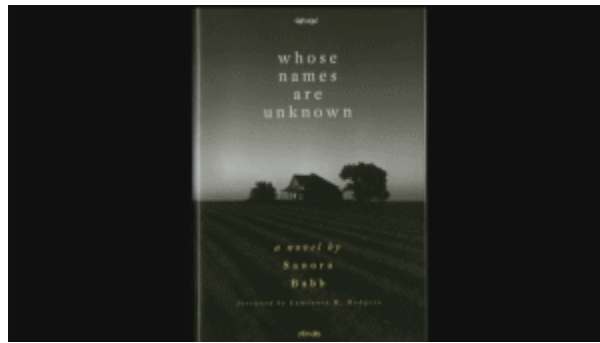
Steinbeck had come out with his own Pulitzer prize-winning novel, *The Grapes of Wrath*, which chronicled the tribulations of the Joad family, tenant farmers who had migrated to California, from the cotton fields of Eastern Oklahoma -- not the Dust Bowl.



The book was such a hit that the market couldn't support a second novel on the same subject,



and her editor advised Sanora to put her manuscript aside.

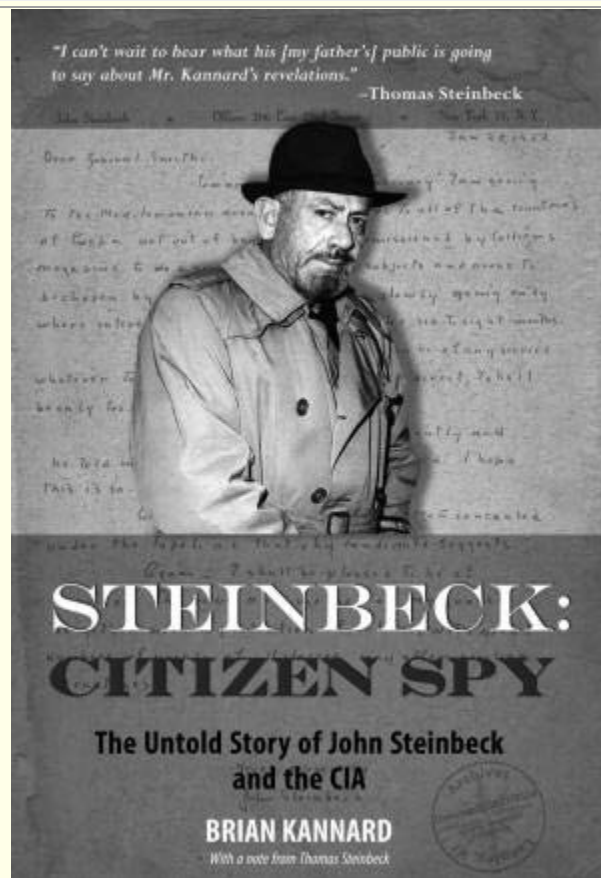


It was finally published in 2004, a year before her death.



Redacted CIA memo mentioning John Steinbeck shown

My discovery of John Steinbeck’s connection to the CIA could be described as payback for a youthful indiscretion—my own, not the author’s. While reading *The Grapes of Wrath* in high school, I skipped the “turtle” and other chapters that seemed to me superfluous to the plot line of the Joads’ journey west. The punishment for my teenage sin of omission came years later, when it first occurred to me that John Steinbeck was a CIA spy. The insane-sounding proposition grew from incongruities in Steinbeck’s life that—unlike Tom Joads’ turtle—I found I couldn’t ignore.



Steinbeck: Citizen Spy book cover shown with subtitle: The Untold Story of John Steinbeck and the CIA

FOIA to the CIA: What Do You Have on John Steinbeck?

Why was Steinbeck never called before the House Select Committee on Un-American Activities, despite his alleged ties to Communist organizations? Why did the CIA admit to the Church Committee in 1975 that Steinbeck had been a subject of the illegal CIA mail-opening program known as HTLINGUAL? Did Steinbeck's connections to known CIA front organizations, such as the Congress of Cultural Freedom and the Ford Foundation, amount to more than mere coincidence? Did the synchronicity continue when Steinbeck did freelance writing for the Louisville Courier-Journal and New York Herald Tribune? Both newspapers were linked to MOCKINGBIRD, another CIA operation, in Carl Bernstein's 1977 Rolling Stone article "The CIA and the Media." Why did the CIA redact portions of Steinbeck's FBI files before they were released under the 1966 Freedom of Information Act (FOIA), the law that permits full or partial disclosure by government agencies of previously classified documents on request?

There was only one source—the CIA itself—that could definitively answer my questions and confirm or disprove my developing conclusions. I submitted my FOIA request to the CIA in January 2012. With characteristic bureaucratic speed, the CIA responded after eight months, in August 2012, sending me copies of two letters written in 1952. In the first, penned on personal stationery in his own handwriting, Steinbeck offers to work for the CIA. In the second, then-CIA Director Walter Bedell Smith accepts Steinbeck's offer. The text of these letters and others can be found in my book, *Steinbeck: Citizen Spy*, at my website or in the FOIA Electronic Reading Room.

The CIA Director Accepts the Author's Offer of Help

Jan 28, 1952

Dear General Smith:

Toward the end of February I am going to the Mediterranean area and afterwards to all of the countries of Europe not out of bounds. I am commissioned by Collier's Magazine to do a series of articles—subjects and areas to be chosen by myself. I shall move slowly going only where interest draws. The trip will take six to eight months.

If during this period I can be of any service whatever to yourself or to the Agency you direct, I shall be only too glad.

I saw Herbert Bayard Swope recently and he told me that your health had improved. I hope this is so.

Also I wear the "Lou for 52" button concealed under the lapel as that shy candidate suggests.

Again—I shall be pleased to be of service. The pace and method of my junket together with my intention of talking with great numbers of people of all classes may offer peculiar advantages.

Yours sincerely,

John Steinbeck

ER 2-5603

6 February 1952

Mr. John Steinbeck

206 East 72nd Street

New York 21, New York

Dear Mr. Steinbeck:

I greatly appreciate the offer of assistance made in your note of January 28th.

You can, indeed, be of help to us by keeping your eyes and ears open on any political developments in the areas through which you travel, and, in addition, on any other matters which seem to you of significance, particularly those which might be overlooked in routine reports.

It would be helpful, too, if you could come down to Washington for a talk with us before you leave. We might then discuss any special matters on which you may feel that you can assist us.

Since I am certain that you will have some very interesting things to say, I trust, also, that you will be able to reserve some time for us on your return.

Sincerely,

Walter B. Smith

Director

O/DCI:REL:leb

Rewritten: LEBecker:mlk

Distribution:|

Orig – Addressee

2 – DCI (Reading Official) [“w/Basic” has been handwritten beside this line and scratched out]

1 – DD/P [a check mark and w/Basic handwritten in]

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Did Steinbeck’s CIA Connection Start in Russia?

Reread A Russian Journal with the possibility that Steinbeck was working for the CIA prior to 1952 in mind. When Steinbeck traveled to the USSR with Robert Capa in 1947—the second of three trips the author made to the Communist state during his lifetime—Walter Bedell Smith happened to be the U.S. Ambassador to Russia. Steinbeck notes in his account of his and Capa’s Russian journey that they dined with Smith during their stay.

This experience helps explain the personal tone of familiarity expressed in Steinbeck’s 1952 letter to Smith offering to help the CIA. It also suggests the possibility that Steinbeck used his access while in the USSR to gather intelligence for the U.S. government from the Russian interior. While visiting a factory in Stalingrad, Steinbeck observes that the Russians are still melting down hulls from German tanks to make tractors fully two years after the end of World War II, lamenting his frustration at not being able to get current production figures for the facility. Such information would have been particularly important to the U.S. government in 1947, as the Cold War became hotter and American travel behind the Iron Curtain more difficult.

The 1952 exchange between the author of *The Grapes of Wrath* and the Director of the CIA provides a new set of parameters for understanding John Steinbeck’s life. In my book I carefully examine each of the letters resulting from my FOIA request to the CIA, the writer’s heavily CIA-redacted FBI files, Thomas Steinbeck’s thoughts on the matter, and likely avenues through which the elder Steinbeck could have served his government covertly both before and after 1952. Viewing the author’s life in terms of possible links to the CIA opens vistas for better comprehending certain works, such as *The Short Reign of Pippin IV*, that his literary agent, editor, and others discouraged him from writing.

The Short Reign of Pippin IV: A Fabrication is a novel by John Steinbeck published in 1957; his only political satire, the book pokes fun at French politics.

Plot summary

Pippin IV explores the life of Pippin Héristol, an amateur astronomer suddenly proclaimed the king of France. Unknowingly appointed for the sole reason of giving the Communists a monarchy to revolt against, Pippin is chosen because he was rumored to descend from the famous king Charlemagne. Unhappy with his lack of privacy, alteration of family life, uncomfortable housings at the Palace of Versailles and mostly, his lack of a telescope, the protagonist spends a portion of the novel dressing up as a commoner, often riding a motorscooter, to avoid the constrained life of a king. Pippin eventually receives his wish of dethronement after the people of France enact the rebellion Pippin's kingship was destined to receive.

-- The Short Reign of Pippin IV, by Wikipedia

In recommending my book to a Steinbeck blogger, a noted Steinbeck scholar described the possible CIA-Steinbeck connection detailed in Steinbeck: Citizen Spy as “a potential game-changer.”

Time will tell.

COMMENTS

bill steigerwald says:

October 4, 2013 at 12:51 pm

Great work. Steinbeck’s connection with the CIA makes a lot of sense. He was, despite his leftist reputation, very anti-communist and patriotic. I’m sure he wasn’t shooting microfilm of those great old Soviet tractor factories or doing any recruiting, but when he went into the USSR and behind the Iron Curtain he didn’t play along with his host’s propaganda machine. He didn’t trash America’s foreign policy from Moscow like some other celebrity dupes/useful idiots. And he made a point to seek out and encourage dissident writers in Eastern Europe. Then there was Steinbeck’s hawkish support of the war in Vietnam and his sleepovers at the LBJ White House, which make his lefty-liberal supporters squirm and search for proof that he turned into a dove on his deathbed. Steinbeck was always a New Deal Stevenson Democrat/Cold War liberal and never as left-wing as his progressive friends wished and conservative enemies charged. But apparently he didn’t just suck up to political power, he offered to do freelance spy work for it.

William Ray says:

October 4, 2013 at 2:35 pm

Another comparison could be made as context for your point: Henry “Scoop” Jackson, the left social/right defense U.S. Senator from the State of Washington. Thank you for reminding readers that both foreign-interventionist Presidents between Teddy Roosevelt and LBJ were Democrats, Woodrow Wilson and FDR, and that the isolationists who opposed American entry into European wars were Republicans, such as Senator Henry Cabot Lodge from Massachusetts. History can be quite as surprising as the future when actually studied.

Martin Maloney says:

October 17, 2013 at 5:30 am

I was active in the movement against the war in Vietnam. John Steinbeck appeared before a congressional committee and testified in favor of that war. As I recall, he had a son in military service in Vietnam. It seemed incongruous to me at the time that someone who had written “The Grapes of Wrath” could support the Vietnam war. After reading this article, it makes perfect sense.

William Ray says:

October 17, 2013 at 1:53 pm

Thank you, Martin. Look for my blog post about Brian Kennard's book on Steinbeck and the CIA later today. You're right. Both of John Steinbeck's sons served in Vietnam. Kennard treats this phase of the author's public politics candidly and compellingly in the book, which I highly recommend.

-- Did John Steinbeck Work as A Citizen Spy for the CIA?, by Brian Kannard

Indeed, over the years, the CIA had been engaged in the business of trying to suppress books rather than encouraging them. In 1964, for example, John A. Bross, then the CIA's comptroller, got the bound galley proofs of David Wise and Thomas B. Ross's book *The Invisible Government*. The book was an expose of the CIA, FBI, and other agencies that had engaged in illegal activities. Bross obtained the galleys through a friend of a family member who was then working for Random House. With the authorization of John McCone, then DCI, the CIA asked Bennett Cerf, president of Random House, if the agency could buy up the first printing.

Cerf responded that he would be delighted to sell the first printing to the CIA, but then immediately added that he would then order another printing for the public, and another, and another," according to Wise's subsequent book, *The American Police State*. The agency dropped the idea.

While the CIA would have liked to have brought legal action against the authors, they were journalists, not former employees. The CIA has gone to court only to enforce contracts signed by CIA employees when they enter and leave employment.

-- Inside the CIA, by Ronald Kessler

According to Wise, CIA officials considered buying up all the copies, but abandoned the idea when Random House chief Bennett Cerf pointed out that he could print a second edition. Instead, McCone formed a "special group" inside the Agency to sabotage the book. Its number 1 weapon: bad reviews written by CIA agents under code names and passed to cooperative journalists and publishers; among the fake reviewers was E. Howard Hunt, later of Watergate burglary fame.

Following that, in 1965, the New York Times decided to launch its own investigation of the CIA, triggered by a slip of the tongue by Congressman Wright Patman (D-Tex.) the previous year. As chair of the House Banking Committee, Patman had convened hearings to explore whether foundations were being used as tax dodges. The congressman inadvertently identified the J.M. Kaplan Fund as a CIA conduit, and named eight (phony) foundations that passed funds through it. CIA officials rushed to Patman's office. The following day, Patman announced that the CIA had nothing to do with his hearings and declared the matter ended.

But the episode caused the Times' managing editor, Turner Catledge, to pay more attention to CIA activity. On September 2, 1965, Catledge noticed an odd story coming out of Singapore. Prime Minister Lee Kuan Yew publicly revealed that five years earlier the CIA had offered him a \$3.3 million bribe for the release of two CIA agents who had been arrested. Yew had demanded \$35 million, but ended up taking nothing in return for their release. Details of the story were truly bizarre, but the prime minister had produced as evidence a letter of apology from Secretary of State Dean Rusk. Times journalist Harrison Salisbury remembers Catledge thundering, "For God's sake let's find out what they are doing. They are endangering all of us." The Times Washington Bureau chief Tom Wicker, drafted a survey to send to the newspaper's worldwide network of journalists asking what they knew about the CIA. What were their experiences with the agency?

James Jesus Angleton, the CIA counterintelligence chief whose job was to look for Soviet moles, had a copy of the survey before the ink was dry. The legendary Angleton had grown steadily paranoid after decades of professionally suspecting everyone of pro-Moscow sympathies. According to Salisbury, Angleton regarded the journalistic survey as a KGB instrument; the very phrasing of the questions "betrayed the hand of Soviet

operatives." While Angleton's reaction might have seemed extreme, the response to the Times survey at CIA stations around the world was similar.

CIA media liaison Colonel Stanley Grogan sent a memo to McCone, "NEW YORK TIMES Threat to Safety of the Nation," in which he suggested using the CIA's "heaviest weapons," including White House pressure, to combat the Times. Salisbury, who saw the memo, described it as a scream from outer space. "Any questions, any attempt to probe what the CIA was doing, how it operated, what its intentions might be, was seen as hostile, dangerous and frightening, capable of destroying the agency."

In late April 1966, in the midst of the CIA furor over the two Ramparts articles, the Times published the fruits of its investigation in a series of five articles. While listing some of the CIA accomplishments, the articles depicted the Agency as without oversight; seemingly the government had no control over its increasingly questionable behavior. Richard Helms, then Raborn's deputy, moved quickly to contain the damage, successfully killing a planned book based on the articles. Most of all, Salisbury noted in his memoir, the CIA feared a permanent record, available and accessible to all. He and Wicker thought that the CIA response was hysterical in the extreme, but they could not persuade the higher-ups to publish the book.

-- Patriotic Betrayal: The Inside Story of the CIA's Secret Campaign to Enroll American Students in the Crusade Against Communism, by Karen M. Paget



[Sanora Babb] You, who live in any kind of comfort or convenience,



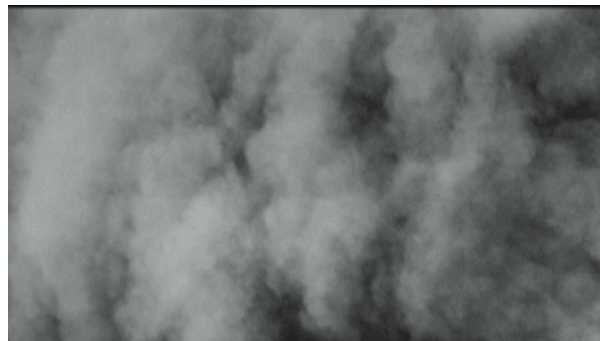
do not know how these people can survive these things, do you?



They will endure because there is no immediate escape from endurance. Some will die. The rest must live.



HIGHER GROUND



[Caroline Henderson] The worst storm thus far in 1937 occurred immediately after a slight snowfall,



which again roused delusive hopes. That snow melted on a Tuesday.



Wednesday morning, with a rising wind, the dust began to move again,



and until late Friday night, there was little respite.



We are now reluctantly feeding our livestock the last small remainder of the crop of 1931.



[Narrator] In most of the nation, the drought had ended,





but for Caroline Henderson and her neighbors who had stayed in the heart of the Dust Bowl, 1937 would prove to be the worst year yet.



Guymon, Oklahoma, just thirty miles Southeast of her homestead, was engulfed by six bad dust storms that January,



fourteen in February, and then thirteen more in March,



including one that closed the schools in nearby Boise City and tore roofs off of buildings ...



100 miles away in Dodge City, Kansas.



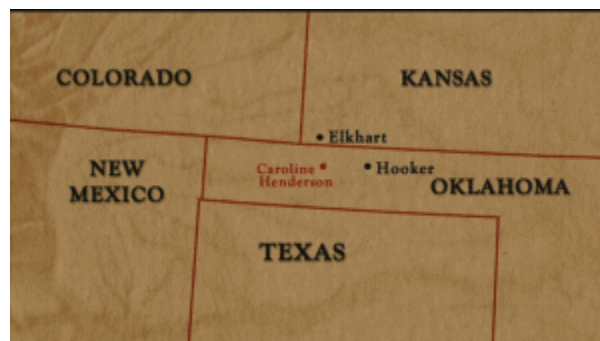
On the afternoon of May 21, a local photographer named Francis Craver noticed a dust cloud appearing over the Doric Theatre in downtown Elkhart, Kansas.



He grabbed his camera and chronicled the storm's descent,



which caused the high school to cancel commencement ceremonies planned for that evening.



Two weeks later, fifty miles East of the Hendersons, in Hooker, Oklahoma,



a furniture salesman named George Risen saw another wall of dirt approaching.



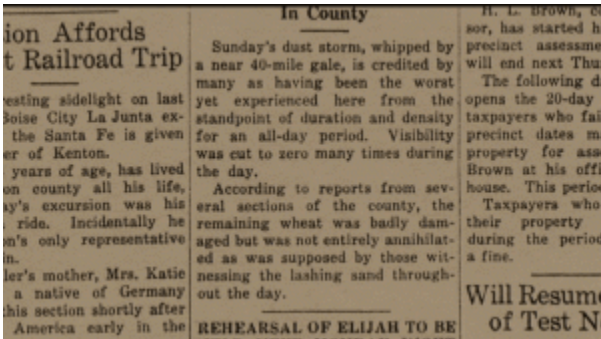
He scrambled to the top of the tallest building in town ...



and began taking pictures with his Brownie camera.



As it passed, the storm dropped three feet of dust on Hooker and the surrounding countryside.



[DUST STORM NEAR RECORD PROPORTIONS. LITTLE PROSPECT REMAINS FOR PRODUCTION OF WHEAT IN COUNTY. Sunday's dust storm, whipped by a near 40-mile gale, is credited by many as having been the worst yet experienced here from the standpoint of duration and density for an all-day period. Visibility was cut to zero many times during the day. According to reports from several sections of the county, the remaining wheat was badly damaged but was not entirely annihilated as was supposed by those witnessing the lashing sand throughout the day. REHEARSAL OF ELIJAH TO BE ...]

By the end of July, the number of destructive storms would rise to 79; by the end of the year, to 110.



The only difference between the Southern Plains and the Sahara Desert, one resident suggested,



was that a lot of "damned fools" weren't trying to farm the Sahara.



[Dorothy Williamson, Prowers County, CO] If you were a farmer, you plowed the ground, and you put seed in it, and it grew up. That was farming. You didn't expect this dirt that was giving you this food to turn on you like that and destroy you like it did.



[Robert "Boots" McCoy, Texas County, OK] Those people that was real religious ...



said that God was trying to drive us off of the land.



I never did believe that, or dad never did believe it,



and we believed whatever dad believed, you know, as kids. Dad said they'll just be times that they'll be bad and times that they won't.



[Virginia Frantz, Beaver County, OK] Both of my parents were very, very good Christian. No matter what came along, they seemed to accept it.



They both just seemed like they were just going on doing the best they could, and they didn't do a whole lot of griping about it.



[Narrator] Around the house, Virginia Frantz's mother often sang hymns to take her children's minds off the troubles staring them in the face.



*[Virginia Frantz, Beaver County, OK]
[Singing] I'm pressing on the upward way
New heights I'm gaining every day
Still praying as I onward bound
My prayer, my aim, is higher ground*



And then it was

*[Singing] Oh, lift me up and let me stand
By faith, on heaven's table land
A higher faith than I have found
Oh, lift me up on higher ground*

[Laughing] It's been probably sixty years since I've heard that song. [Laughing]



[Floyd Coen, Morton County, KS] I remember we had the radio, and he's listening to it, talking about a flood on the Ohio River, and houses floating down and people on them houses. And my dad turned to us and said, "We've got it better here than they have up there." And that was in '37. So he thought that the dirt was better than that water.



[Narrator] In April of 1937, farmers from five states met in Guymon, Oklahoma.



"The problem in the Dust Bowl is entirely too large for the remaining good farmers to even make a start to cope with," they wrote the government.



"We must have help, and it's imperative we have help now."



[Pamela Riney-Kehrberg, Historian] I think it has to be pretty extreme for a group of farmers, very independent-minded, very stubborn,



a group that on the whole doesn't like to be meddled with, to say, "Please come and meddle with us."



But at this point, they're into their sixth year of no income, their fifth year of no crops, and they're seeing neighbors' fields blowing into their own, they're seeing enormous clouds of dirt in the air, and they don't know what else to do.



And when you don't know what else to do and you're afraid of losing your farm, then you begin to ask for rather more extreme measures than you would have asked for otherwise.



[Donald Worster, Historian] If one man mishandled his land, everybody suffered under these conditions.



All it took was one 1,000-acre farm blowing dirt badly to disrupt the lives of everybody around him.



And if that farm operator actually happened to be living in Amarillo or Denver, and only came out on weekends anyway, who did you talk to?



There was no authority to stop this sort of process.



[16,000,000 ACRES DESTROYED IN TEXAS BY EROSION. TERRACE TO PROTECT YOUR FARM.]

[Narrator] The farmers wanted every landowner to be required to leave stubble on harvested fields, and they wanted some way to have abandoned acres planted with cover crops.



To do it, they even suggested that martial law be declared.



[MORTON COUNTY, KANSAS. THURSDAY, APRIL 29, 1937. URGE MARTIAL LAW IN THE "DUST BOWL". DESPERATE APPEAL IS MADE TO THE PRESIDENT IN DRAMATIC ATTEMPT TO CONTROL INCREASING DEVASTATION NOW PREVALENT.]

[Timothy Egan, Writer] They wanted the ability to condemn other people's property if they weren't keeping it up. This was hugely antithetical to how most of these people thought. In some counties, they were granted authority to go out and condemn someone,



to slap them in jail if need be, if he was letting his land blow again.



Very authoritarian measure for folks who considered themselves highly individualistic.



[Donald Worster, Historian] When your back is against the wall, all ideology goes out the window. So here is a group of people who are very anti-state, anti-government, who never wanted the government interfering with anything they did or telling them what to do,



but who, when the chips are down, are going to ask for the only help they can get, and that's from the federal government.



[NO PAYMENTS UNLESS LAND TILLED RIGHT. Eighty-five percent of land must be worked to entitle operator to participate in program; will pay for weed growth. New rulings issued this week by the AAA require that 85 percent of crop land must be farmed before a person ...]

Eventually, soil conservation districts were established meant to enforce better farming practices through consensus.



At the same time, the government was buying back as much land as it could from dusted-out homesteaders ...



and slowly returning it to permanent grassland.



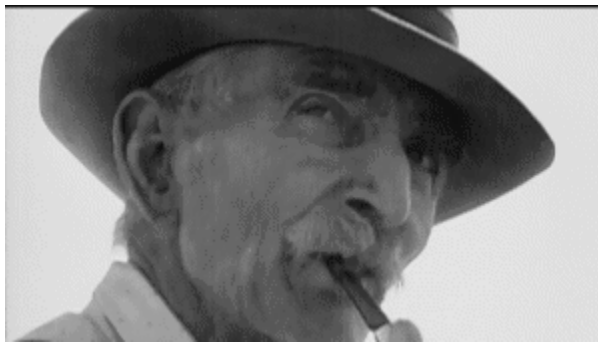
Farmers now got help to buy gasoline for their tractors ...



if they were doing soil-erosion work.



And in some cases, they even received payments not to grow cash crops at all.



[Donald Worster, Historian] "We have got to begin to induce people to plant less."



How do you do that? You can't just take their land away from them. So the idea was to pay them not to produce. So the idea was to pay them not to produce.



For the people in the Great Plains, this was a salvation.



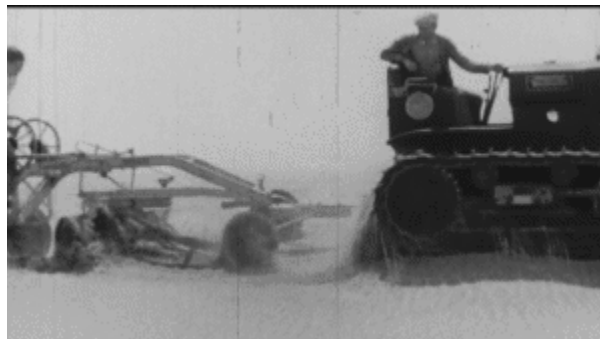
They could keep their land, they didn't have to go out every Fall and plant wheat again, the government would send them a check, and year after year, this could go on, and until better times emerged.



[R. Douglas Hurt, Historian] Nobody knew whether any of this would really work or how long it would take.



Might be 50 years, might be 70 years;



nobody knew.



It's a time period in which the federal government entered agriculture as never before,



and it's never left.



[Narrator] Meanwhile, near Dalhart, dunes that had once towered 36 feet above one of Howard Finnell's employee's cars,



had been tamed in 18 months of painstaking restoration work.



The contrast between contoured fields that captured the rain, and those farmed the old way was striking.



With such tangible results, more and more farmers decided to take Finnell's advice. By the end of 1937, despite the persistent dust storms, the amount of dangerously eroded land had been reduced by more than half.



In 1938, the rainfall edged upward --



more than 18 inches in Boise City -- and although the number of dust storms receded only slightly, some farmers in No Man's Land brought in a wheat crop of ten bushels per acre --



nothing close to a bumper crop, but almost bountiful compared to previous years.



The drought seemed to be losing its grip.



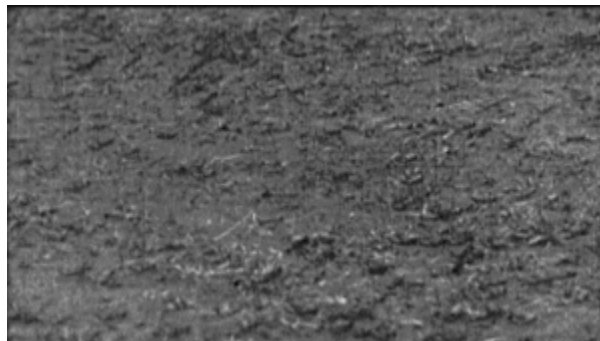
[Timothy Egan, Writer] When the worst was arguably over, when they had seen the back-hand of nature, when they'd seen more venom and anger and outright evil, as they called it, that the sky had thrown at them, that any human beings could ever take, and they thought it was over, came one more almost biblical plague.



[Robert "Boots" McCoy, Texas County, OK] Grasshoppers mostly were crawling, but, you know, you scare them, they'd jump and fly.



But most of them were just crawling, just like a whole sea of them.



Just, they ate everything in sight.



[Pauline Robertson, Union County, NM] It almost looked like the ground was moving,



and they would get that big,



and they would eat on the bark of the trees,



and they ate everything that they could come in contact with.



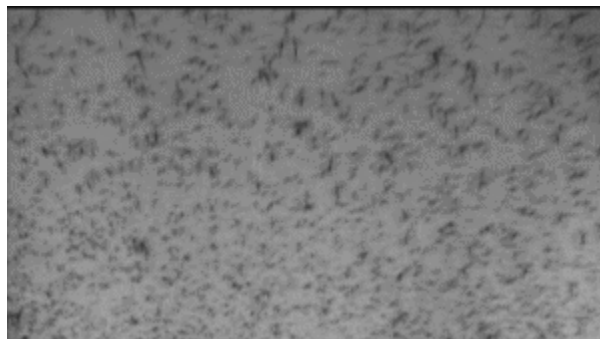
[Sam Arguello, Union County, NM] And they kept on going. From here, they left on,



and what I understand, somewheres in Oklahoma, they grew wings,



and they all took flight, and they said they shaded the sun ...



because they were all together.



[Narrator] Farmers hooked up sleds to their tractors ...



and dragged them across the fields,



trapping grasshoppers in vats of kerosene.



Some tried crushing them under rollers.



Several states called out their National Guards to spread poison,



mixed with sawdust and molasses and banana oil, along the roadsides.



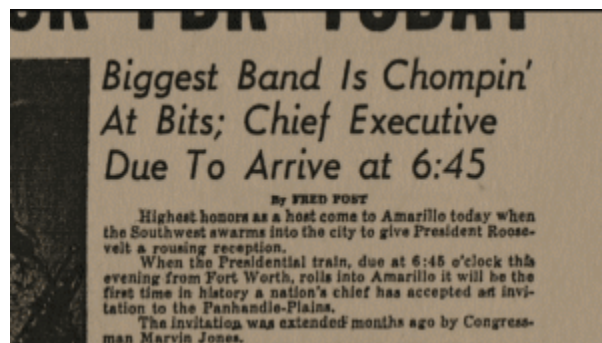
[BOISE CITY, CIMARRON COUNTY, OKLAHOMA. HOPPERS SERIOUS MENACE. CARLOAD MILL FEED ARRIVES FOR PREPARATION OF POISON MIXTURE. TIME OPPORTUNE.]



[Timothy Egan, Writer] How much more out of sync could nature be when they're now pouring strychnine on what had been the greatest grassland to kill grasshoppers who are chewing on fence posts because there's nothing else left to live?



That that itself, by the time they were pouring poison on the land that had been killed by them, I think they had gone so far down the road in altering this great grassland that it was almost beyond repair.



[AMARILLO DAILY NEWS. PLAINS TO WHOOP 'N HOLLER FOR FDR TODAY. BIGGEST BAND IS CHOMPIN' AT BITS; CHIEF EXECUTIVE DUE TO ARRIVE AT 6:45, BY FRED POST. Highest honors as a host come to Amarillo today when the Southwest swarms into the city to give President Roosevelt a rousing reception. When the Presidential train, due at 6:45 o'clock this evening from Fort Worth, rolls into Amarillo it will be the first time in history a nation's chief has accepted an invitation to the Panhandle-Plains. The invitation was extended months ago by Congressman Marvin Jones.]

[Pauline Durrett Robertson, Potter County, TX] All the Democrats were excited. There were people in Amarillo who did not like Roosevelt. And they were usually the wealthy people.



anyone, they said, between the ages of nine and ninety who could play "The Eyes of Texas" on any instrument.



An estimated crowd of 200,000 --



four times the population of the city itself -- turned out,



lining the three-mile route of Roosevelt's motorcade to Ellwood Park.



"People who are ignorant and people who think only in terms of the moment," the President said, "scoff at our efforts and say,



'Oh, let the next generation take care of itself. If people out in the dry parts of the country cannot live there, let them move out.'"



[Timothy Egan, Writer] And then the most amazing thing happens. Remember, the drought has been going on for eight years. It starts to rain.



These clouds come out of nowhere. It's a July day. It's peak hot season. Clouds bunch, and it rains. And it's an old-fashioned gully-washer.



And the rain comes off of Roosevelt, and he continues. He's got his clamped knees up there, and he continues to give his speech. "I'm never gonna desert you."



Charles Hatfield (on the ladder) and his younger brother with one of their rain towers, in Coalinga, Calif. The pair built a similar 20-foot tower in the woods east of San Diego and began what one city official would later call “an incantation aimed at wringing moisture from the air.” What followed was a destructive downpour.

In 1915 San Diego hired 'moisture accelerator' Charles Hatfield, who claimed to have a formula to produce rain.

As California is finding out, drought can make people — and their governments — do things that might otherwise be unthinkable.

Take the San Diego of 1915.

With their small city beset by drought, civic leaders hired "moisture accelerator" Charles Hatfield, who claimed to have a secret formula of chemicals to produce rain.

"It was a disaster," said Rick Crawford, supervisor of special collections at San Diego's central library.

For \$10,000, Hatfield promised to produce enough rain to fill the city's depleted reservoirs. The otherwise fiscally conservative City Council agreed — although one councilman called the idea "foolishness."



Charles Hatfield scans the skies for signs of rain. The debate continues over whether he was a fraud or a

man who had discovered an early forerunner to modern cloud-seeding. (Gordon Wallace / Los Angeles Times)

FOR THE RECORD:

San Diego "rainmaker" case: An article in the June 1 California section about San Diego's hiring in 1915 of "rainmaker" Charles Hatfield was accompanied by a historic photo of Hatfield on the ladder of a 20-foot tower, which was identified as one he had built east of San Diego. He did build such a tower for San Diego, aimed at "wringing moisture from the air"; however, the photo was of another tower, in Coalinga, Calif., in 1924.

Hatfield and his younger brother built a 20-foot tower in the deep woods east of the city and began what one city official would later call "an incantation aimed at wringing moisture from the air." Smoke drifted skyward.

What followed in January and early February of 1916 was a downpour — 30 inches of rain by some estimates.

Mission Valley flooded. The San Diego River jumped its banks. Farms, homes, bridges and businesses were swept away. Little Landers, a farming commune, was destroyed. Two dams were damaged and a third failed. Estimates of the deaths range from a dozen to 50.

Hatfield, who had done other rainmaking chores, decided to flee.

"Fearful of being lynched by angry farmers, Hatfield 'got out of Dodge,' as the saying goes, leaving town during the night," wrote Dan Walker in his "Thirst for Independence: The San Diego Water Story," published in 2004. "He never received his \$10,000."

When the waters receded, Hatfield returned and filed a lawsuit. Litigation dragged on for years, not settled until the San Diego County Superior Court rejected it in 1938.

From the "Hatfield Flood" came a legend that has endured for decades, inspiring books, historical reviews, at least two country-western songs and, very loosely, the 1956 movie "The Rainmaker" starring Burt Lancaster and Katharine Hepburn.

The debate continues over whether Hatfield was a fraud or a man who had discovered an early forerunner to modern cloud-seeding.

With San Diego again gripped by drought, the Hatfield saga is getting renewed notice: a display curated by Crawford in the special collections section of the downtown library and a short docu-drama on the Travel Channel.

Then, as now, San Diego was deeply concerned that its meager amount of native water will not sustain its population. By the late 19th century, San Diego officials were determined to capture as much rain runoff as possible. "We were building more dams than anybody in the world," Crawford said.

A business organization called the San Diego Wide Awake Improvement Club demanded that the City Council do more to keep San Diego from withering with thirst.

When drought left the reservoirs at a low ebb, the council was ready to take a chance, even if it meant spending lots of money. The means have changed but not the motive; as Walker's book suggests, the quest

for water "independence" never ends in San Diego.

Modern-day officials have bet on an expensive deal for water from the Imperial Valley and a \$1-billion desalination plant being built in Carlsbad.

In 1915, officials were taken with an impeccably dressed, politely earnest transplant from Kansas, the son of a devout Quaker family.

Charles Hatfield spoke in scientific terms and promised to work for free unless he could fill the Morena reservoir. He talked of having successfully using his rainmaking technique in Alaska, Los Angeles County, the San Joaquin Valley, Texas and Hemet. He had studied the works of other rainmakers, including the so-called Australian Wizard, and was familiar with the popular book "Elementary Meteorology."

At first, San Diego rejoiced at the rain: "Rainmaker Hatfield Induces Clouds To Open," read one headline.

Then concern set in, followed by distress and then horror as the water roared westward, unstoppable. The San Diego River, usually a few dozen yards wide, was calculated to be a mile in width.

"It seemed the rains would never end and the damage would never stop mounting," historian Thomas Patterson wrote in a 1970 article for the San Diego History Center. "Great trees tumbled root over branch. Sticks of lumber, railroad ties and parts of houses floated crazily."

Just what Hatfield did at his tower near Lake Morena is unclear.

Some accounts indicate he set the chemicals on fire and let the smoke drift upward.

Shelley Higgins, who later served as a Superior Court judge, wrote in his book "The Fantastic City of San Diego" that he went by the tower and saw Hatfield "shooting bombs" into the air.

The controversy and litigation did not hurt Hatfield's career. Offers to make rain came from farmers and others throughout the Midwest and Texas.

The library exhibit includes a letter in 1920 from a New York-based sugar company begging Hatfield to come to Cuba. In 1929 he answered a plea from officials in Honduras to produce rain to douse a forest fire.

The Depression ended Hatfield's rainmaking career; Dust Bowl farmers could not afford his services. He went back to his original trade: selling sewing machines.

Hatfield died in 1958 at age 82 and was buried in Glendale — never having revealed his chemical formula.

-- With San Diego again drought-ridden, 1915 'Rainmaker' saga is revisited, by Tony Perry



[Narrator] "I think this little shower we have had, the President beamed, "is a mighty good omen."



AMARILLO DAILY NEWS. PANHANDLE STAGES RAINSTORM FOR ROOSEVELT. PLAINSMEN THRILL WHEN "CHIEF" PAID TRIBUTE BY DRENCHED THRONG. BY LEWIS [ILLEGIBLE] The President talked of a possible wager he could have was and then turned prophet at Ellwood Park last evening. He said the rain that pelted his face as he talked to a multitude on his first visit to the edge of the "dust bowl" was "a good omen." He used the theme of the weather to cast his few political seeds, but he was surprised at the greeting of dripping clouds in Amarillo. "If I had talked to the newspapermen on the train today, they would have given me a hundred to one odds it wouldn't rain in Amarillo," he said, "but it is raining." Flashing the famous Roosevelt smile after he got off the Fort Worth and ...

[Pauline Durrett Robertson, Potter County, TX] And we had been wishing for rain, praying for rain, and it rained the day he came. It rained. And so he took credit for that.

With the Kennedy brothers, it was no longer purely a matter of national security. It was personal. Castro had not only survived the Bay of Pigs but been emboldened by it, openly mocking the United States' effete and quixotic attempts to bring him down. A smoldering President Kennedy demanded action. Sam Halpern, a veteran Agency officer, recalls Richard Bissell summoning him into his office. "He told us he had been chewed out in the cabinet room of the White House by the president and attorney general for sitting on his ass and not doing anything about Castro and the Castro regime." Bissell related the president's order: "Get rid of Castro."

Halpern wanted clarification. "What do the words 'get rid of' mean?" he asked Bissell.

"Use your imagination," Bissell responded. "No holds barred."

In the year ahead the Agency did indeed use its imagination. There was even a short-lived plan to convince the Cuban people of Christ's Second Coming, complete with aerial starbursts. "Elimination by illumination," the scheme was dubbed by one senior officer.

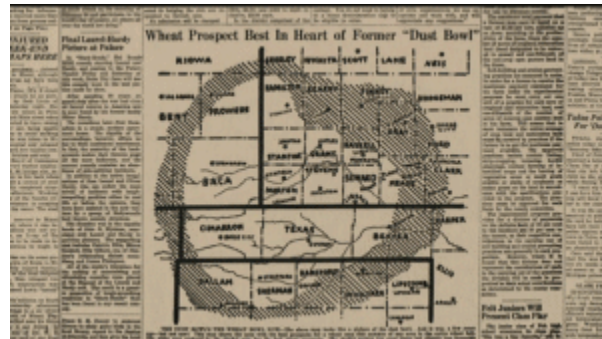
-- The Book of Honor: The Secret Lives and Deaths of CIA Operatives, by Ted Gup



[Narrator] A snowstorm in early 1939 brought more hope, which grew when the Soil Conservation Service announced that,



thanks to better farming practices, the soil was in its best condition in seven years.



By the end of the year, the Dust Bowl had shrunk to one-fifth its previous size.



[Pauline Robertson, Union County, NM] I don't know how many weeks we'd get a little rain and a little rain. And the thing I remember, that when it first started, the sunflowers started growing.



They were in our pasture that was close to the house. When we went to get our milk cows in, which we did on horseback -- you had to hunt them because you couldn't see them -- and the sunflowers would be up above our head.



[Narrator] In Follett, Texas, Trixie Travis Brown's father had been trying for years ...



to persuade his wife to pull up stakes and move to Idaho.



[Trixie Travis Brown, Lipscomb County, TX] My mother was very reluctant because all of her family --



you know, we had probably 50 people of the 437 in Follett were all relatives.



She just was not willing to say yes.



My father, he even had the land picked out in Idaho. He had the map out. And mother just kept holding out.



[Narrator] Then, slowly, things began improving.



[Trixie Travis Brown, Lipscomb County, TX] We began to go out on a regular basis. Mother and dad liked to take drives anyway.



Mother got so worn out with all the kids in the house that she would say, "George let's take a drive out to look at the wheat."



We would go out and stand ...



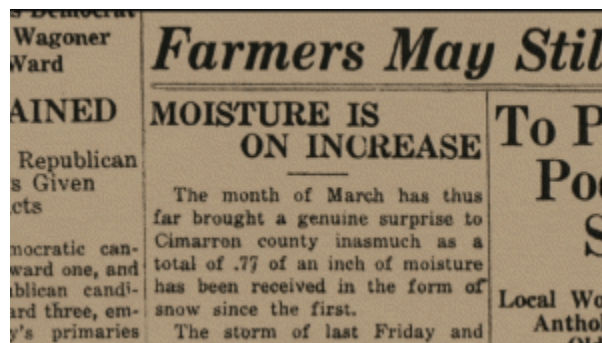
and see how high it was to us children. We'd stand there, and they'd sort of measure the height of the wheat.



And then when it began to really develop, it was obvious it was going to be a really good wheat crop. And it was.



The map went into a drawer, and the trip to Idaho was cancelled.



[MOISTURE IS ON INCREASE. The month of March has thus far brought a genuine surprise to Cimarron county inasmuch as a total of .77 of an inch of moisture has been received in the form of snow since the first. The storm of last Friday and ...]

[Lorene White, Stanton County, KS] No one will every know what it meant to you to have it rain.



And even to this day, we had rain the other day, and I thought when it was raining how nice this was, how what a good rain.



And that's what we prayed, what we yearned for, was the rain that came that would soak into the ground and let us raise a crop and eventually stop the dust.



[Floyd Coen, Morton County, KS] Well, when it did start raining, it was just such a blessing.



We'd go out in the rain and hold our hands up, and let that hit our hands and our face, and then just almost worshipped that rain because we knew then that we was gonna have some crops.



[Imogene Glover, Texas County, OK] It just seemed happier everywhere you went -- everybody, not just my folks.



When we'd go to the neighbors either side, the Thrashers or the Freemans, we always felt like things are getting better. I remember the first year that we probably had a good crop after the Dirty Thirties, we got stuck in the field,



and daddy didn't even gripe about it, [laughing] he was so glad that we were having rain.



[Narrator] At his farm in the Oklahoma Panhandle, Dorothy Kleffman's father decided it was now safe to bring his wife and children back from Arkansas.



[Dorothy Kleffman, Texas County, OK] They have a saying here that if you wear out a pair of boots here in the Panhandle, you'll come back,



and when we did come back, the land had been recovered. They had learned how to terrace the land. And I remember my dad had a wheat crop, I think in 1940, that was a good wheat crop.



And we thought, we're back. We survived.



THE WESTERN GATE



[Caroline Henderson] December 13, 1944. We had for once a super-abundance of rain and already three snows.



Wheat was a fair crop. We saved most of it between rains.



We have ample pasturage with the increased rainfall, and cattle have done reasonably well.



And we had a nice garden with most of our winter's living stored away.



[Narrator] Just as it had thirty years earlier,



a war in Europe and the return of a relatively wet weather cycle brought prosperity to the Southern Plains. Wheat prices skyrocketed, and harvests were bountiful.



[Caroline Henderson] May 1945. We have at last assembled most of the materials for piping water into the house, with a sink in the kitchen and indoor toilet in the bathroom. But we need a superman to do the work.



We have both worn down fast during the years of extreme desolation since 1931.



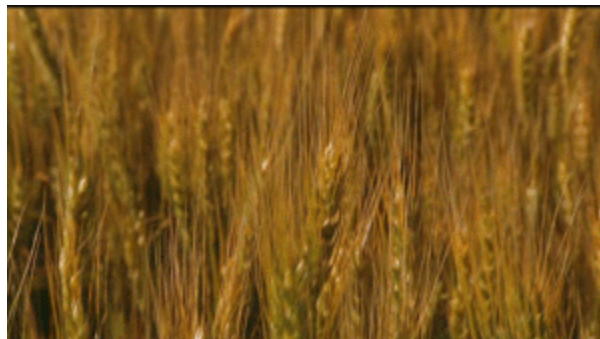
Every small accomplishment now seems to demand a greater output of energy and resolution than in the years that are gone.



[Narrator] Caroline Henderson was grateful for better weather and higher prices, but she and her husband Will were now nearing 70.



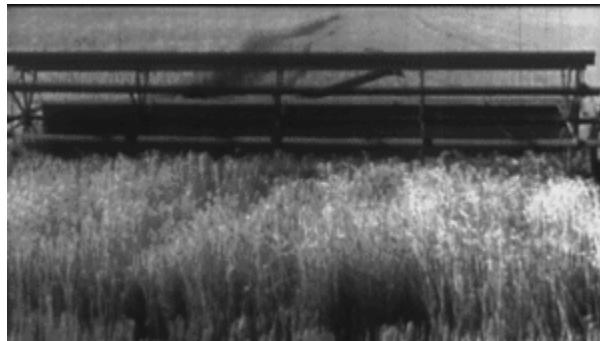
She suffered from asthma, he had a heart condition, and neither of them could forget the stern teachings of the Dust Bowl.



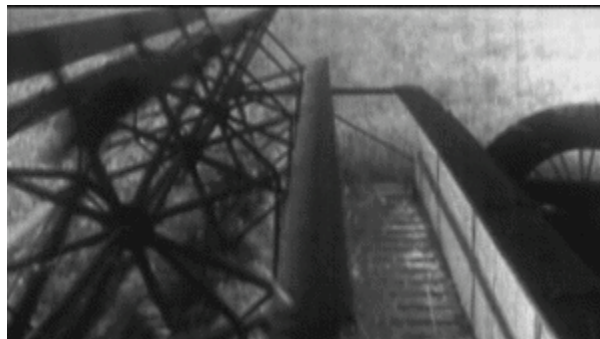
[Caroline Henderson] It is good to remember that the laws of the universe recognize no favorites and cherish no hostility or small vindictiveness;



that before sun and rain, stormy winds, or summer's kind beneficence, we all stand upon one common level.



[Narrator] In the first five years of the 1940s, land devoted to wheat expanded by nearly three million acres.



The speculators and suitcase farmers returned.



Parcels that had sold for \$5.00 an acre during the Dust Bowl ...



now commanded prices of 50, 60, sometimes 100 dollars an acre.



Even some of the most marginal lands were put back into production.



"The same process," Howard Finnell warned, "is starting again in the very same place.



"I always said I was the only one who could remember those dreadful days,"



Caroline confided to a friend, adding,



"People have simply assumed it couldn't happen again."



Then, in the early 1950s,



when the wet cycle ended ...



and a two-year drought replaced it,





the dust storms picked up once more.



But the damage to the land was mitigated ...



by those farmers who had continued using ...



Howard Finnell's conservation practices,



and because nearly four million acres had been purchased by the government during the Dust Bowl ...



and permanently restored as national grasslands, the soil didn't blow as much. At least a few lessons had been learned.



[Wayne Lewis, Beaver County, OK] We want it now, and if it makes money now, it's a good idea.



But it isn't necessarily it's a good idea.



If the things we're doing are going to mess up the future, it wasn't a good idea.



Don't deal on the moment.



Take the long-term look at things.



[Timothy Egan, Writer] I think that the most basic lesson was, be humble.



Respect the land itself. Listen to what it's trying to tell you. If the wind blows 60, 70 miles an hour for 50% of the year, there's a reason why only one thing is growing there, and it's native grass. Don't try to put things in place there that don't belong there. Listen to the land itself.



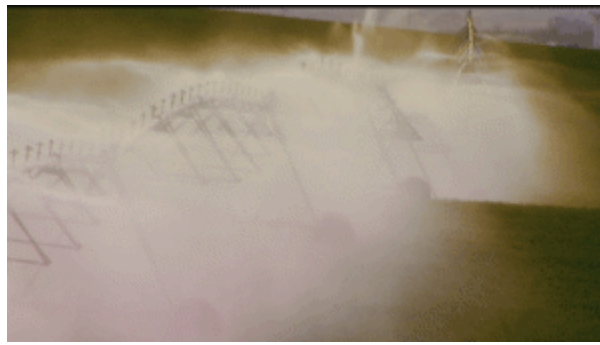
[Narrator] But now, instead of looking to the skies for rain,



many farmers began looking beneath the soil,



where they believed a more reliable -- and irresistible -- supply of water could be found --



The Ogallala is about 100 feet deep on the average. We've used over 50 feet of it now.



We've got about twenty years of water left under these eight states or the portions of these eight states, and it's disappearing. It's gonna be gone in 20 years.



If you lose the water, you're gonna lose the land. And that's it in a nutshell.



[Wayne Lewis, Beaver County, OK] My folks put in one of the first irrigation wells, and we thought it was a great idea.



As I look back at it now, it was the beginning of a bad idea.



Having irrigation water permitted us to do some things that weren't good for the long term.



And some of these days, I'll be gone, but somebody is gonna be out of water.



Folks are gonna have trouble getting enough drinking water, and they'll look back and say,



"And to think back there in the 50s and 60s, they used up our drinking water to raise hog feed."



[Donald Worster, Historian] I think the Dust Bowl can happen again -- most emphatically can happen again. It can become a creeping Sahara. The Sahara Desert, a few thousand years ago, was a savannah.



We know that it's possible to turn from Savannah to a stark desert,



and there's no reason to think that it can't happen in the middle of North America.



[Caroline Henderson] August 1, 1965. Another hot and desolate day.



We are both quite weakened by our struggles,



either with asthma or a desperate cough, I believe largely the result of working with the dusty wheat.



We had reason to hope for a good rain for the feed crop, just now in need of encouragement,



but the moisture was cut off with only a light shower.



[Narrator] On her homestead in No Man's Land, Caroline Henderson carried on without resorting to irrigation water from the Ogallala Aquifer.



It had been nearly 60 years since she first arrived, full of dreams of farming her own land and prospering from its bounty.



In those 60 years, she and Will had seen only ten bumper crops -- and oftentimes, she expressed feelings of failure to those she knew best.



As they approached the age of 80, they were still using the farm equipment they had purchased in the 1920s because Caroline refused to borrow money for land or machinery.



But they were free of debt, their daughter had become a successful doctor and had given them a grandson with a bright future.



In her old age, Caroline steadfastly refused to turn her land over to a farm management company --



"strangers of some far-away money-gathering corporation," she called them, "with no possible interest in this small bit of the good earth."



In 1965, with both of them in bad health, she finally agreed to come to Arizona to live with their daughter.



They returned to No Man's Land the next Spring for a final visit. Will died three days later. Caroline joined him -- passing through what she called "The Western Gate" -- within a few months.



In accordance with her wishes, the homestead was placed in trust, on the condition that it never be plowed again.



[Caroline Henderson] To prepare the ground as well as we may, to sow our seeds to cultivate and care for -- that is our part.



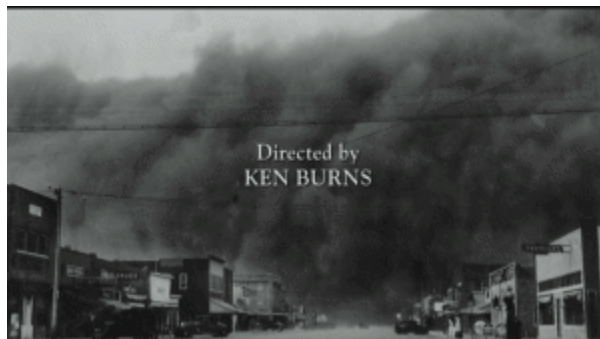
Yet how difficult it is for some of us to learn that the results we must leave to the great silent unseen forces of nature,



whether the crop be corn or character.



IN MEMORIAM
CLARENCE BECK
PAULINE HEIMANN ROBERTSON
DOROTHY STURDIVAN KLEFFMAN
WAYNE LEWIS



Directed by Ken Burns

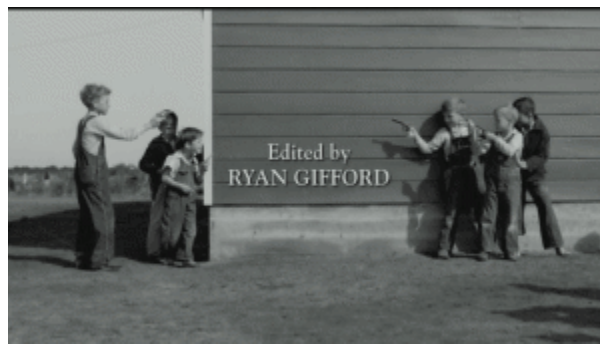


Written by Dayton Duncan

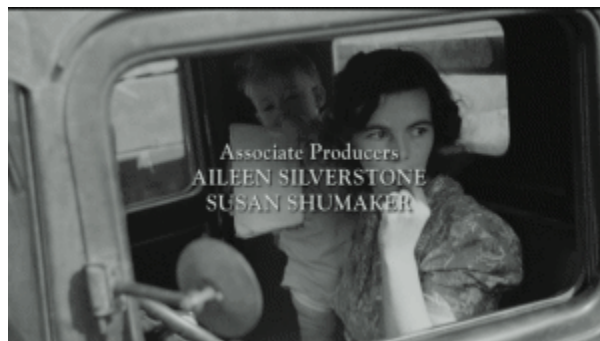


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Narrated by Peter Coyote



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VALERIE MARCUS

Music

Instrumentalist and Studio Arrangements
BOBBY BORTON

Traditional Music
JACQUELINE SCHWAR, piano

Music Recorded at
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Music Engineers
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ALAN STOCKWELL

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"Dead Bird Religion"	"Do Be Me"
"Dead Can't Kill Me"	Words and Music by Woody Guthrie
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Performed by Woody Guthrie	Performed by Woody Guthrie
Courtesy of RCA Records	Courtesy of RCA Records

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"SO LONG I'S Been Good to Know Yuh (Here's Old Dead)"
Written by Woody Guthrie

"Dead Scum Hunter (The Great Dead Scum)"	"I Ain't Got No Home (Is This World Any More)"
"Dead Bird Religion"	"Do Be Me"
"Dead Can't Kill Me"	Words and Music by Woody Guthrie
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"Using Down the Road (I Ain't Going to Be Dead) This Way"
aka "Where Down the Road"
Written by Woody Guthrie and Lee Hays
Published by Woody Guthrie Publications, Inc.
& TRC-Music Music, Inc. (BMI)
Performed by Woody Guthrie
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"Struggle Blues"
Words and Music by Woody Guthrie
Courtesy of Sony Music, Inc.,
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Performed by Woody Guthrie
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Courtesy of Smithsonian Folkways Recordings
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"SO LONG I'S Been Good to Know Yuh (Here's Old Dead)"
Written by Woody Guthrie
Published by Woody Guthrie Publications, Inc.
& TRC-Publishers Music Publishers, Inc. (BMI)
Performed by Woody Guthrie
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"I Ain't Got No Home (Is This World Any More)"
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[Woody Guthrie] [Singing]
That old dust storm
killed by baby
But it can't kill me, Lord,
And it can't kill me
That old dust storm,
Well, it killed my family
But it can't kill me, Lord,
And it can't kill me
That old landlord,
and he got my homestead
But he can't get me, Lord,
And he can't get me
That old dry spell
Killed my crop, boys
But it can't kill me, Lord,
and it can't kill me
That old tractor
Got my home, boys
But it can't get me, Lord,
And it can't get me
That old tractor
Run my house down
But it can't get me down,
and it can't get me
That old pawn shop
got my furniture
But it can't get me, Lord,
And it can't get me
That old highway,
It's got my relatives
But it can't get me, Lord,
And it can't get me

*That old dust mite
Killed my wheat, boys
But it can't kill me, Lord
And it can't kill me
I have weathered many a dust storm
But it can't get me, boys,
and it can't kill me
That old dust storm storm,
Well, it blowed my barn down
But it can't blow me down,
And it can't blow me down
That old wind might
blow this world down
But it can't blow me down,
It can't kill me
That old dust storm
Killed my baby
But it can't kill me, Lord,
And it can't kill me*