

THE DROUGHT—ACT OF GOD AND FREEDOM

BY J. RUSSELL SMITH

THE United States is suffering from drought as never before. There are three different aspects of this catastrophe. One is the absence of rain in places where the record of the past gave us reason to expect rain sufficient for agriculture.

The second element of loss and misery results from our widespread establishment of extensive agriculture in places where the evidence and the record did not give reason to expect the farmer to make an enduring success.

The third factor, new to most minds, has shocked millions—the destruction of lands by wind erosion.

The second and third of the three troubles may properly be said to result from a national land policy that traditionally has been but little above the level of economic idiocy.

I like to do as I please, especially with the property I own. I like to buy land and cut down the trees. I want to be free to dig ditches, and if I want to drain my lake and grow a crop in the rich accumulation in its bottom—why, it's nobody's business but my own—so I feel.

My father was like that, and his father, and all my ancestors, clear back to that little sailing ship that brought them across the Atlantic. In fact, we came to America because we were that kind of people. So were most other Americans. We all want freedom.

The government of the United States, made by that kind of people for that kind of people, has let us do very much as we pleased. Not only has our government let us, it has helped us to do as we pleased, especially with land. Our land policy has been: give it to the people; hurry up and give it to the people. They know what to do with it. Any and all know what to do with land—any land—all land.

In the sixties, seventies and eighties the government was giving away good land in quarter sections. When the good land was taken, the government gave away the poorer land in half sections, and then the yet poorer land in whole sections. If no one took it, the land remained government land; anyone might use it, and all could abuse it. Unrestricted pasturage was too often its fate. The ruin of the grass let gullies begin their destructive work (see map on page 413.)

We have, in effect, grabbed this continent almost without restrictions. We have done with it as we pleased, and now the consequences of this grab-and-kill land policy are beginning to show up.

We are now reading of drought. I shall not rehearse details. They have been on the front page of nearly every newspaper for weeks. Is drought an "Act of God," as the marine insurance policy says—something beyond man's control and also something wholly unexpected? So far as what we call drought is the result of the absence of the usual amount of rain, it may be called, if you choose, an act of God—or of nature. If nature regularly kept a non-agricultural grassland in a certain region, it is not

an act of God if we go there to begin farming and fail for want of rain.

But nature has changed her rain technique somewhat in certain areas, for the present at least.

In the United States rain results from the movement of great masses of air that are respectively of high barometer or of low barometer—so-called "highs" and "lows." Winds blow spirally in toward the center of an area of low barometer and ascend. If there is a good moisture supply, a "low" gives rain—much rain. Figure 1 shows a normal area of low barometer in western Kansas. The "low" draws warm, moist air from the Gulf of Mexico and gives rains to a large area (shown by dots) on the southeast, east and northeast edges of the "low" area. Such an area of low barometer usually moves slowly across the country, and passes out the St. Lawrence Valley, making hundreds of thousands of square miles of rain as it goes.

If it so happens that an area of high barometer lies between the low-barometer area and the sea, the "low" can still draw air into itself, but it cannot make much rain out of wind supplied by an area of "high." This happens because in a "high" area the air descends from a high altitude, is therefore dry, and blows outward from this "high." A "low" in Kansas fed by a "high" to the south of it is only a disappointing sprinkler.

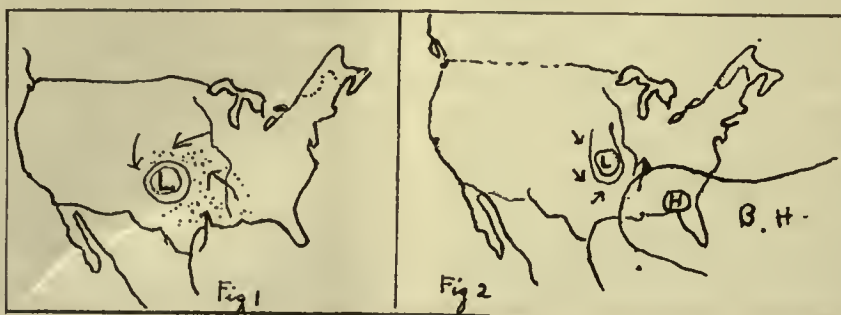
NOW it so happens that in the Atlantic Ocean between our southern states and Spain there is, most of the time, a large area of high barometer called the Bermuda High. Occasionally it gets larger and pokes its western end across our southern states. That shuts off our water supply, most of which comes from the Gulf of Mexico. That makes drought.

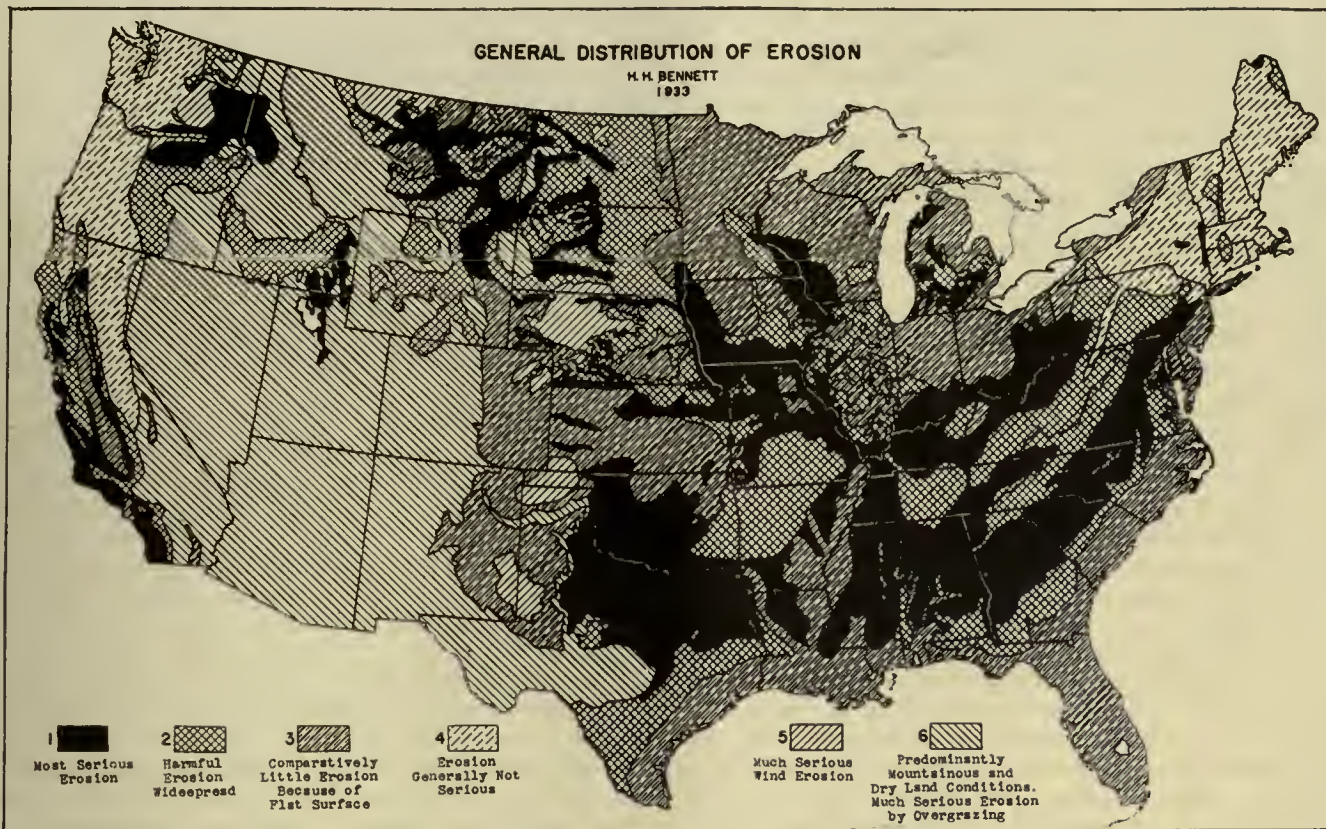
Figure 2 shows some weather of August 1, 1934. The "low" area should have made abundant rain over a large area if the "low" could have drawn a good in-swing from the surface of the Gulf. But not so. The Bermuda High blocked the moisture-bearing winds from the Gulf and fed it instead with dry air from higher altitudes, and made only light rain all over a small area. The promising "low," reduced in force, was pushed up toward Lake Superior by the Bermuda High. The paths of "highs" and "lows" make weather, and these paths are variable. When they go "wrong" for a whole season calamity follows, as in 1930, when the southeastern United States had its record drought.

But the making of rain then is an act of nature. We cannot control it. We do not even know the process of its causation. We must learn either to go around it or to go with it.

We may ask ourselves, at a time like this: did nature ever manage the weather this way before? And how shall we act in the future?

Nature has a great variety of weather combinations, and the full list is slow in appearing. There is a significant mark at St. Louis which





records the fact that the Mississippi River attained its highest flood at that point in the year of our Lord 1844. In the last ninety years that flood has not been equalled. Some day an unexpected set of weather factors may give the upper Mississippi Valley a cycle of rains similar to those of 1844, and there is certainly no reason to think that it may not make more droughts like the present one.

Indeed, the drought of 1884 to 1888 may have equalled the present drought in large areas which were then almost unsettled and from which we have therefore little record. Furthermore, the land-speculating pioneer often refuses to acknowledge patent but unpleasant fact.

It is estimated that the drought of 1884-88 drove a quarter of a million settlers out of Kansas alone—hurled them back as the wind blows leaves.

I knew well one sufferer from that drought. His tragic story, told to me in 1896, is still fresh in my mind. He was an Iowa man. Just before the great drought of the eighties he and three friends, also from Iowa, took a wagon-trip to the unsettled grasslands to the west. It was June, the prairies were beautiful with grass, flowers and bright sunshine. Antelopes ran away across the grass. The landscape was jewelled with little lakes of clear water where water-fowl swam and bred. A railroad was being built across this country a few miles to the south, and was opening up the land to settlers. The Iowa man and his three friends were so pleased that they took up land, built sod houses, brought out their families to grow up with the country.

The first year there was a shortage of rain, and my friend was disappointed in his crop. He had plenty of land, so he doubled the area of his crop the second year. But the drought halved the harvest.

He had placed his house beside a beautiful little lake. In the second winter the lake went dry. The hungry jack-rabbits came in off the upland and dug into its bottom to

get the roots of water plants. They made a busy scene in the winter moonlit nights. The third year my friend again doubled the area of his crop, and the increasing drought again halved his harvest. Thus, for the three years his acreage was 1, 2, 4; his crop, 1, 1/2, 1/4.

At the end of this period he gave up, sold the few things he had, and went back to Iowa, a broken man.

This occurred in longitude 99. This drought was followed by good years, another wave of settlers, and twenty years later the neighborhood was a fairly good community. Now it is on government relief. And the future?

THE careful study of the drought of 1884-88 and its results might have taught a great lesson to settlers and would-be settlers. But the man of the West and of the East who went West was much more speculator and gambler than cool, calculating student of droughts. Instead of studying droughts with calm statistics those optimists told each other millions of times that the climate had changed, and that plowing the land increased the rain. A pious old man from Georgia said within my hearing, after he had been shown some western land about this time, "The Lord just knowed we needed more land, an' He's gone an' changed the climac. It's rainin' more out there than it used to."

More recently, the war-boom and the tractor came together—a fateful pair. With the tractor a man could plow two or three or even four times as much prairie as he could plow in the eighties. It was great—if it rained and if there was a market for wheat, barley, rye and oats. We have plowed and plowed—plowed land that should never have been plowed—and recently the skies of Chicago, New York and Washington were clouded with dust because the tractor has destroyed the prairie-sod and the winds blew the top-soil away.

Some of this drought and most of these dust-storms are

only a part of the great land-use problem. We have been little short of lunatic in the way we have settled some of the West. If this drought is able to give us mass-production of valuable psychological impressions it may eventually have a useful side. Perhaps it will make the masses note the shriveling of the United States through the permanent destruction of plants and soil. The United States is, first of all, land, and land is good economically only when it can produce. The proportion of our land that is already destroyed by unintelligent or heedless use or misuse should appall all who can read (look at map on page 413.)

Arthur E. Morgan, head of the Tennessee Valley Authority, recently made a statement that has a bearing here although he was not talking of drought. He said that surveys showed that in the period of settlement—a little over a hundred years—one half of the good farmlands of the Tennessee Valley had been quite ruined by soil erosion (water.) In some of the hill sections of Georgia the land has already washed away so badly that some counties have lost one half of their farm population. The recent dust-storms have blown the most valuable topsoil off no one knows how much of our western grain lands which probably should never have been plowed at all because they were really only pasture lands—so the experts, and the record, say.

But I am still free to buy land and do with it as I please. I can cut it. I can burn it. I can do as farmers did in the now famishing West—drain lakes that should never have been drained. I can plow arid pastures and let them blow away. I can plow fertile hills and let them wash away, and can in a decade, or half a decade, ruin the land that might support a family for a millennium.

Soil destruction is still going on in the United States, faster than ever before. The new age of machinery gives me new powers of destruction. Witness the tractor and the dust-storm.

Would you tell me that I cannot do as I please with my own land? The idea is unpleasant to me. "This is a free country." I want to do what I want with my little back field. But I am beginning to have misgivings about allowing

Tom, Dick and Harry to misuse their land and destroy the United States, even if it may pay them personally to do so.

This question is particularly opportune, because in the carnival of boom and speculation that followed the World War we capitalized the moment, and land values of large areas of the West took a fantastic jump. Then we loaned money on the land at this fantastic valuation. Then came the trade slump and the price slump of 1929, and then came the drought. Whole counties are piled up with mortgages—mortgaged at several times what anyone is likely to pay for the land.

In the drought of the eighties we let the borrowers lose the land, and the lenders get possession of the land and then lose their money. But this time the United States government has stepped in, under both Mr. Hoover and Mr. Roosevelt, to take over these loans. Much of this mortgaged land belongs really to the United States government by way of its various loaning branches. By these loaning branches we prevented a grand smash—and *we* promise to pay instead of letting the farmer or the loaner pay. The government has put up money. Really it has bought lots of land—bought it with borrowed money.

We, the taxpayers of the United States, must soon be taxed to pay for hundreds of millions of dollars of loans by which the United States government bids fair to own again much of this western land. Will we act as foolishly with regard to it in the next fifty years as we have in the last fifty?

Unless the United States government goes bankrupt we are now about to pay in *cash* for many of the follies of Tom, Dick and Harry. We are also paying for their food just now, and we have them on our hands for next winter, and also for next summer, even if rains should begin now.

Are these three brethren to continue free to commit follies for which our taxes pay, and which in addition ruin the land on which future generations might live?

I may still want to do as I please with my own land, but I do believe the United States needs a land policy which even I, liberty-loving Smith, should obey in the interests of preserving the United States.

The Lessons of the Drought

UNLESS Uncle Sam permanently adopts the policy of paying for the miscellaneous follies of ignorance both near and far:

1. Regions where agriculture is reasonably dependable need to carry calamity reserves, probably in the form of unused credit.

2. Regions where agriculture is not reasonably dependable need to be returned to grass.

3. And under any and all circumstances we need a land policy that will keep individuals from destroying the land, otherwise this is not a permanent country.

A detailed picture of the drought—what it has done to farms and towns, how it has cut the totals of the food supply for man and beast, will be given in an early issue of Survey Graphic. The forthcoming article will also discuss the new burden the disaster has laid on federal relief funds, and the methods being worked out in Washington and in the field to meet an emergency that affects many states and puts whole counties on relief