

FRIENDS OF THE LAND

Address

by

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Friends of the Land

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There are two ways we can lose our land. We can lose it to a foreign power bent on world conquest and possessing the military might to make its dreams come true. We can lose it with even greater finality as far as human life is concerned if we merely continue to strip its cover with plow and ax as we have been doing while the precious and irreplaceable topsoil flows past our cities down to the sea in mud.

You might say there are two ways for human beings to end their hope for a satisfactory future life for themselves on this planet. One is to perfect the technique of mass slaughter faster than they develop the technique of living together in an orderly, peaceful world society. The other is to destroy that thin, scarce film of soil without which human life cannot survive. In our lifetime the trend of our work on both equations has been bad.

The line of action I am discussing tonight cannot and must not detract one featherweight from our effort to win the military war speedily and decisively. That is the current phase of our struggle with the first great equation. War this year will in all probability take the lives of more American boys than have been sacrificed up to now in all foreign wars of our history. That stark outlook hangs like a cloud over the home of everyone of us. When we have won military victory, we must this time press endlessly for the development of mechanics for international order. We must not, we will not, falter on either count. But at the same time the people of this nation can push vigorously its work on the second great equation, to protect the land itself, the subject of our meeting here. Progress on that front will not weaken, but will support and inspire and give meaning to our military and international performance.

The problem of the management of our soil and water resources is world-wide. In the long run every phase of human life will be controlled by the way man meets

it. My job as the speaker tonight is to bring that universal problem into the confines of this room; to try to give it perspective and meaning in terms of the interests and emotions of the men and women of Memphis and the mid-South.

Let us start with the broadest possible view. Natural processes have placed a thin film of topsoil over the land. Activated by the sun, it grows vegetation that is necessary to life. The areas where the soil cover is thick and productive for man's cultivation are limited and are known. There are only about four billion acres left in the whole world of soil ranging from reasonably good, some of it poor, up to good, to feed two billion human beings. Nutritionists say a good diet requires about $2\frac{1}{2}$ acres per capita.

A lot of good land on every continent has been destroyed, and ancient civilizations went with it. The Libyan desert was once a land of flourishing cities set in wide and fertile fields. Man cut the trees, over-cropped and over-grazed the soil, and made a desert. The Mayan civilization in Central America after flourishing for 1,200 years destroyed itself about 700 years ago when, within the short space of two generations, it cleared the hills surrounding their black, fertile valleys in order to grow corn where trees and grass had grown for centuries. China's Yellow Sea is yellow with the wash of sub-soil where the topsoil long since has vanished. These illustrations can be multiplied, but we do not need to go to Africa, or China, or India, or Central America to see the process and its results - they are painted in a vivid, livid picture clear across the cotton belt from Georgia and the Carolinas to Oklahoma.

One more observation before I sharpen the focus to the Continental United States. It took nature from 400 to 1,000 years, depending on conditions, to make one inch of that precious topsoil. It takes only about three years of careless farming on moderately steep slopes, of "square farming in a round country", of up-

and-down-hill plowing, to lose that inch of topsoil.

What is the picture in the United States? Those of you who have heard or read Hugh Bennett know it already. In our short life as a nation we have ruined 50 million acres of good land; it is abandoned; it cannot be farmed. Another 50 million acres of crop land is swiftly coming to that stage. There isn't much that can be done about it now. One hundred million acres - three states of Illinois!

On another 100 million acres more than half the topsoil is gone - all the topsoil from much of it. A lot of poor people are trying to scratch out a living on this land, but the soil isn't there to make it a good living.

On a third 100 million acres the erosion process is actively under way. We have a fight on our hands to save that, a fight that will call for every weapon we have.

Let me summarize, starting from the other end. We have left about 400 million acres of crop land in the United States. About 40 million acres of that ought to be taken out of cultivation today. It is too steep for anything but trees and grass if we are to hold the soil that is left and keep it out of our streams and reservoirs. About 100 million acres could be reclaimed and added by drainage and irrigation. The sum total of our soil resources, therefore, is 460 million acres of reasonably good to good land. That's all there is; there isn't any more.

These aren't guesses; they are the results of Soil Conservation Service surveys which divided the Continental United States into 126 regions, and worked through the farmers of every county, every community. All but 130 million acres of this crop land is subject to the identical process that has already ruined so much of our land.

Let's sharpen our focus once more and look briefly at the 13 cotton and

tobacco states that include all the territory tributary to Memphis.

These states include nearly one-third of the nation's crop land - 125 million acres in crop production. The Soil Conservation Service says that over one-tenth of that land should be taken out of crop production at once. Only 13,000,000 acres or another 10 per cent can be considered safe from erosion. The remaining 80 per cent needs extended and continued conservation treatment. Already, in 150 years, 38 million acres have been washed away and destroyed for agriculture. Only $6\frac{1}{4}$ million acres have had organized soil conservation treatment. Sixteen times as much needs to be treated.

Here is a most significant fact. These 13 cotton and tobacco states, with a third of the crop land, contain 51 per cent of the people who live and work on farms in the United States. The struggle of these 15 million or more people for a cash income has meant too much cash cropping, too much row farming, too much growing to sell and not enough growing to eat at home. That system is hard on the land, hard on the people; and poor land and poor people go together.

Thus far I have been giving you background, a lot of it, too much, probably. I have been talking about the soil as producer of the food, clothing, and shelter essential to life, and the working of processes that destroy soil. That is one side, a fundamental side, of a subject that has many sides. I have talked negatively and, I hope, alarmingly, about mankind's waste of irreplaceable soil resources without saying anything about what man has done, and can do, to check and reverse the process. As I turn to work these other angles, I believe we can at the same time begin to see and define the interest which Memphis has - the very people in this room have - in the critical challenge to befriend the land.

Unless cover is restored on the hills and unless cultivated land is handled differently on the slopes and in the valleys that drain into the waterways of the

great Mississippi basin, recurring floods are going to wreak increasing damage in the Memphis area and elsewhere in spite of the miracles of engineering construction we attempt or perform. That means something to Memphis; it is another side, but an important one. I'll return to it in a moment. First I want merely to mention still another side. If this country will only do what it knows how to do to restore hill covers and to farm practically for soil conservation, we will be doing more than can be done in any other way to multiply and perpetuate wild life in the streams and fields of our land. Maybe there is a community where the men like to hunt and fish more than you do here in Memphis, but I haven't found it if there is. There are other sides and angles, but they can wait. If these already suggested don't strike deep into your interest, nothing else will.

We in this country know how to do all that needs to be done to conserve our soil and to control our floods. The trouble is enough of us don't use what we know. We are like the old farmer when the county agent asked him to the schoolhouse meeting to learn about farming better. "Hell, there's no use my coming", he said, "I don't farm as good as I know how to now."

Up in my state, Missouri, there's a man who is a real friend of you people here along the lower Mississippi. Maybe you never heard of him, but if what he is preaching is done, the engineers will be able to bring the Mississippi river under flood control and keep it there. His name is Bill Etheridge. He is professor of Field Crops at the University of Missouri.

Bill is a real Friend of the Land. He has had a big hand in moving Missouri's agriculture in recent years in the direction of more cattle and sheep, more acres of improved grass, more acres of crops pastured, and less row-crop farming, particularly on the hills. Due to Bill Etheridge and others like him, Missouri now ranks as second state in total acres of farm land grazed.

He is advocating the construction of deep, grass-sloped farm ponds on Missouri farms, over 500 thousand ponds for the 175 thousand farms. The program already has built 22 thousand. The capacity of these ponds in the aggregate to hold flood waters that otherwise would add to flood peaks here is enormous, to say nothing of what they would do for the falling water tables up north. If a system of farm ponds dotted the states that drain off into the Mississippi; if we got cover back on the cut-off hills; and if we farmed horizontally instead of in squares, engineering skill could handle the big river floods.

Here's about the way Bill Etheridge would tell the story if he were here tonight. Floods are local or regional in occurrence but national in extended economic loss and disturbance. Their frequency and size, and their excitement of the public mind are increasing. Such floods as occurred in the lower Mississippi in 1927, the Northeast in 1936 and 1938, the Ohio Valley in 1937, Southern California in 1938, the Missouri Valley in 1942 and 1943, and the Arkansas River Valley in 1943, have aroused an anxious public interest in the whole dreadful phenomenon; and were we not for most of this period progressively engrossed in subjects of war, our national consciousness of flood disaster would be even more acute.

The increasing frequency and size of floods, major and minor, are not caused by great variations in climate. Floods, of course, originate in unusually heavy precipitation, but the major floods cited above - a succession of eight disasters in sixteen years - were not invariably preceded by falls of rain or snow which in themselves could be called phenomenal.

Nor are the structural and engineering controls of floods now less effective in design and original efficiency than formerly. Floods are growing in number and volume principally because the watersheds are delivering to the streams an ever increasing proportion of the water which falls upon them. Denudation is the condition

which sets water free on its running course downward from the hills and slopes to the low grounds, creeks, and rivers. A well-wooded hillside with its multifold obstructions and spongy absorbent soil commonly allows very little water to run off the surface; good grass is equally effective; a correctly planned rotation of crops, aided by terracing and contour farming, loses only an insignificant amount of water and soil. But when the hillside is cleared, plowed, and intensively cultivated without any attention to the continuity of surface cover and the saving of water, the loose absorbent surface soil is soon washed off, the whole slope becomes eroded, and water falling on the denuded area quickly seeks its level. The speed and volume of the delivery of water down a given grade are in proportion to the degree of denudation. Next to water itself, denudation is the principal natural factor contributing to floods. And denudation is increasing rapidly and with great local variation.

The control of the delivery of water and soil from high grounds to low grounds and streams lies in the management of public and private lands - especially farm lands - of the watersheds and drainage basins. The process of denudation has to be reversed.

The means of doing this are the simple practices of a first-rate program of soil conservation. They are:

(1) The reforestation of public lands and the planting of farm woodlots in strategic places, to break, obstruct, and absorb moving water as well as to redevelop the passing natural resources of timber and wildlife.

(2) The filling and stabilizing of farm gulleys, to spread water over the soil surface instead of giving it channels in which to run to the creeks.

(3) The improvement of permanent pastures, to hold the soil in place as well as to give better support to livestock.

(4) The correct rotation of crops to provide a maximum continuity of soil cover as well as to give good yields.

(5) The improvement of soil tilth to increase soil capacity for absorbing and holding water.

(6) The construction of farm ponds to provide many thousands of effective small catch basins as well as to furnish water for livestock.

(7) The terracing, contour farming and waterway grassing of farm fields, to slow the downward course of water so that it may evaporate or be soaked up by the soil sponge instead of running off.

These and similar practices can hold a vast amount of water on the land and store it there in the great natural reservoir of the soil and thus prevent it from adding a further burden to an already overtaxed system of engineering works downstream. They save soil too and prevent it from filling and in time destroying the engineer's reservoirs, dams, and channels.

No rational thinker will hold that soil conservation on the hills and slopes can completely supplant structural works downstream. Any measures of land management as measures of prevention are properly regarded as supplementary to the protective measures afforded by downstream structures.

I am ready to assume that we are all more or less interested in these things - in soil and water conservation, in flood control. The question is, how much are we interested? Is our interest academic, the too-bad-but-what-can-I-do variety? Or are we willing to search our hearts and minds to see if there isn't something we can do about it? Is there a place for the Friends of the Land, and, if so, do you belong in it? Is a common interest in the preservation of the soil and all that implies strong enough cement for a local and a national organization that has no other interest or purpose?

The Friends of the Land as a formal body is not quite four years old. It is young, it is small, its few thousand members are widely scattered. But it is growing, interest in it is increasing, and it is learning to walk and make its way in the world. The reason, as one of its founders puts it, is this; "When people come together to work for the land, the mother of us all, to try to protect it and save it for the use of human beings, for ourselves and the present as well as for posterity and the future ***, there they find some common denominator that brings them closer together than any other work on the face of the Earth."

Liberty Hyde Bailey, dean of agricultural writers, might have had Friends of the Land in mind in 1918 when he wrote prophetically:

"To protect the Earth *** is the fundamental conservation. Not all citizens can participate here, but every citizen can be mindful of the necessity of it and aid in creating public sentiment. I wait for the coming together of new organizations and societies that shall have for their purpose the conservation of fertility. These will be much more than agricultural and rural organizations and their work need not be technical or occupational. They may include all persons and the discussions and interests may run the range of man's relation to land. *** In the large sense, everyone of us is a farmer, for the keeping of the Earth is given to the human race."

Some people complain to me that Friends of the Land isn't "practical". The answer, of course, is that Friends of the Land will be just as "practical" as we make it. If a connection with the organization stimulates communities to study local conditions and spread the light throughout their own trade territory, then Friends of the Land will be justified by a practical result. If it reaches many of the non-farming population, which is more than three-fourths of our total, with the vital message of conservation, it is "practical". If it nourishes and spreads the

reach of its magazine "The Land" to its full potential usefulness, then from my standpoint it has justified itself even though it fails to accomplish another single thing.

After all, the question of what is practical and what is not becomes pretty much a matter of definition. When a young man in Ohio tried to get his neighbor to plow and cultivate on the contour, that practical individual made the classic answer:

"Young man, you can't tell me anything about farming; I've worn out three farms already." The farmer in Southern Iowa or Northern Missouri who farms his rolling slopes with square fields may think he is intensely practical, but less than a generation of that kind of farming will have destroyed the major values of the farm. Exactly that happened to the black-loam Central Iowa farm on which I was raised. I went back to see it in 1930 after 24 years. What had been black topsoil was yellow clay, and it will never be a good farm again.

There are a few thoughts I want to leave for the local Chapter. To reach its maximum usefulness a community organization must be big enough and alert enough to generate its own current so that it will not need to depend on power from the outside. There is enough to be seen here, to be done here, and there is enough leadership here so that you will not need to draw for object lessons on Illinois or Ohio or Iowa. You will not even need to bring on the outside "traveling circus" to make your meetings entertaining and inspiring - Bromfield and Bennett and Forman and Lord and Francke cannot stretch everywhere. Look about you in Tennessee, in Mississippi, in Arkansas. Everywhere you can see the right way and the wrong way to handle the land. From here along the Nation's great river artery you can help spread the understanding that flood control is a two-phased job. One belongs to the engineer, to handle floods when they come. The other falls to men on the land, to friends of the land, who alone can keep waters in the courses to which they belong.

I realize that nearly every man and woman gathered here has a direct or indirect interest in the ownership of a piece of land. The truth and importance of these things are well-known to you. After all, there is the closest possible relationship between the right care of the land and the plant-to-prosper, live-at-home philosophy which has radiated from Memphis for many years. That is another face of this many-sided subject. Friends of the Land brings you no new philosophy. Perhaps it can help add to the light and force that is already here. It is what we do for ourselves that counts most; the values most worthwhile will not be brought to us from the outside.

I remember very well coming to Memphis five years ago to speak at the Mid-South Forum at the close of the Plant-to-Prosper contest for 1938. I do not suppose any of you remembers that I quoted then briefly from something a friend of mine and a friend and neighbor of yours, Alf H. Stone of Mississippi, had written. He started with these lines from Cowper:

"Defend me, therefore, common sense, say I,
From reveries so airy; from the toil
Of dropping buckets into empty wells,
And growing old in drawing nothing up."

He then went on to say:

"Our own people, as well as those beyond our borders, would do well to accept the stubborn fact that we ourselves must work out our own destiny, must solve our own problems, must heal our own wounds. And we should also realize that for the health of our own bodies and the peace of our own souls, it is well that this is so. We are not different from the rest of the world. We are entitled to no special and peculiar dispensation of providence.

"There is not a farm in the Southern states which is not potentially a self-sustaining unit. This simply means that our farming population,

Individually and as a whole, can raise its own vegetables, produce its own melons and fruit, cure its own meat, produce its own milk, butter, syrup, chickens, and eggs. These things are too simple and crude for discussion in a learned treatise on rural economics. But through all the ages of civilized men, and in all the countries of the civilized world, they have been the backbone, the beginning and the end, of a sound agricultural economy. It is only in the South that we refuse to produce for ourselves the necessities which we ourselves consume. It is only here that we blindly and stupidly persist in our determination to buy the necessities of life, rather than produce them. And this is the deepest of our own empty wells. Not in a thousand efforts can we draw from it anything save the bitter water of broken hopes."

He touched the heart of the problem of land and human conservation in the South. You know it, and I know it. He was wrong, I believe, in thinking that only in the South are evils of one-crop farming to be found. The dust storms of a few years back said otherwise. But it is another side to our picture, another common interest.

Let me in conclusion wish you well in Memphis, Friends of the Land. Let me in an official role bring you the greetings and the best wishes of the other local chapters, most of which I do not know as well as I know you. There is work to be done if we know how to do it.

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