

The COW Ahead of the PLOW

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The art of agriculture, that is, agriculture in practice, is old. The science of it, namely, the understanding of the principles underlying the practice, is relatively new. The art has come to us slowly through the ages under guidance of the quiet but severe forces of evolution. Each long-lived practice is a case of survival by the strength of its recognized service. The science of agriculture has not been under test so long. It has often changed the art of agriculture. These changes were most pronounced where the natural resources, particularly the fertility of the soil, were ample to pay for, or cover, the costs of the mistakes connected with those changes.

Our westward march across the United States, to deeper, more fertile soils, has perhaps not impressed you as a case in question. We have not realized that bountiful soil fertility may have covered the costs of our errors in understanding the fundamental scientific facts of agriculture. Too much plowing, when we once recognized what the plow can do, and the resulting dust bowl, were only a temporary disturbance where the surface soil was so deep. A second dust bowl in the same place, however, might be a permanent disaster, if it should be the equal in severity of the first one.

The costs cannot be paid repeatedly by losses of this natural resource, namely, the soil. A science of agriculture given to direction from one center, and under national emergencies — apt to be over-emphasized if not even propagandized — has left abandoned farms, and exhausted soils at the rate of one per family per generation in its wake of westward travel. The art of agriculture has been more permanent, and less “progressive,” if those are the costs of such distinction. The slower art of agriculture put the **cow ahead of the plow**. The science of agriculture, given to more speed, put the **plow ahead of the cow**. Cannot that science give more lasting profit to its agriculture by keeping the cow, our foster mother, ahead of us in our vision as the reason for having any plow?

Primitive agriculture used the flocks and the herds, not the plow, as its symbol. Primitive agriculture was nomadic. It became a settled or a fixed one on those soils to which the cow had led the way. She served as the chemist assaying the soil fertility growing the forage that fed her and her owner. She had no fences to

restrain her. She chose to graze on those soils fertile enough to make the satisfying feed of her contentment. She was not only ahead of the plow, she was ahead of the fence and other kinds of machinery that disregard her physiology her nutrition in their designs according to the modern science of agriculture which is emphasizing economics, systems, politics, and all else except the nutrition of animals and man for their good health.

Agriculture is concerned with life, not just with machines and materials.

Some simple observations may prompt us to ask ourselves some questions and to stimulate our thinking about the soil as it provides all that the cow would need to have coming from it, and whether a soil needs to meet only the limited requirements of being just something to be plowed, or to be manipulated by other agricultural machinery. Forages grazed by the cow have been called “grass and hay.” They have been something to be cut with a mower or chopped, baled, stored in the barn, and measured as tons of dry matter. More machinery to reduce the labor requirements of the farmer has been guiding the production of grasses and hays, when, in our humble opinion, that effort should be guided with the concern for more fertility in the soil for better nutrition of the cow by means of those feeds. The machinery has become primary in the agricultural picture. The cow has become secondary, if one can judge by the growing tractor population in contrast to the cow population.

When the plants we call “weeds” grow tall in the pasture while others are grazed closely and seem to be growing shorter, this is regularly considered a call for the mowing machine to fight the weeds. Instead when weeds “take” the pasture, that ought to be viewed as a case in which the cow is giving a new definition for the word “weeds.” Careful observations of her behavior should raise the question in our minds whether she would suggest hormone sprays for the fight on weeds on a national scale. She is apparently telling us that weeds are not so much a particular plant species of bad repute within the vegetable kingdom. Rather, weeds are any plants making too little of nutritional value to tempt her to eat them for it. She lets them grow taller and tolerates the degree of her own starvation required to do so.

Recently a case came to our attention

in which a herd of beef cattle was regularly going through knee-deep bluegrass and white clover on a virgin prairie, never fertilized and never plowed, to graze out the, formerly well-fertilized, abandoned corn field of cockle burs, briars, nettles, and a host of plant species considered our worst weeds. Most of them were the kind that are under legislative bans against distribution of their seeds. Here the cows were contradicting our plant classifications. They were disregarding what we offered as supposedly good grazing in the form of the bluegrass, and were going the greater distance to consume the plants we have always called weeds and even noxious ones. Such was their choice, though only when the weeds were growing on more fertile soil. These cows would scarcely recommend the use of hormone sprays to kill certain plant species we classify as weeds. They would recommend more fertile soils instead. Then, apparently, no plant would be called "weeds" by them.

When the cow breaks through the fence, is it her objective merely to get on the other side? A careful consideration of such cow behavior points out that she is not going from one of our fields to another one, both of which have had the fertility of the soil exhausted to a low level. In-

stead, she is going from one of those areas of our neglected soil fertility to the railroad right-of-way, or to the public highway. She is going to where the soils are still near the virgin, fertile condition. Those soils have not been mined of their nutrient stores. When as agricultural leaders, possibly agricultural scientists, we plea for better fences to save valuable meat or milk animals from violent traffic deaths, is this not a failure to see the cow ahead of the plow? Is it not a case of putting the plow too far ahead of the cow?

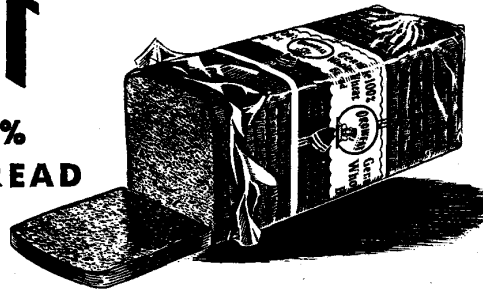
(To Be Concluded Next Issue)

For the great Convention of the Fertilizer companies, they of course had to have a Queen — like all organizations. But, they didn't know what to call her! Finally decided on Queen "Plant Aid."

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