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Renewing Husbandry

The time of mechanization in agriculture is fast coming to an end. But can we recover what's been lost?

BY WENDELL BERRY

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I REMEMBER WELL A SUMMER MORNING in about 1950 when my father sent a hired man with a McCormick High Gear No. 9 mowing machine and a team of mules to the field I was mowing with our nearly new Farmall A. That memory is a landmark in my mind and my history. I had been born into the way of farming represented by the mule team, and I loved it. I knew irresistibly that the mules were good ones. They were stepping along beautifully at a rate of speed in fact only a little slower than mine. But now I saw them suddenly from the vantage point of the tractor, and I remember how fiercely I resented their slowness. I saw them as “in my way.”

This is not an exceptional or a remarkably dramatic bit of history. I recite it to confirm that the industrialization of agriculture is a part of my familiar experience. I don't have the privilege of looking at it as an outsider.

We were mowing that morning, the teamster with his mules and I with the tractor, in the field behind the barn on my father's home place, where he and before him his father had been born, and where his father had died in February of 1946. The old way of farming was intact in my grandfather's mind until the day he died at eighty-two. He had worked mules all his life, understood them thoroughly, and loved the good ones passionately. He knew tractors only from a distance, he had seen only a few of them, and he rejected them out of hand because he thought, correctly, that they compacted the soil.

Even so, four years after his death his grandson's sudden resentment of the “slow” mule team foretold what history would bear out: the tractor would stay and the mules would go. Year after year, agriculture would be adapted more and more to the technology and the processes of industry and to the rule of industrial economics. This transformation occurred with astonishing speed because, by the measures it set for itself, it was wonderfully successful. It “saved labor,” it conferred the prestige of modernity, and it was highly productive.

During the fourteen years after 1950 I was much away from home, though I never entirely departed from farming or at least from thoughts of farming, and my affection for my homeland remained strong. In 1964 my family and I returned to Kentucky and settled on a hillside farm in my native community, where we have continued to live. Perhaps because I was a returned traveler intending to stay, I now saw the place more clearly than before. I saw it critically, too, for it was evident at once that the human life of the place, the life of the farms and the farming community, was in decline. The old self-sufficient way of farming was passing away. The economic prosperity that had visited the farmers briefly during World War II and for a few years afterward had ended. The little towns that once had been social and economic centers, thronged with country people on Saturdays and Saturday nights, were losing out to the bigger towns and the cities. The rural neighborhoods, once held together by common memories, common work, and the sharing of help, had begun to dissolve. There were no longer local markets for chickens or eggs or cream. The spring lamb industry, once a staple of the region, was gone. The tractors and other mechanical devices certainly were saving the labor of the farmers and farmhands who had moved away, but those who had stayed were working harder and longer than ever.

THE EFFECTS OF THE PROCESS OF INDUSTRIALIZATION have become so apparent, so numerous, so favorable to the agribusiness corporations, and so unfavorable to everything else, that by now the questions troubling me and a few others in the '60s and '70s are being asked everywhere. It has become increasingly clear that the way we farm affects the local community, and that the economy of the local community affects the way we farm; that the way we farm affects the health and integrity of the local ecosystem, and that the farm is intricately dependent, even economically, upon the health of the local ecosystem. We can no longer pretend that agriculture is a sort of economic machine with interchangeable parts, the same everywhere, determined by "market forces" and independent of everything else. We are not farming in a specialist capsule or a professionalist department; we are farming in the world, in a webwork of dependences and influences probably more intricate than we will ever understand. It has become clear, in short, that we have been running our fundamental economic enterprise by the wrong rules. We were wrong to assume that agriculture could be adequately defined by reductionist science and determinist economics.

It is no longer possible to deny that context exists and is an issue. If you can keep the context narrow enough (and the accounting period short enough), then the industrial criteria of labor saving and high productivity seem to work well. But the old rules of ecological coherence and of community life have remained in effect. The costs of ignoring them have accumulated, until now the boundaries of our reductive and mechanical explanations have collapsed. Their collapse reveals, plainly enough for all to see, the ecological and social damages they were meant to conceal. It will seem paradoxical to some that the national and global corporate economies have narrowed the context for thinking about agriculture, but it is merely the truth. Those large economies, in their understanding and in their accounting, have excluded any concern for the land and the people. Now, in the midst of so much unnecessary human and ecological destruction, we are facing the necessity of a new start in agriculture.

THE TRACTOR'S ARRIVAL HAD SIGNALLED, among other things, agriculture's shift from an almost exclusive dependence on free solar energy to a total dependence on costly fossil fuel. But in 1950, like most people at that time, I was years away from the first inkling of the limits of the supply of cheap fuel.

We had entered an era of limitlessness, or the illusion thereof, and this in itself is a sort of wonder. My grandfather lived a life of limits, both suffered and strictly observed, in a world of limits. I learned much of that world from him and others, and then I changed; I entered the world of labor-saving machines and of limitless cheap fossil fuel. It would take me years of reading, thought, and experience to learn again that in this world limits are not only inescapable but indispensable.

Mechanical farming makes it easy to think mechanically about the land and its creatures. It makes it easy to think mechanically even about oneself, and the tirelessness of tractors brought a new depth of weariness into human experience, at a cost to health and family life that has not been fully accounted.

Once one's farm and one's thoughts have been sufficiently mechanized, industrial agriculture's focus on production, as opposed to maintenance or stewardship, becomes merely logical. And here the trouble completes itself. The almost exclusive emphasis on production permits the way of working to be determined not by the nature and character of the farm in its ecosystem and in its human community, but rather by the national or the global economy and the available or affordable technology. The farm and all concerns not immediately associated with production have in effect disappeared from sight. The farmer too in effect has vanished. He is no longer working as an independent and loyal agent of his place, his family, and his community, but instead as the agent of an economy that is fundamentally adverse to him and to all that he ought to stand for.

THE WORD "HUSBANDRY" IS THE NAME of a connection. In its original sense, it is the name of the work of a domestic man, a man who has accepted a bondage to the household. To husband is to use with care, to keep, to save, to make last, to conserve. Old usage tells us that there is a husbandry also of the land, of the soil, of the domestic plants and animals—obviously because of the importance of these things to the household. And there have been times, one of which is now, when some people have tried to practice a

proper human husbandry of the nondomestic creatures, in recognition of the dependence of our households and domestic life upon the wild world. Husbandry is the name of all the practices that sustain life by connecting us conservingly to our places and our world; it is the art of keeping tied all the strands in the living network that sustains us.

Most and perhaps all of industrial agriculture's manifest failures appear to be the result of an attempt to make the land produce without husbandry. The attempt to remake agriculture as a science and an industry has excluded from it the age-old husbandry which was central and essential to it.

This effort had its initial and probably its most radical success in separating farming from the economy of subsistence. Through World War II, farm life in my region (and, I think, nearly everywhere) rested solidly upon the garden, dairy, poultry flock, and meat animals that fed the farm's family. Especially in hard times farm families, and their farms, survived by means of their subsistence economy. The industrial program, on the contrary, suggested that it was "uneconomic" for a farm family to produce its own food; the effort and the land would be better applied to commercial production. The result is utterly strange in human experience: farm families that buy everything they eat at the store.

An intention to replace husbandry with science was made explicit in the renaming of disciplines in the colleges of agriculture. "Soil husbandry" became "soil science," and "animal husbandry" became "animal science." This change is worth lingering over because of what it tells us about our susceptibility to poppycock. Purporting to increase the sophistication of the humble art of farming, this change in fact brutally oversimplifies it.

"Soil science," as practiced by soil scientists, and even more as it has been handed down to farmers, has tended to treat the soil as a lifeless matrix in which "soil chemistry" takes place and "nutrients" are "made available." And this, in turn, has made farming increasingly shallow—literally so—in its understanding of the soil. The modern farm is understood as a surface on which various mechanical operations are performed, and to which various chemicals are applied. The undersurface reality of organisms and roots is mostly ignored.

"Soil husbandry" is a different kind of study, involving a different kind of mind. Soil husbandry leads, in the words of Sir Albert Howard, to understanding "health in soil, plant, animal, and man as one great subject." We apply the word "health" only to living creatures, and to soil husbandry a healthy soil is a wilderness, mostly unstudied and unknown, but teeming alive. The soil is at once a living community of creatures and their habitat. The farm's husband, its family, its crops and animals, all are members of the soil community; all belong to the character and identity of the place. To rate the farm family merely as "labor" and its domestic plants and animals merely as "production" is thus an oversimplification, both radical and destructive.

"Science" is too simple a word to name the complex of relationships and connections that compose a healthy farm—a farm that is a full membership of the soil community. The husbandry of mere humans, of course, cannot be complex enough either. But husbandry always has understood that what is husbanded is ultimately a mystery. A farmer, as one of his farmer correspondents once wrote to Liberty Hyde Bailey, is "a dispenser of the 'Mysteries of God.'" The mothering instinct of animals, for example, is a mystery that husbandry must use and trust mostly without understanding. The husband, unlike the "manager" or the would-be objective scientist, belongs inherently to the complexity and the mystery that is to be husbanded, and so the husbanding mind is both careful and humble. Husbandry originates precautionary sayings like "Don't put all your eggs into one basket" and "Don't count your chickens before they hatch." It does not boast of technological feats that will "feed the world."

Husbandry, which is not replaceable by science, nevertheless uses science, and corrects it too. It is the more comprehensive discipline. To reduce husbandry to science, in practice, is to transform agricultural "wastes" into pollutants, and to subtract perennials and grazing animals from the rotation of crops. Without husbandry, the agriculture of science and industry has served too well the purpose of the industrial economy in reducing the number of landowners and the self-employed. It has transformed the United States from a country of many owners to a country of many employees.

Without husbandry, “soil science” too easily ignores the community of creatures that live in and from, that make and are made by, the soil. Similarly, “animal science” without husbandry forgets, almost as a requirement, the sympathy by which we recognize ourselves as fellow creatures of the animals. It forgets that animals are so called because we once believed them to be endowed with souls. Animal science has led us away from that belief or any such belief in the sanctity of animals. It has led us instead to the animal factory which, like the concentration camp, is a vision of Hell. Animal husbandry, on the contrary, comes from and again leads to the psalmist’s vision of good grass, good water, and the husbandry of God.

Agriculture must mediate between nature and the human community, with ties and obligations in both directions. To farm well requires an elaborate courtesy toward all creatures, animate and inanimate. It is sympathy that most appropriately enlarges the context of human work. Contexts become wrong by being too small—too small, that is, to contain the scientist or the farmer or the farm family or the local ecosystem or the local community—and this is crucial. “Out of context,” as Wes Jackson has said, “the best minds do the worst damage.”

OUR RECENT FOCUS UPON PRODUCTIVITY, genetic and technological uniformity, and global trade—all supported by supposedly limitless supplies of fuel, water, and soil—has obscured the necessity for local adaptation. But our circumstances are changing rapidly now, and this requirement will be forced upon us again by terrorism and other kinds of political violence, by chemical pollution, by increasing energy costs, by depleted soils, aquifers, and streams, and by the spread of exotic weeds, pests, and diseases. We are going to have to return to the old questions about local nature, local carrying capacities, and local needs. And we are going to have to resume the breeding of plants and animals to fit the region and the farm.

The same obsessions and extravagances that have caused us to ignore the issue of local adaptation have caused us to ignore the issue of form. These two issues are so closely related that it is difficult to talk about one without talking about the other. During the half century and more of our neglect of local adaptation, we have subjected our farms to a radical oversimplification of form. The diversified and reasonably self-sufficient farms of my region and of many other regions have been conglomerated into larger farms with larger fields, increasingly specialized, and subjected increasingly to the strict, unnatural linearity of the production line.

But the first requirement of a form is that it must be comprehensive; it must not leave out something that essentially belongs within it. The form of the farm must answer to the farmer’s feeling for the place, its creatures, and its work. It is a never-ending effort of fitting together many diverse things. It must incorporate the lifecycle and the fertility cycles of animals. It must bring crops and livestock into balance and mutual support. It must be a pattern on the ground and in the mind. It must be at once ecological, agricultural, economic, familial, and neighborly.

Soon the majority of the world’s people will be living in cities. We are now obliged to think of so many people demanding the means of life from the land, to which they will no longer have a practical connection, and of which they will have little knowledge. We are obliged also to think of the consequences of any attempt to meet this demand by large-scale, expensive, petroleum-dependent technological schemes that will ignore local conditions and local needs. The problem of renewing husbandry, and the need to promote a general awareness of everybody’s agricultural responsibilities, thus becomes urgent.

How can we restore a competent husbandry to the minds of the world’s producers and consumers? This effort is already in progress on many farms and in many urban consumer groups scattered across our country and the world. But we must recognize too that this effort needs an authorizing focus and force that would grant it a new legitimacy, intellectual rigor, scientific respectability, and responsible teaching. There are many reasons to hope that this might be supplied by our colleges of agriculture.

The effort of husbandry is partly scientific but it is entirely cultural; and a cultural initiative can exist only by becoming personal. It will become increasingly clear, I believe, that agricultural scientists will need to work as indwelling members of agricultural communities or of consumer communities. It is not irrational to

propose that a significant number of these scientists should be farmers, and so subject their scientific work, and that of their colleagues, to the influence of a farmer's practical circumstances. Along with the rest of us, they will need to accept all the imperatives of husbandry as the context of their work. We cannot keep things from falling apart in our society if they do not cohere in our minds and in our lives.

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*Wendell Berry's poems, essays, and works of fiction have won him numerous honors and a wide following. His latest collection of poems is titled *Given*. His essay in this issue is drawn from *The Way of Ignorance*, to be published by Shoemaker & Hoard in November 2005 and used here by permission. He lives and farms in his native Kentucky.*



The Orion Society, 187 Main Street, Great Barrington, MA 01230
413-528-4422 / Toll Free 888-909-6568 / Toll Free Subscriptions 800-254-3713

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