

Simple Solutions, Package Deals, and a 50-Year Farm Bill



As our economy has been showing us for the past year or so, we have become a nation of fantasists. With a kind of abject credulity, we have come to believe in the power of money alone to bring forth goods, to believe that money itself *is* a good, to believe that consumption is as vital an economic activity as production. We think that shopping is a patriotic act and a public service. We tolerate fabulous capitalists who think a bet on a debt is an asset.

It is becoming harder to remember—especially, it seems, for most economists—that our lives depend upon the economies of land use, and that the land-using economies depend, in turn, on the ecosphere. It is nonetheless a fact that we cannot have life or health or wealth apart from the health of the natural world—of land, water, and air. A

further and more demanding fact is that land, water, and air cannot be healthful apart from a healthful human economy, beginning with farming, forestry, and mining.

Mining we have allowed to become an industrial war against the land and all its living communities, taking whatever is of most immediate value, and leaving in return ruins and poisons that are substantially worse than nothing. Perhaps it is not surprising that, ignorant and indifferent as we are, we have allowed the economies of agriculture and forestry to mimic the economy of mining, making potentially renewable and sustainable resources nonrenewable, taking much temporary wealth and returning permanent ruin to the land and its natural and human communities.

A nation skilled and educated in fantasy is going to have trouble understanding, and so is going to resist understanding, that healthful land-use economies are immediately complex and ultimately mysterious—and that healthful ecosystems, on which healthful land-use economies depend, are immediately even more complex and ultimately even more mysterious. We like to believe that all choices are simple, as between an obvious good and an obvious evil, as between two silverware patterns or two automobiles. But in the economies of land use there are no simple choices, and no consequences that do not ramify perhaps endlessly. The results of such choices are not limited, not linear, but are intricately and at last mysteriously formal.

Back in the 1970s, with the examples of good Amish farms before us, my friend Maurice Telleen of the *Draft Horse Journal* helped me to see that the presence of draft horses or mules on those farms was not a simple choice of one kind of traction power over another. It was instead a choice of one kind of farming, and one way of thinking about farming, over another. What Maury understood and helped me to understand was that those work animals were a determining force against specialization and for diversity. They were part of a package or a pattern. If you were working horses or mules, then, merely in the

nature of things and following an obvious logic, you would also have pastures, forage crops, fenced fields, feed grains, and barns for stable room and feed storage. Those things in turn made for the keeping of other kinds of animals. Diversity of crops and animals led, in turn, to the rotation of crops, the use of cover crops, the use of manure as fertilizer. The farm thus sponsored much of its own operating energy and fertility. Moreover, the use of draft animals determined the scale of the farm. The farms had to be what we would call “small” or “family-sized”—acres that could be worked and maintained with a reasonable expenditure of effort by the work animals and therefore by the people as well. A good Amish farmer told me that he had learned from his father never to have a horse harnessed after supper. That amenity guaranteed enough rest and good health for the horses, and also some needed leisure for the family.

If the use of draft animals implies diversity, homegrown energy and fertility, appropriateness of scale, and a significant measure of built-in economic health on the farm, it also implies economic diversity and health in the local community. I am thinking, for example, of Holmes County, Ohio, where the horse-powered farms are supplied and served by an impressive variety of local shops, trades, and industries: harness makers, farriers, family-run farm equipment factories, and so on. I am also thinking of the small towns of my boyhood, in which all sorts of independent small businesses survived and even thrived by participating in an economy of small, horse- or mule-powered farms—in which shoe-repair shops repaired harness, and a lot of farm equipment was built or rebuilt or repaired in local blacksmith shops.

If we can see that draft animals on the farm belonged to and led to a distinctive kind of farming, then we will have no trouble in seeing that the substitution of tractors for draft animals belonged to and led to farming of a radically different kind. The tractors too have

proved to be part of a package, as now we can see. The tractor package included increased dependence on farm equipment corporations and oil companies, increased dependence on credit, increased dependence on toxic chemicals, ever-larger farms and ever fewer farmers, loss of diversity, increased specialization, more acres planted in annual crops and fewer in perennials, more soil erosion, clearing of woodlots, removal of fences and fencerows, less diversity both domestic and wild. All this implies and has led to a highly centralized long-distance food economy, and a commensurate decline of local economies and communities and of the whole social structure of rural America. And obviously you cannot disrupt the social structure of the countryside without disrupting the social structure of the cities.

About now I begin to hear the distant rumble of two accusations that experience has taught me to anticipate: namely, that I am trying to “turn back the clock,” and that I am a Luddite.

Well, I certainly am not trying to turn back the clock. I know, for example, that we cannot recover the topsoil that we have squandered since we began to impose our extractive, persistently colonialist economy on the so-called New World. I know we cannot recover our rural communities and local farming cultures, such as they were, flawed as they were, before 1950. We have no place to start but where we are, which is not news, but merely the truth. We do need to have some authentic understanding of the choices we have made.

On the other hand, I am indeed a Luddite, if by that I may mean that I would not willingly see my community—to the extent that I still have one—destroyed by any technological innovation. Most present-day farmers are, for a number of reasons, not capable of choosing to farm with horses, and so there would be little use in suggesting to them that they can’t farm well with tractors. They can, and many do, but to do so they must measure and regulate their work by the nature, the carrying capacity, and the sustaining pattern of their farms, not by the capabilities of the available machines.

Though there is no contest, at present, between draft animals and tractors, I don’t want to neglect to say that there is at present a well-started and ongoing contest between creatures and machines, and in this contest the creatures have good reason to worry.

The same interests and forces that have brought about our centralized, long-distance agricultural economy have also brought about a centralized, long-distance forest economy. The economic principle is everywhere the same: a domestic colonialism that extracts an immense wealth from our rural landscapes, returning as near nothing as possible or nothing or worse than nothing to the land and the people. The producers of agricultural products, nearly all, nearly always, are at the mercy of the market and the buyers. Producers of forest products are in the same fix.

Given the growing demand for local food, and the increasing numbers of farmers’ markets and Community Supported Agriculture farms, it is becoming possible to imagine the development of local farm and food economies in which communities and localities produce, process, market, and consume local farm products, marketing any surpluses to outside demand.

But we need to be moving also toward the integration of forestry into the local farm and food economy, wherever the farms are likely to include woodlands. Wherever forests or woodlands are predominant in the landscape, we need to think of developing local forest economies that, instead of exporting raw logs, would produce, process or manufacture, and market the fullest variety of forest products, from lumber for building to mushrooms and nuts, from fenceposts to firewood, from Christmas decorations to finished furniture.

The answer, the only answer, to economic colonialism is to make the greatest local advantage of the products of the local countryside, producing and processing for local consumption first of all, and only then for export. This exactly reverses the colonial economy that, if it

could, would have the local people starve in order to export food, or live in shacks and shanties in order to export logs. In the Appalachian coal fields a colonial economy does in fact cause the local people to live in severely and dangerously degraded landscapes to enable the export of coal.

Obviously, in talking about the development of local economies based on local products, I am giving an improved sense to that weary phrase "job creation." If your community is making its living primarily by the export of raw materials for manufacture elsewhere, then along with your logs or your wheat or your cattle or your minerals you are exporting jobs, and then you will be exporting your young people to take those jobs. All that is clear enough. We have seen it happening.

Perhaps the most important point in favor of local economy is that by making an economy local we necessarily make it diverse. That is because local needs are diverse. If we attempt to make our versatile landscapes as responsive as possible to the diversity of local needs, then we would be solving, not one, but many problems.

This of course would be contrary to the economic tendency of our country, especially in recent times. Our tendency has been to fasten upon one local product, and allow that one to determine the local land economy. One reason I don't long to turn back the clock is that I don't know a time that I would like to turn the clock back to. Even so, we have made choices and changes, and we need to think critically of our history. I remember a way of farming here in Kentucky that was comparatively diverse and at best well structured, farm by farm. I remember when Louisville lived, to a significant extent, from its surrounding landscape. I remember excellent sheep flocks and herds of cattle on beautifully maintained Central Kentucky farms that were not horse farms. I remember when most farm families subsisted primarily from their own land and home economies. These memories don't tell me that I once lived in an ideal age, above criticism. They

tell me that by now we have become too much determined by outside influence and too little self-determining; too concentrated, too specialized, and too vulnerable; too thoughtless or neglectful of good possibilities in our land and people.

The economic advantages of diverse local land based economies such as I am talking about are clear enough. Their promise is not luxury or extravagance for a few, but a modest, decent, sustainable prosperity for many. In addition, there would be an equally significant ecological advantage. In a complex local economy, in which a lot of people were economically dependent on the products of the local landscape, there would be the strongest local support for good land use. People knowingly dependent on the land would not willingly see it cropped or grazed or logged or mined to exhaustion.

I have laid out a vision, and I am skeptical of visions. But this vision is recommendable at least for its modesty. The scale is small, and I would be greatly surprised if it should produce even one billionaire. It is also a practical vision. It exists, no doubt in many versions, because it is attractive to some of us. But we are going to see it enforced by the increasingly manifest failures of industrial forms of land use. I don't think I need to say a lot about these failures beyond just listing them. The principal ones are these:

1. Erosion and degradation of the soil.
2. Pollution by toxic chemicals, resulting in unswimmable streams, inedible fish, and a six-thousand-square-mile "dead zone" (one of at least four hundred worldwide) in the Gulf of Mexico.
3. Toxic or pathogenic food.
4. Forest ecosystems damaged or destroyed by high-grading, clear-cutting, tree monocultures, recreational abuse, deer overpopulation, etc.

- 5. Land destruction on a gigantic scale by forms of surface mining, culminating in mountaintop removal.
- 6. Destruction of rural communities and the cultures of husbandry.

For a long time the exorbitant costs and damages of industrial exploitation of land and people were talked about only by a fringe of dissidents and protesters. But now these problems have caught the attention of mainstream reporters and are making their way into public consciousness. To give just one example, *Time* magazine, for August 31, 2009, carried an article on industrial agriculture and industrial food that would have been unimaginable even a year earlier. The article says unconditionally:

With the exhaustion of the soil, the impact of global warming and the inevitably rising price of oil . . . our industrial style of food production will end sooner or later. . . . Unless Americans radically rethink the way they grow and consume food, they face a future of eroded farmland, hollowed-out countryside, scarier germs, and higher health costs . . .

The good news is that we don't have to be consenting victims of agribusiness-as-usual. To give just one example on the positive side, Wes Jackson and the Land Institute—with the backing of numerous other groups and institutions—have proposed to the Secretary of Agriculture “A 50-Year Farm Bill” that addresses head-on the problems of erosion, toxicity, loss of diversity, and the decline of farm communities. The five-year farm bill—what we have had so far—deals with export policy, consumer issues, subsidies, food stamps, etc., with a bone thrown to ecology by way of never-adequate conservation programs. “A 50-Year Farm Bill,” by contrast, comes at agriculture from ecology, and deals directly with issues of land use. The key change

proposed by this bill is the increase in the acreage of perennial plants from 20 percent in 2009 to 80 percent in 2059. This change would involve at first increases in pasture and forage crops, and then, starting in 2019, the introduction of perennial grain crops.

The proposed perennialization of agriculture, like the horse and the tractor, would not be a simple choice. It too would be a package deal, and it would go literally to the roots of our problem. The advocates and suppliers of agri-industrial technologies have encouraged us to think of agriculture as an enterprise occurring on top of the ground. We have not been concerned nearly enough with the condition of the soil, with the health and abundance of underground organisms, or with the depth, tenacity, and longevity of the roots of plants. Perhaps we have avoided these subterranean matters because of their darkness and complexity, which belittle our knowledge and our powers of explanation.

The use of perennial plants in agriculture may always levy a tax of humility and require a certain deference to mystery. You may, for example, “manage” your pasture; you may by good management take excellent care of it, keeping it healthy and productive all your life; but you will never know its whole pattern or its whole story, from the long, nutrient-releasing decay of its bedrock, to the cohabitation of its plant species, their foliages and roots, to the teeming communities of the small-to-invisible creatures of sod and topsoil, to the interactions of tame and wild grazers and foragers and their predators, to the birds that live in and above and from it, to the ways in which your work and care affect everything else. No conceivable language or diagram could make it plain. To live with a pasture year after year is certainly to learn more and more, but it is also to learn more and more how small your knowledge is. The predominance of annual monocultures, by contrast, encourages a disastrous pretense of omniscience.

A significant increase in the acreages just of pastures and forages

implies—in addition to the obvious result of less soil erosion—a new diversification. Replacing corn and soy beans grown for animal feed with perennial grasses and legumes would reduce erosion and save energy; by extending the seasonal green growth of the fields, it would greatly increase the harvest of solar energy; and it would take cattle, hogs, and poultry out of the animal factories and put them back on farms, back on grass, where they belong. Diversification would tend to reduce the size and increase the number of farms; it would bring more people into agriculture, where at least some of them belong. This is a prospect pleasing to all of us who are devoted to better, kinder ways of using the land. But it involves worries too, and to be as honest as possible I want to speak of a worry.

Most people who understand good land use know that to use our land in the best way, we will need more people on our farms and ranches and in our forests. We need a better ratio of eyes to acres, as Wes Jackson has put it. We need more people skilled in physical work, who have workable minds. How are we going to get them? That is a big worry. They certainly are not going to come ready-made from the “labor pool.” And we can hardly expect to get the best work done by underpaying and overworking an underclass of migrant workers—yet another racially denigrated class consigned to “menial” work. I think we will have to go back to our old agrarian ideal, espoused by Thomas Jefferson among many others, of a countryside populated by settled families and stable communities earning a decent livelihood from their work and their goods. And let me say emphatically that by “settled families” I mean people of any race or origin who are willing to accept the actual responsibilities and do the actual work that go with the ownership and good use of land. The people who do the land’s work should own the land. It should *not* be owned in great monopolistic estates by a class of absentee landlords, as in the latter days of the Roman Empire, and as increasingly now, with us, in the time of our own decadence.

To speak of the need for settled families and stable communities in rural America is to imply at the same time the necessity of extensive and profound cultural change. Good and responsible use of family-sized holdings cannot be expected of people with the dependent and subservient minds of industrial employees. What is required are people independently intelligent and resourceful, skilled in handwork and practical thought, who have forgotten about “professionalism,” “official channels,” and “overtime.”

Now I hope I have said enough to return more pointedly to the problem I started with: our popular and dangerous doctrine of the simple solution. In my lifetime I have witnessed the advent of several solutions that were both large and simple, all ostensibly addressed to one or two problems. The nuclear bomb, the work of “idealistic” scientists, was invented to win a war. It then brought forth “the peaceful atom” to assure military dominance and to solve forever our need for cheap, clean energy. Among other unforeseen results is a string of six industrial sites and waste dumps along the Ohio Valley from Portsmouth to Paducah that will be contaminated, and unimaginably dangerous, virtually forever.

Such simple solutions as nuclear power and, more recently, biofuels have been introduced into contexts, natural or human or both, that its proponents have ignored. Every one, in order to solve a problem or two, which as likely as not it has failed to solve, has caused new problems by which its proponents have been surprised. Every one has been immensely profitable to some, though its real costs, including ecological and social costs, have not been debited against its earnings. We don’t have an accurate measure even of the net economic value of any of them.

On September 29, 2009, the *New York Times* reported the latest of a long line of simple solutions in agriculture. This is “a long-awaited breakthrough,” namely “a high-technology method to sort the sperm

of dairy bulls” so that it “produced 90 percent or more female offspring, allowing farmers to expand their herds more efficiently.”

Well, who in our frantically innovating society is going to quarrel with efficiency? The answer, as usual, is that there will be no quarrel until the desired efficiency crashes into a reality that, as usual, comes as a surprise. In this instance the big surprise was “the economic crisis that “caused booming dairy exports to dry up and curbed demand at home, sending prices tumbling. At the same time, feed costs remained high . . .” Overproduction is the inevitable result, which is hardly the right circumstance for the introduction of sorted bull sperm and the consequent increase of the size or productivity of dairy herds.

Here, then, is another example of technological innovation made in ignorance, and therefore in defiance, of context. “Sexed semen” came into use because it made an illusory sort of financial sense: more cows = more milk + booming demand = more money. The presumed efficiency led directly to disaster—for dairy owners but not, I suppose, for the producers of sexed semen—because it did not make economic sense. It failed to make economic sense, we must suppose, because for a long time the dairy industry has failed to make agricultural or ecological sense. Instead of a resilient dairy economy, broadly based upon local demand and diversified small farms capable of adapting quickly to changes of context, we have a gigantic, overfinanced, financially vulnerable dairy industry founded upon the two bubbles of Wall Street delusion and global demand.

The increasingly undeniable failures and dangers of our industrial system of food production are attributable mostly to our cult of simple solutions. The simple-mindedness that produces simple solutions has made us incapable of judging industrial efficiencies and technological breakthroughs within the contexts of actual economy, the disciplines of good land use, or ecological responsibility. Simple solutions will always lead to complex troubles, and simple minds will always be surprised.*

By contrast, the 50-Year Farm Bill—proposing diversification, perennialization, and resettlement of our agricultural landscapes—cannot be thought of as simple. It is immediately and obviously complex. It proposes a kind of decency and a kind of justice to ecosystems and the ecosphere, to the communities and cultures of land husbandry, and to human society. It involves much difficulty. It will take a long time. The most we can say in its favor is that it is necessary, for it would solve, not one or two, but many problems. It would bring more people, more hands and eyes, more intelligence, more conscience, more affection into the service of our economic landscapes. If this can happen, it will be a homecoming.

(2009)

* On February 19, 2010, an op-ed article in the *New York Times*, by Adam Shriver (a doctoral student in the philosophy-neuroscience-psychology program at Washington University), proposes genetically engineering the brains of animals painfully confined in animal factories so that they cannot feel pain. A practice that is indefensible morally, ecologically, agriculturally, and (if all the costs were accounted) economically, is thus made acceptable if the animals are “engineered” so as not to feel their suffering. The idea that science can be used to shortcut the actual complexity of actual problems has become conventional with some scientists. This dishonors and abuses everything involved, including science.