

The Return of the Prairie*

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The entire notion of retiring American cropland sounds farfetched. Politicians talk all the time about export markets eager for everything we can grow: agriculture, we hear, is our strong suit. Environmentalists, meanwhile, stare at a global population of more than six billion by the end of the century and say that food production must rise dramatically. No wonder there is more talk about whether we have enough cropland than about whether we have too much. Between commercial enthusiasm and environmental pessimism, however, we have forgotten that demand may *not* keep pace with supply, especially as supply rises from countries, like Brazil, that are rapidly expanding their agricultural exports. What will happen if American farmers can't sell everything they produce? The sad probability is that fields will revert to poorly managed woodlots and scruffy pastures.

American Abundance. The high road of American agriculture starts somewhere near Horace Greeley, who dedicated a book to the first man to plow ten acres a day, two feet deep, for two dollars an acre. It continues past Orville Freeman talking about an "ever-expanding agriculture" and Earl Butz telling farmers to plant "fence post to fence post." Plenitude was recently been elevated to teleological status: nobody in the Senate hearing room raised an eyebrow when Norman Berg, President Carter's director of the Soil Conservation Service, told a subcommittee that the heartland of this country existed for grain. Berg's words were "That's what it was created for."

This vision is by now habitual, if not instinctive, for most Americans, but its fulfillment depends on exports soaking up everything America's farmers can grow: That's because domestic requirements will certainly not rise much in the decades ahead. Our faith in exports, however, is also strong. It goes back to the 1920s, when in the postwar slump George Peek fought a long, unsuccessful battle in Washington for an export corporation. Peek was ahead of his time, for American agricultural exports edged up only gradually even in the 1950s and 1960s. The jump after 1970, when the value of American agricultural exports tripled in five years, from \$7 billion to \$22 billion. Five years later, the figure had doubled again. Is it any wonder that otherwise sober men start waving their arms and talking about feeding the world?

Population is rising, of course. A report published in 1984 by the USDA's Joint Council on Food and Agricultural Sciences points out that, if world grain production is to keep up with population growth, then by the year 2000 the world will have to increase its grain production by an amount equal to twice the current output of the United States. These projections, moreover, ignore

the 475 million people who, according to the Food and Agriculture Organization in 1981, were "seriously malnourished." For them to have a better diet, still more grain will be needed.

World grain trade is in fact projected to rise from 130 to 240 million tons by century's end; Africa and South Asia alone will probably buy seventy percent of the increase. If the United States holds onto a major share of this growing market, its grain exports could rise from 110 million metric tons in 1980 to 168 million in the year 2000, roughly a 50% increase.

That sounds impressive, but will it keep our farmers busy? To produce 168 million tons of grain for export in the year 2000, our production would have to rise only 1.3 percent a year until the end of the century. A major forecast prepared in 1983 at Oklahoma State University, however, estimates that wheat yields will probably rise three percent annually until the end of the century. The figures imply continued surpluses and unneeded cropland.

The Oklahoma State estimate may be wrong, but history is not on the side of doubters. We ought to remember that Curtis Marbut, the USDA's longtime chief soil scientist, said in 1925 that "the future contains lurking within it no possibility of such an increase of production as has taken place during the last half century." Marbut, of course, was dead wrong: The future contained an even bigger increase in production than the previous half century, an increase that was accomplished entirely with rising yields, because we harvested fewer acres in 1975 than we did when Marbut spoke. Many people say that Marbut was not wrong, just premature. But what reason do we have to believe that now is the time when the future at last contains "lurking within it" no production surprises?

Sometime Cropland. None of this, of course, neither the demand projections nor the promise of higher yields, proves anything. We may need every acre we've got. Still, it is clear that cropland redundancy in the next century is not wildly implausible. It is likely enough that we ought to start thinking about how we might deal with it.

In the past, of course, when cropland became superfluous it was simply abandoned. This will come as no surprise to easterners. In Maine, for example, about 35 acres are cultivated today for every 100 cultivated a century ago. Cropland retirement is now occurring in the great midsection of this continent. Just east of Oklahoma City, for example, there is a lot of country that looks as though no white man has ever figured out what to do with it: Mile after mile, there is only a half-cleared woodland of blackjack-oak thickets and pastures so poor they're hardly worth fencing. This is old sharecropped cotton land, driven out of production not simply because it was horribly gullied, but because low prices hurt farmers here much more than they hurt farmers who still had topsoil. One

acre in twelve is cultivated in this part of Oklahoma today. Incredible as it seems, the figure in 1920 was one acre in three.

If we knew that a century from now a large proportion of today's cropland was going to be similarly abandoned, we might have the common sense to restore it to the open prairie found by homesteaders. That way, we would get something of value from the land. Instead of a neglected fence around weeds, we would have grazed parkland with recreational elbowroom, a prairie equivalent of the national forests. If we actually sat down and figured out which lands should be retired, we would find, I think, that we were identifying many of the places that even now worry soil conservationists. A particular target might be the slopes of the major rivers crossing the Great Plains. The pattern of retirement might look like a map of selected Mississippi tributaries with parks running along the streams and extending back onto the headlands in bands whose width would increase year by year as our crop acreage requirements declined. Creating such prairies, we would probably find the Mississippi running with a gradually lightened load of agricultural pollutants.

Consider the case of Oklahoma. The most striking natural features of the western part of the state are its rivers -- the Cimarron, the branches of the Canadian, and the Washita. A state highway crosses the Cimarron, for example, near the now-closed plutonium plant where Karen Silkwood worked. The atmosphere is spooky, but the river itself is magnificent, moving slowly between wooded banks of red sandstone. As they pass Oklahoma City, the forks of the Canadian have been trashed with landfills, automobile bodies, broken concrete, and tires. What makes it especially depressing is that the forks are such obvious candidates for park development. If Oklahomans wanted to do something special they could hardly do better than make them into long parks, accessible by car but developed so hikers and horseback riders could move along the river without seeing or hearing an engine.

Farmers and agribusinesses are likely to point out that Oklahoma is the nation's number two wheat producer and not about to yield its position voluntarily. Much of this wheat, however, comes from unstable sands blown by Pleistocene winds into ten-mile-wide bands fringing the north sides of the rivers. Exact statistics are not available, but I estimate that the sandy land along the Cimarron covers a half-million acres, of which about a third, say 150,000 acres, is cropped, almost all in wheat. The Soil Conservation Service writes here that "much of the land used for crops is better suited to permanent pasture," because there is a "severe hazard of soil blowing." The farms are surprisingly small, ranging from 500 acres downstream to twice that in the drier upstream country. The value of grain sold from these farms actually declines as one moves upstream from the smaller but more productive eastern farms: the figures decline from about \$50,000 to about \$40,000 annually. With good grain prices these farms can probably continue in wheat for many years, but low

prices, weakened government support, or drought will see retirement come to these farms as surely as retirement came to their cotton cousins in the 1940s.

The sensible alternative, I think, is to anticipate such changes and get ready to convert these areas, if conditions warrant, into national prairie parks. Much more than the Cimarron is involved here. What good is retiring 150,000 acres of wheat in a country where, year after year, we struggle to hold wheat acreage below 50,000,000 acres? I am talking about cropland retirement on a much larger scale.

The closest thing we have to such a program now is in the National Grasslands. Covering about 4,000,000 acres, these grasslands are what we have to show for two much more ambitious proposals made in the 1930s. At that time, the National Resources Planning Board suggested federal acquisition of 75,000,000 acres, mostly in the Great Plains. The Forest Service wanted even more: It recommended a "conservative initial program" that would have bought 125,000,000 acres as the first step of a scheme ultimately involving the purchase of more than 200,000,000 acres, about half of it rangeland. Only about 11,000,000 acres were actually bought, all on a voluntary basis. The lands soon became the orphans of the federal estate and were transferred from the Resettlement Administration to the Farm Security Administration to the Bureau of Agricultural Economics to the Soil Conservation Service. By 1954, 3,000,000 acres had been disbursed among other federal agencies, and the remaining lands were shifted to the Forest Service, the agency responsible for them today. For seven or eight years, the Forest Service continued making transfers to other agencies, but in 1961 most of the remainder was organized into nineteen National Grasslands. Despite their misfit history, the lands today are often heavy in grass, while on the private side of the fence the land is nearly denuded.

Of all federal agencies, in short, the Forest Service is the one with the experience and demonstrated willingness to care for the grasslands of the Great Plains. The administration of prairie-restoration projects should accordingly be assigned to it. The present National Grasslands emphasis on commercial grazing, however, ought to be replaced by a much closer balance between grazing and recreation. There ought to be a greater effort to reestablish native vegetation instead of exotic grasses. There will probably have to be deliberate burning. There might well be game as well as cattle ranching. And there will certainly have to be a greater effort to make access easier. The Forest Service is as competent as anyone to carry out such instructions.

Buying Back the Prairie. The obvious question, then, is how to create such parks and have them grow if and when cropland is retired. The mechanism I propose is voluntary contracts in which farmers retire 100 percent of their cropland for 15 years. During that time the government pays the farmers for

the crops they would otherwise grow. At the end of the fifteen years, title to all but a 40-acre homestead vests in the federal government.

Consider the example of an average wheat farm in Oklahoma. The farm covers 500 acres, half of it cropped and planted to wheat. The farmer is 50 years old; his farm, including land and buildings, is worth \$400,000. Wanting to retire at age 65 and without children willing to try making a living on the farm, the farmer volunteers for the prairie-restoration program; the government accepts his offer. He no longer plants anything except approved grasses, and for the next fifteen years the government pays him \$25,000 annually. I arrive at that figure by multiplying his 250 wheat acres by 30 bushels per acre by \$3.30 per bushel. The farmer's net income soars, of course, because he has so few production costs. Meanwhile, he supplements his government check with stocker cattle in the summer, or, if he prefers, by renting his land out for grazing. Fifteen years later, when title shifts to the government, the farmer will have received \$375,000 for crops he never grew. He will have received, that is, almost the entire \$400,000 market value of his farm. Instead of being out of his life's investment, however, he remains the owner of a 40-acre homestead he can sell, live on, or make the headquarters for a seasonal grazing operation on the restored, now federally owned, prairie.

Retiring an eighth of Oklahoma's wheat acreage this way would mean purchasing almost a million acres of wheat land and probably two million acres of farmland altogether. At \$800 an acre, that's a federal investment of \$1.6 billion. To retire an eighth of Kansas's wheat acreage, which is twice as large, would cost twice as much. If my memory is correct, the \$3.2 billion cost of acquiring a 4,000,000-acre estate in Kansas is a couple of hundred million less than the cost of a new aircraft carrier.

The carrier comparison may be absurd, but it's less absurd than comparing the cost of a retirement program with the zero-cost of a non-program. After all, the real-world alternative isn't no program: it's more of the existing farm program—which is anything but cheap. In 1982, about half the wheat farmers in this country participated in a program with a 20% acreage reduction requirement; in exchange, they got loans to help them grow their crops; they also got deficiency payments if their crop was sold for less than the so-called target price. The administration intended to have an identical program in 1983, but late in the year a radical revision was made. Saying that "weak demand is a global problem" Secretary Block proposed a supplementary payment-in-kind program. PIK programs had been used before: In 1961, for example, the Kennedy administration allowed farmers to set aside 40% of their cropland and receive, as payment-in-kind, half of what they might have grown on half that set-aside and 60% of what they might have grown on the other half of it. Twenty-five million acres were put into the PIK program that year. Similar programs continued until 1970.

The 1983 PIK program was more generous. Farmers who participated in the regular program could now elect an additional 30% set-aside, for which they would receive payment-in-kind at the rate of 90% of their yield. Participation was high: 86% of the nation's wheat growers signed up. For Oklahoma, with 7.8 million acres of eligible land, a million were set aside under the PIK program alone. The government agreed to pay the state's 35,000 participating farmers more than 55,000,000 bushels of wheat.

Only about a fifth of the PIK wheat was actually supplied to those Oklahoma farmers from government-owned stocks; 80% of the payments-in-kind were paper transfers, with the government waiving outstanding crop loans. The loan rate that year was about \$3 a bushel, and the PIK program depressed wheat production nationally about a half-billion bushels, so if Oklahoma is representative of the program nationwide the program probably cost at least \$1.5 billion. That, of course, is only for wheat, not for the other crops covered by PIK programs in 1983, and it is only for the PIK part of the wheat program. The cost of the conventional wheat program for 1983 is not yet available, but in 1978 the deficiency payments to Oklahoma farmers averaged \$3,000 and totaled \$72 million. It is astonishing how blithely this goes on, year after year.

A prairie-restoration proposal, in other words, sounds outrageous until it is compared with what we've already got. It amounts to 100% PIK payments on an entire farm, instead of 90% payments on part of a farm. It also means locking the government into a contract for 15 years, although the contract may include years when wheat will not be in surplus. On both counts the program is more expensive than what we have, but I am not sure it is mountainously more expensive. In the long run, of course, it could be a lot cheaper, since the land would eventually be federal property, freed from the prospect of continuing subsidies. Best of all, the proposal gives us something tangible in exchange for our continued support of American agriculture, something besides the knowledge that without our help farmers would be in even deeper trouble.

There are, of course, other kinds of objections that can be raised against the proposal. For park supporters, perhaps the most worrisome is the business of inholdings: what happens if one farmer in three likes the program but two don't? What kind of prairie would we have if it amounted to a quarter-section patchwork? The best way to minimize this difficulty is to establish valley-edge trails at the outset of the program by fee acquisition, much as we did to put together the Appalachian Trail. The prairie-acquisition zones should then be defined narrowly but elastically, so that they can expand as farms are offered. The government will probably decline some offered farms because they are unmanageably fragmented or because they are too far away from existing land under contract. Smart farmers, on the other hand, may be able to put especially attractive packages up for sale to the government.

What will farmers think of a proposal like this? At first it will offend their every instinct. On the verge of bankruptcy, however, they should gradually see that, unlike foreclosure, it gives them a way out of debt while allowing them to keep their homes. It is a bitter choice, but it is also a better one than they will find in the marketplace to which an urban Congress will, sooner or later, lead them.

Established, the program will have enthusiastic support -- and not only from environmentalists. A couple of years ago I spent a day with a sheep rancher from Rock Springs, Wyoming. The American sheep industry is sick, dying as surely as our cotton industry. All day long I asked about costs and returns. In his pickup, we bounced and slid on snow-covered dirt roads all over Sweetwater County to get to his sheepherders, each responsible for a couple of thousand sheep, a pair of quiet horses, and a couple of noisy dogs. Many people from the coasts don't like this part of Wyoming, or what they see of it from Interstate 80. It is dry, and a lot of it is flat. Late in the day, however, we came up over the top of one of the great ridges that surround Rock Springs, and when I mentioned the coastal opinion of sagebrush, he flared up and said, "Christ, I love this country."

He is no fan of the Sierra Club and certainly no fan of the Bureau of Land Management, which keeps telling him what he can and cannot do with his sheep on public lands. But is there any question of his struggling to pick between a restored prairie or an abandoned agricultural landscape held by speculators? We have a unique opportunity now, as unique as the one that faced the founders of the national forest system in Teddy Roosevelt's time. We ought to be identifying acquisition zones and looking at how to phase in contracts--experimentally at first, faster as reduction occurs, slower if it does not. If we wait too long, thousands of farmers will have been driven off their land, the funding mechanism of this proposal will have been lost and, with it, a spectacular opportunity to treat a large part of this country right.

*Revised 2004 but not updated from the version published in *Landscape* (28:3), 1985, pp. 1-6.