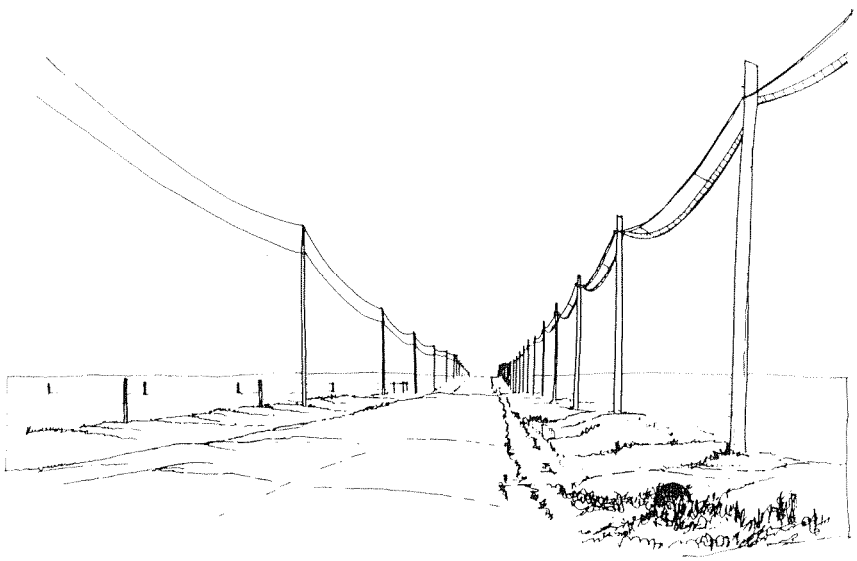
# Square to the Road, Hogs to the East

Robert B. Riley



Sketches by Susan Wydick

Most of us have read the tales. The quiet, the bright flowers, the tall grass moving to the wind like the sea and high enough, it was said, to hide a man on horseback. Even today, with that vast mesic grassland long plowed up, the traveler driving west on Interstate 74 senses the land open up just past the Indiana line. Here the stretches of tall grass become not an incident within the woodland but the landscape itself, a strange landscape, a landscape so different that a word for it had to be borrowed from the French. A word that George Stewart wrote ". . . has always borne a touch of strangeness and poetry. In English, *meadow* is to *prairie* as a placid cow [is] to a shaggy buffalo-bull."

The strange beauty of the great grasslands has been reduced to commonplace by the rhapsodies of writers and tourist developers who never saw it. The story of its development over the years from 1830 to 1880 has been thoroughly documented. The settlers left the stream corridors, moving first to the forest prairie edge, then cautiously onto the drier prairie, while keeping a small woodland parcel for fuel and fencing, and finally out on to the wet prairie, where one could take a flat bottom boat for miles in the spring. The technological keys are familiar: the self-scouring plow to cope with the sticky spring soil; the railroad to open markets for the change from a subsistence to a cash economy; the osage orange hedge and then barbed wire to end the fencing controversy that dominated

agricultural discussions and investment for much of the nineteenth century; and intensive mechanization to take advantage of an opportunistic cheap land, expensive labor, ample markets, and maybe a native inclination for tinkering. Less documented are the skills and technology of the immigrant Frisians who drained the wet prairie and the spontaneous, synergistic development of that Midwestern system of grading, marketing, and storing grain—symbolized by the prairie elevator—that was not to be introduced into the other great grain growing areas of the world for a half-century. All evolved within that uniquely American framework, the mile square grid.

All the elements were in place by 1880. The following five decades witnessed the perfection of the system. The ancient northern European animal and small grain agricultural system reached its culmination in a mechanized and highly capitalized crop rotation of corn, oats, and hay, with the raising of poultry, hogs, beef and dairy cattle, apple orchards and miniature vineyards, and a structural assemblage of farmhouse, shed, outhouse, hog and chicken houses, ice and pump and cob houses, barn, shed, corn crib, and windmill. The image lingers still, an apotheosis of American society and settlement system, a subject of endless personal and commercial nostalgia. Each fall, the *Chicago Tribune* still runs the cartoon "Injun Summer," memorializing that quintessential Midwest landscape.

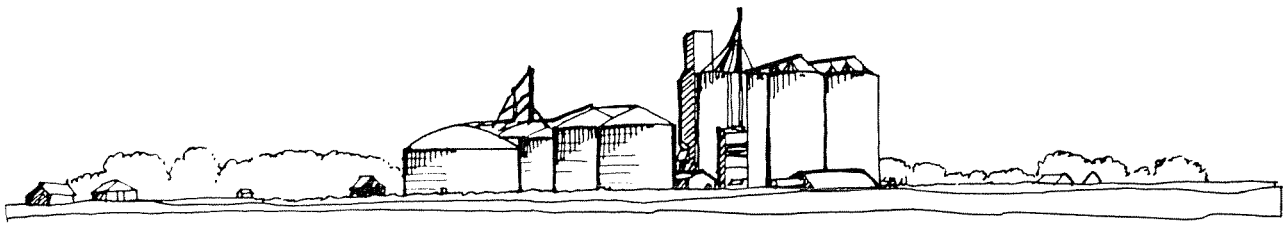
Cartoons notwithstanding, much of that landscape is gone, even in "Tribuneland" and certainly in that part of the "cornbelt," east central Illinois, where I live. We all know that, too. If we cherish the image, we sense that reality is different and growing more different. We talk of agribusiness, corporate farming, runoff, and monoculture.

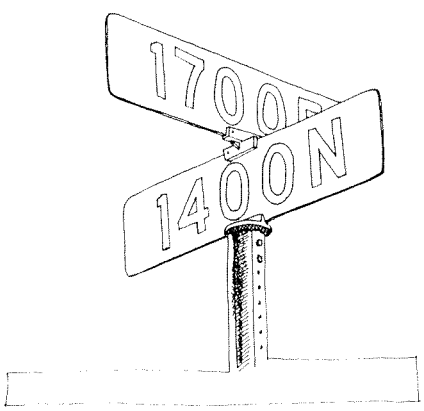
The underlying technological forces that have changed cornbelt farming can be described simplistically as an electro-petro-chemical revolution. Electrification was slow in coming to rural America but finally came dramatically and suddenly, almost entirely a creation of Franklin Roosevelt's second term. By World War II it was essentially complete. The 1930s and 1940s also witnessed the disappearance of horse and mule. By 1950 electricity and the internal combustion engine had triumphed, chemical fertilizers could be substituted for manure, and chemical herbicides and sophisticated corn genetics continued a productivity push that began in World War II. On through 1980 farm equipment became constantly more sophisticated, and more expensive, and the dense net of township roads was well graded and paved and supplemented by the interstate highway system.

Electrification, gas- or diesel-powered tractors, and the disappearance of horse and windmill might read like ancient history; if the image of the old farm is strong, it also seems that of entirely another time and society, as sentiment increases distance. But the older, working farm couple of today began farming in that seemingly so far away time, picking corn by hand and throwing the ears in a wagon. If the last five decades have seen dramatic change, it is well to recall that people have lived through it and adapted to it.

The result of all these changes is, in simplest terms, a capital-intensive, two-crop, cash-grain system. If one took the 1929 census of agricultural production for an eastern Illinois county and replaced every product but corn with soybeans, the result would be close to the 1979 census. In those fifty years acreage in corn has oscillated about a steady level, wheat acreage has sunk to a vestigial amount, oats have disappeared along with the horses they fed, and beans compete with corn. Sheep, hogs, horses, and cattle have all sunk to a number less than ten percent of that reported in 1929; orchard trees and vines are no longer even enumerated. John Fraser Hart has labeled the result the "CBM agrisystem": corn, beans, and Miami.

Such a description conjures up images of factory farms, bare fields and silting streams, and a stark repellent landscape, but the easy images do not always survive a careful look, and some myths are simply that. This is not corporate farming, not a creature of large companies. The investment return, well under five percent, is too small and too unpredictable to interest big business. Farming here is expensive, certainly. Two decades ago J. B. Jackson observed "that the



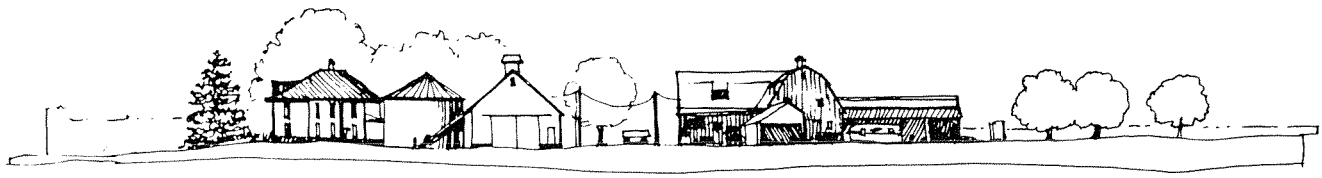



young American without means can sooner hope to be president of a bank than the owner of a working farm," and the writers of the column "Profit Planners" in *Prairie Farmer* recently advised a would-be farmer with experience and $130,000 that he hadn't enough capital to even consider getting into the business. The operative catch phrase is "cash flow," but almost all of this farmland is still owned by or among families or individuals, however large their assets might be.

Everyone "knows" that farm size is increasing, and the agricultural census confirms that lore. But for census purposes, "farm" means all the agricultural land under a single "operator." In the eastern cornbelt, a farm of large size is likely to consist of noncontiguous pieces of land separated not only by other people's land but by the paved constraints of the ubiquitous mile square township roads. Fewer farms mean somewhat fewer buildings, but beyond that the effect of farm size on the look of the land is not so direct or obvious. While farm "tenancy" has increased over the last fifty years, the effect of that change on the look or the economy of the land is not obvious either, although the increases in cash leasing are thought to bode badly for conservation practices. Most farmers own some land and rent additional land. The idea of tenancy conjures up images of barefoot poverty and mean living, but the *Prairie Farmer* reports that progressive tenants, seeking more land to maximize equipment use and minimize cash flow, are printing brochures that emphasize their computer-based accounting systems and, in one case, advertising in the *Wall Street Journal*. Nor are Arabs or other foreigners gobbling up Illinois farmland. Less than one-half of one percent of the state's farmland is registered in foreign ownership, and much of that ownership defined as foreign is simply the land of oil and coal companies with a majority of foreign stockholders.

But if not all lore is true, still the look of the land has changed in fifty years. Probably the most radical visual transformation, and the least remarked upon, is the night landscape: mercury vapor lights, first distributed free by utility companies in the 1960s and called security lights, cast pools of harsh, garish light at every farmstead.

What woodlots still exist away from the stream corridors are sparsely treed and clear of understory; they have invariably been grazed and lumbered over the years, "hogged and logged" as it is called. What scraps of good prairie remain are often to be found along railroad lines or in cemeteries. Good stands of railroad prairie are most likely to remain where a road parallels the tracks, leaving a width of undisturbed soil wide encugh for some ecological stability but too narrow to be worth farming. Such strips are disappearing as the railroads turn from burning to spraying for right-of-way maintenance, and economic pressure makes corn- or bean-raising more likely. Cemetery prairie is most likely on fenced but little visited areas, subject to enough



mowing to kill off woody invaders but not enough to drive out the more fragile native species. A mowing once a year for Memorial Day (the "Decoration Day" of my youth with memories of peonies and rusting G.A.R. stars) is often just enough.

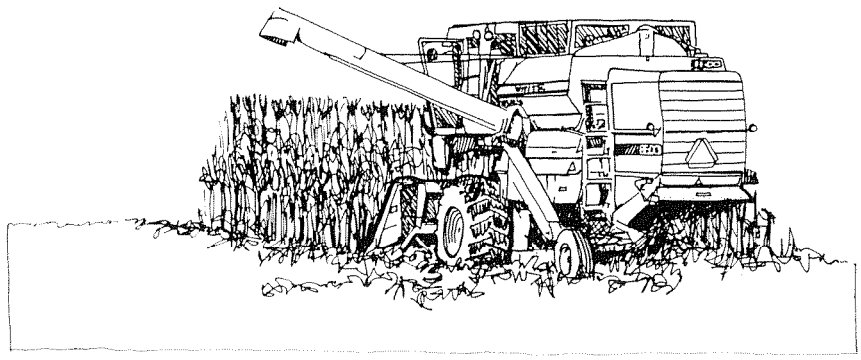
The landscape is more open. The orchards and vineyards are gone. What few hedgerows remain have gone to canopy, leaving the eye level view nearly clear. The fences have almost disappeared; neither corn nor beans wander into the road to be hit by cars, and the few animals left learn to avoid that single strand of almost invisible electrical wire on thin metal posts. Two or three old fence posts remain, but only for sight lines to identify property boundaries when working the fields and maneuvering equipment.

There are fewer buildings. Consolidation of ownership usually means removal of farmsteads, consolidation into one "home place." At the remaining one farmstead, an electrified cash grain farm needs no ice house, pump house, cob house, cattle barn, or chicken or hog house. There are still over one-quarter of a million chickens in my county, about the same number as fifty years ago. In 1929 they were distributed among more than 2,600 farmers, in 1979 among less than 70, a phenomenon that serious students of cornbelt settlement systems call "fowl urbanization." Some building types have stayed but evolved. The new farmstead will have a shed, but it is likely to be lower, longer, and wider, with a roof of shallower pitch, a prefabricated industrial building of corrugated roof and siding over pole and truss framing. Where a corn crib remains, the only likely change is the replacement of wooden siding by perforated metal, an evolution of material within a stable form. But the greatest change in the working architecture of the cornbelt countryside derives from a single technological innovation: the shelling head on the combine. The word "combine" itself comes from the first turn-of-the-century field machines that both reaped wheat and threshed it but now applies to comparable operations on any crop. Until ten to twenty years ago, long after hybrid corn with its uniform height had allowed the development of a mechanical picker, corn still left the field on the cob, to remain there until fed to animals on the farm or to be mechanically shelled at the farmstead or elevator. Today in the most productive parts of the cornbelt almost all corn leaves the field shelled.

The traditional cornbelt corncrib was a clear, logical, evolutionary solution for storing ear corn and a story worth tracing in itself. Now, with shelled corn or beans or wheat, the farmer must store not a stack of loosely piled, large cobs but a dense, bulky mass of small grain particles, a mass that often needs to be dried and always needs to have air flowing through it to avoid rot. The successor to the corncrib is a round metal bin, with a fan to force air through it and often a tank of propane at hand for warm-air drying. On the largest farms there will be rows or clusters of these bins, loaded from a high, industrial-looking tower, the "leg," braced with wire rigging. Such farms, and many of the newest and largest elevators, transcend the shed roof, ad hoc clustered forms of old farm and elevator to take on, with their massive tanks, complex piping, and spidery rigging, the high-tech look of an oil refinery.

But the old cribs often stay. The slatted bins can be lined to hold shelled corn; the loft over the central aisle can serve as bulk storage, the aisle itself can shelter equipment. No driveway is needed because only field-tired vehicles approach them. Maybe it is not worth the trouble digging out the concrete foundations just to gain three more bushels of corn a year. Whatever the reasons, the cribs often stand alone in a quarter-section of land, their stark shapes and weathered tones emphasizing the open, bare flatness of the fields and the sense of time and change on the land.

The example of the corn shelling head eliminating a vocabulary of architectural functions and forms, from crib to cob burner, and introducing an entirely new geometry, shows how little we understand about why the look of the landscape changes as it does. Technological forces affect it in complex and not obvious ways. The rural landscape, for example, abounds with examples of the "cornbelt cube," a house of square plan and two stories, topped with a pyramidal roof and a central chimney, built in the early years of the century. We can guess that a major reason for its popularity was

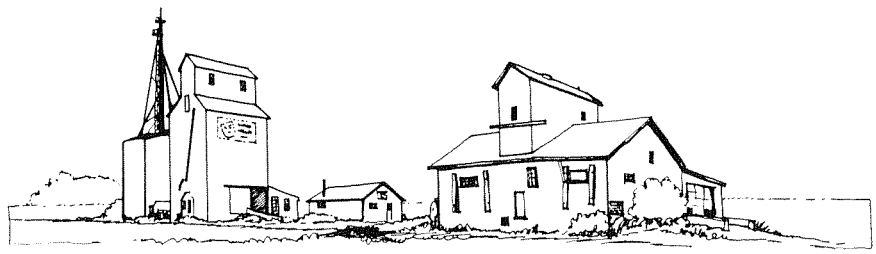


the introduction of convection flow warm air, central heating, but no one knows. No one has ever studied the American house as an expression of evolving heating technology, from fireplace to stove to convection flow warm air to forced warm air to, finally, electrical and solar heating.

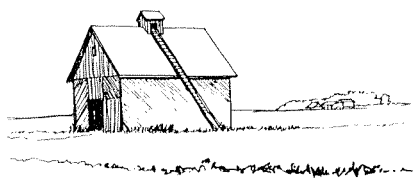
Nor has anyone studied the evolution of farmstead landscapes. For decades the extension literature has offered advice to the farmer. Some of it, such as Wilhelm Miller's evocation of the prairie spirit, has been sensitive and some, like the recurring recommendation of tree massing to hide unpleasant views and frame pleasant ones, simply sensible. Too often it has been accompanied by condescending admonitions that the flow of farm youth to city jobs is caused by lack of rural beauty and would be stopped by tasteful design. A scholarly comparison of the actuality of farm landscaping with the advice of designers and improvers, however, might show that farm families have evolved their own images of "farmstead" independent of professional fashions. Certainly the current actuality, a predeliction for huge, velvety carpets of grass, putting-green perfect and unbroken by trees or shrubs, would seem to owe more to the popularity of the self-powered riding mower than to the tastemakers' advice.

We know little enough about the impact of the professional literature on the countryside, but we know even less about the impact of the popular press and advertising. If

fascination with the power mower and the lack of row crop work over much of the summer contribute to the bare look of the farmstead lawn, so does the advice of cornbelt newspapers and the *Prairie Farmer* to eliminate shrubs that offer hiding places to thieves intent on rustling combines. Farm-oriented advertising is big business, as intent on image as on product. Industrial-type farm buildings are given names like "Ironwood," a nice blend of practicality and romance. The chemical companies have two schools of brand naming: the clean-room, smock-coated, wonder-drug approach of Treflan, Basagran, or Cythion, and the sod-buster, tough-guy school of Bronco, Lasso, Roundup, and Fussilade, in a not surprising demonstration of the importance of both high technology and tradition in cornbelt life. This curious blend of progress and tradition can be seen in the caps distributed by my elevator. They bear the legend "equal opportunity fertilizer," but the woman's cap has a powder blue bunny tail tassel on top.



Technology and tradition have produced a different landscape, a landscape that repays care taken in looking at it for what is, not what it was. The visual changes in the cornbelt landscape can better be interpreted as continuity than as disruption. We are lucky, for this is not the case everywhere. In England, where the new farmsteads look more and more like those of America, the change is legitimately lamented. The traditional English farmstead adapted to and utilized topographic changes, formed a



tight compound with buildings enclosing spaces between them, and was made up of heavy and monolithic structures. The new farmsteads sit on land graded flat, with the buildings linearly arranged and made of light striated sheeting over a skeleton. This is an equally accurate description of the new cornbelt farmstead, but it also applies to the older farms here. Cornbelt farm buildings never formed a compound or utilized exterior walls and courtyards but always appeared as independent masses. Their siting obeyed only two laws: hogs to the east and square to the road. The hogs are gone, but the buildings, new or old, are invariably aligned on the north-south east-west axes of the grid. Unsubstantial sheets of corrugated metal over poles and prefabricated trusses are a logical extension of that American invention, the balloon frame, and of the American philosophy of building lightly and quickly. The new farmstead might look simpler because it contains fewer buildings, but its visual and functional rules are the time-honored ones. Its look, stark, clean, sometimes hinting of the industrial, can be seen not as a disruption of a tradition but as its clearest expression, a near Miesian perfection through reduction to essentials.

The larger landscape, too, can be understood as an ultimate expression of traditional values and beliefs. It is open, bare, clean, and organized to the point of starkness. It is an expression not just of efficiency and profit, or of cash flow, but of a belief in productivity, care, and neighborly respect. To ride a combine at harvest time, high above the corn tops, numbed by noise and vibration, is to feel not just the power in the machine but an elation in using it to transform the land. The remnant hedgerow, the old fence, or scraggly tree is an affront, not just because it means a bushel less but because it resists the human ordering made possible by the machine. A bare, black, fall-plowed field, however erosion prone, however necessary for planting hundreds of acres in uncertain spring mud and weather, is also seen as a sign of care expressed in neatness and order. To feel that care is to understand the affront produced by the single cornstalk in the middle of the bean field. It is to understand the state signs explaining that the shaggy, weedy midsummer ditch is actually a "roadside for wildlife," not a result of shoddy upkeep by the adjacent farmer. And to know what neighbor still means, in a time when even one-man farms average close to 500 acres, is to realize that the open, unadorned farm lawn, clean and kept like the fields around, is also more than a drill ground for power mowers, or a guard against combine rustlers; it is a symbol of openness to others and respect for them.

The new machine and equipment sheds look simpler, even better kept than the older buildings did. There are not only fewer buildings, but they are of neater and simpler shapes. The round bins, often starkly white like sheds and farmsteads (there are few red barns here) and the occasional farm

elevator, with its wire bracing, take on the look of abstract elements. Frank Lloyd Wright thought that the prairie house should be low, with deep overhangs, and should nestle into the land. The cornbelt cube, stark, high and blocky, eaveless, is its antithesis, a bold imposition on the land, a clear expression of human artifice.

This abstract regularity reinforces the dominant organization of the mile square grid. The intersections are marked with bright green signs—1400E, 800N—that tell you just where you are. Mail boxes read "The Bowers—Virgil, Doreen, and Lurleen: 1100N, 633E," a logical but curious way of anchoring the globe to the southwestern corner of your county. The row crops, too, follow the grid; driving the county roads in the late summer is like speeding through eye-level corduroy. The smaller country cemetery, located on a rise, never succumbed to the curvilinear cemetery planning fashion; its plots and marker stones are lined up so that even the dead are settled on the grid system. With the disappearance of windmills and trees, a new set of verticals, the phone and power poles, provide a regular, repetitive subdivision to that grid. The hedgerows that are left are now simple lines of trees; they read not as low, wide, rounded masses but as thin lacy walls, tracing field patterns and reinforcing further subdivision of the grid. Seen inscribed against a winter sunset, they seem to symbolize nature not only receiving the grid but becoming the grid.

That grid, surely the most extensive visible abstraction ever laid upon the globe, impresses most from the air. On a transcontinental flight west, one first sees it appear tentatively over Michigan, or maybe Indiana. Over Illinois and Iowa it *is* the landscape, with only the briefest of interruptions for steep terrain. By the great plains it has loosened; its grain is coarser now, because roads every mile are not economical, but the pattern remains. By the Front Range it disappears, only to reoccur suddenly in irrigated valleys. To understand it best, fly Illinois and Iowa in a small plane, at say 3,000 feet above ground. To do so is to see the ultimate expression of Cartesian rationality and Jefferson democracy, a noncentrist, nonhierarchical organization. It is an organization so powerful that even the few departures seem to reinforce it: the wrinkling of the land in Iowa like a topologist's diagram or the subservience of the interstate gracefully curving on top of it only to return to the half-section line, where land taking is shared and the township road system undisturbed. The buildings, simple, abstract cubes set square to the road, the circular counterpoint of bins or an occasional irrigation circle, look like pieces on a gigantic monopoly board, based on the rules of commodity and political equality.

It is a visual landscape that contemporary high-technology farming has molded but not disrupted. The disruptions are the landscapes brought by new residents, the curving roads, and artificial lakes of the wealthier exurbanites seeking that original niche of human occupation, the wooded stream valley, or the one side of a quarter-section, small-lot subdivision of strip septic tank suburbia, or the single lot with its long, low, dark-stained ranch house set on a "welcoming" diagonal. The farmer has a clear and bold vision of the landscape; the newcomers do not.

In many parts of the world the farmer is considered a sly, dim-witted peasant, but his landscapes are viewed as charming. In America the yeoman farmer, if not an image of sophistication, is still a central figure in the democratic dream, a figure enshrined by Jefferson and as much enriched by populism, grange, and dust bowl as he has been simplified by nostalgia and Norman Rockwell. His landscape is equally worth our understanding and our admiration.