The village of Penn Yan, New York, doesn’t look much like a crucible of American agriculture. Home to the two-hundred-ten-year-old Birckett Mills buckwheat grinding plant (“Buckwheat is Best,” a row of peeling yellow grain silos informs visitors crossing a bridge to Main Street) and marked only occasionally by the defensive nostalgia of America’s spurned rural heartland—Victoriana, flags hung gamely on sagging porches—the town, which straddles the north shore of one of New York’s Finger Lakes, mostly appears to be abandoning farming altogether. Bolted to one four-story wall of the Birckett mill is a twenty-eight-foot-high iron pancake griddle, black, flat, and taller than the bookstore across the street. A sign painted below explains, “This is the original griddle used to make the WORLD RECORD PANCAKE” at the annual Buckwheat Harvest Festival—twenty-eight feet and one inch in diameter. But that was in 1987.

When I visited the village one autumn day in 2006, a National 4-H Week banner that was strung across Main Street looked forlorn and out of place. A new video game hall was opening below it. The books displayed behind the plate glass window at Long’s Office Supplies carried urban titles such as Understanding Iraq and Take This Job and Ship It: How Corporate Greed and Brain Dead Politics Are
Selling Out America. Farmers I talked to complained of having to hire illegal immigrants from Mexico to harvest their crops—local youths were deserting the fields. When I walked into Lloyd’s Pub my first night in the village—down Main Street from the Birkett mill—I saw where the young people had gone. Students from nearby Finger Lakes Community College were packed inside, squeezing their way to the bar and fitting from table to table with the exuberance of teenagers eager to break the bonds of rural life. “She keeps puking and forgetting what she did,” one girl said to another above the din. A boy in a backward-facing baseball cap and precariously sagging jeans approached two girls beneath an inflatable bottle of Guinness beer suspended from the ceiling. “Are you just walking around and eating?” one of the girls asked, reaching out to finger the boy’s shirt. “Yeah,” he said. “It’s good times. Good times.” The rain, which had been gentle when I drove into the village, intensified, and a few of the students ran out into it, standing in the street with their arms extended, sweatshirts spotting, then soaking with water.

And yet. Though only 1.7 percent of Penn Yan’s 5,219 residents marked “farming, fishing and forestry” as their occupation in the most recent census, farming is on the rise here. And not just any farming. The farmers of Penn Yan—stolid, tractor-cap-wearing, churchgoing men and women who actually send their kids to events like National 4-H Week—are quietly living out what may be the last, best hope for America’s tortured relationship with its own food. Dotted throughout the rolling hills and winding, tree-lined valleys of surrounding Yates County are about fifteen organic farms, many spreading over hundreds of acres and producing sizable yields of commodity crops—corn, wheat, soy, and hay—more often associated with the Midwest and Great Plains. Most of those crops are processed at Lakeview Organic Grain, a local mill started by a Penn Yan farming couple in 2001, which has become the hub of a functioning, medium-scale agricultural economy that manages to balance the sustainable imperatives of organic farming with the relentless pressures of America’s capitalist food system. Lakeview, New York’s only entirely organic grain mill, grinds more than two hundred tons of grain per week and sells it to organic dairies and livestock farms in New York, Pennsylvania, and Ohio. Its operations are big, but not too big. Each winter, when fields lie cold and fallow, Klaas and Mary-Howell Martens, who own Lakeview and farm fourteen hundred organic acres of their own, convene about one hundred organic farmers in the nearby city of Geneva for monthly meetings to swap expertise, introduce newcomers to organic regulations, and foster what has become a luxury on most of America’s mechanized, corporate, and subsidy-driven farms—community.

Much has been written recently about the supreme difficulty of reforming the American diet. Not just exposés such as Eric Schlosser’s Fast Food Nation, but more nuanced studies by writers as varied as New York University nutrition professor Marion Nestle and journalist Michael Pollan, both of whom detail the seemingly intractable compromises built into every stage of the process by which America grows, buys, and eats its food. Pollan’s recent The Omnivore’s Dilemma: A Natural History of Four Meals even outs organic farming, that supposedly wholesome and counter-cultural alternative to America’s rural apocalypse, as agribusiness as usual, with its new spokesman Gene Kahn, founder of the Cascadian Farm organic fruit company, who sold out to General Mills and now drives a Lexus with license plates reading “ORGANIC.”

In Penn Yan, however, the picture is a little different—and a little more hopeful. None of the farmers I met there drove a Lexus. They were too busy charting a middle way between what Harvard professor Steven Shapin, writing last year in The New Yorker, called the “counterculture” of organic farming’s origins and the “bean-counter culture” of its present-day incarnation. That middle way is nothing more complicated than a dialing back of America’s agricultural clock to a time about seventy years ago when most American farms had adopted simple mechanization but not the engineered fertilizers, genetically modified seeds, and chemical pesticides that characterize modern agribusiness—not to mention flash-frozen jet transport across the country. In line with federal surveys showing that medium-sized farms are, in fact, more efficient than their larger industrial counterparts, Mary-Howell Martens, speaking from behind the dusty counter of Lakeview Organic Grain, told me that Penn Yan’s agricultural experiment has, so far, succeeded brilliantly. Before local farmers went organic about a decade ago, Penn Yan was “a town with a bomb-ed-out center,” she said. “Now it’s a thriving village.”

More to the point, farmer Larry Lewis, a friend of the Martens with whom I spent the better part of a day touring his roughly six hundred acres of organic corn, soy, wheat, and hay a few miles from Penn Yan, told me that he was thriving. In 1996, when Klaas Martens persuaded him, against his better judgment, to try thirty acres of organic red kidney beans, Lewis said he was “pounding my head against the wall” as a conventional farmer—this from a man with farming “in my blood” who told me he began baling hay on his grandfather’s dairy the day he was old enough to grasp a pitchfork. The mounting costs of chemical fertilizers, clothes
America’s relationship to its food is weirder and more con-
ingreedy than ever, with gourmet chefs on television and
writers, ultimately, from the perspective of their readers, people
like them, middle-class professionals who interact with food
at restaurants, in their kitchens, and on their plates—not on
farms. Pollan’s book, after all, is a natural history of four meals.

But if America is to change its eating habits—and Pollan is excellent at documenting the urgent need for
such change—it is farmers, not writers, who will have to
lead the way. And so it is towns like Penn Yan that are
the real crucibles of American agriculture—places where
farmers are figuring out how to grow food without selling
their souls or jumping off the grid. In a New York Times
Magazine article titled “Unhappy Meals,” Pollan offered
some practical suggestions for bringing down the agribusi-
ess empire—if not to its foundations, then at least down
to earth: “Don’t eat anything your great-great-grandmother
wouldn’t recognize as food… Get out of the supermarket
whenever possible… Pay more, eat less.” It’s good advice.

But what Pollan doesn’t address is how to make Americans want to dial their dietary lives back seventy years. Current
approaches—mostly warnings of imminent bodily or envi-
ronmental catastrophe—aren’t working. And so perhaps
it is time to let the farmers try. Most Americans don’t know
farmers, but they like them in the abstract. And maybe,
if they heard about Penn Yan and learned that its future
depended on what they ate, they would pay a little more
attention when they go to the grocery store. Who knows?
It may be that what Americans really need to eat more
sensibly is an introduction to Larry Lewis.

Lewis is a stolid man of medium height with a face
at once cherubic and canny. The day I met him, he was
wearing jeans, a flannel shirt, and a tractor cap emblazoned
with the Lakeview Organic Grain logo. His boots, black,
crumpled, and muddy, sat beside the door of the log house
he and his girlfriend, Annie Niver, built by hand about
five years ago. The house, at the end of a dirt drive, was
decorated—cramped, really—with the couple’s collection
of antique farm gear and carnival paraphernalia. Egg
baskets, glass milk bottles, toy tractors, tricycles, a jukebox,
a mechanical swing, Borax tins, speed-limit signs, and
Howdy Doody dolls lined walls and shelves and hung
from honey-stained ceiling rafters.

Lewis offered me a seat—a seat draped with a folded
American flag—at the kitchen table and showed me his
morning reading: agricultural newspapers with names like
The Natural Farmer and Country Folks. The papers, he
said, ran useful stories about field techniques, and classified
ads with good equipment bargains. The phone rang, and
Lewis’s face darkened as he talked. The call concerned
his mother, who has dementia. Lewis was trying to get her
into a twelve-room facility in Geneva—another expense.
Annie works full time as a sheriff’s dispatcher in Penn Yan,
and Lewis said it was only when he was officially certified
organic in 1999—three years after that first crop of kidney
beans, the amount of chemical-free time required for fed-
eral organic certification—that he began making a living as
reliable as hers. “We’re separate as far as income,” he said.
“The farm is pretty much self-sustaining.”

Lewis shuddered as he recalled his pre-organic days.
Growing up in the 1950s in southwestern New York, he
had acquired, seemingly from birth, a passionate love for

The farm is pretty much self-sustaining.
working land. His father was a rural mail carrier, his mother a teacher. But Lewis had gravitated to his grandfather’s dairy farm eight miles away as soon as he was old enough to take the bus there. The dairy, four hundred acres of rolling pasture and hay crops, was called High Up, and Lewis spoke of it reverentially. “I loved being out there,” he said. “I got to do tractor work, driving the tractor at age nine or ten, baling hay, then handling the bales.” When Lewis was in high school, his grandfather, slowed by heart trouble, invited him to move to the farm on weekdays, and he readily agreed, giving up his paper route and squeezing homework into breaks between chores. “I got up early and found (my grandfather) already weeding the garden before milking the cows,” he said. “I saw his love for that, and it came to me.”

After graduating from Cornell in 1973 with a degree in agronomy—where he learned soil science, pesticides, and artificial fertilizers, and studied with a professor who analyzed moon rocks—Lewis worked on farms until he had assembled enough capital to buy his own land. By the mid-1990s he owned about six hundred acres planted with a typical array of Midwestern crops: corn, soybeans, winter wheat, and various grasses used to make hay. It should have been the realization of his childhood dreams. But conventional farming, he found, was like a treadmill. Every year, prices offered by commercial processors lowered, even as costs for spray, fertilizer, and equipment rose. Most farmers responded to such pressure by buying more land, thinking to generate more revenue. But more land meant higher input costs, which in turn meant more debt and the need for even more land and revenue. Farmers waited for neighbors to fail, and if anyone found a high-paying customer or a low-priced source of seed or...
equipment, he kept it to himself. Lewis’s two older boys drifted away from farming into town careers, and he feared he’d lose his third, Matthew, before long.

When, in 1996, his friend Klaas Martens suggested going organic, Lewis thought he was joking. “It used to be you had to be crazy or a hippie (to go) organic,” Lewis said. But Klaas, who had become something of an organic proselytizer after suffering temporary paralysis in a pesticide accident, “kept at me,” Lewis said, and he finally agreed to try. The result was a revolution—not simply in crops, but in Lewis’s entire life as a farmer. After enduring a few seasons of teasing—“what exactly are you growing on those strips?”—skeptical neighbors asked when they saw weeds poking through Lewis’s fields—Lewis found himself unexpectedly reliving his hallowed youth. “We do what our grandfathers did before innovations in the 1940s and 1950s,” he said of himself and the other organic farmers he began meeting. “You try to use those management practices, rotation to break weed cycles…If the plant is healthy, pests and bugs don’t compete with it…The key is balancing. We take soil samples, balance things. That’s where the agricultural expertise comes in. Like most everything else, it’s hands-on that really does it.”

Lewis took me to Lakeview Organic Grain and talked of his pleasure in selling crops to the Martens, a family whose kids were enrolled in Future Farmers of America—not the sharp-eyed bargain hunters from Cargill. He used words like “phenomenal” and “exciting” to describe his sudden ability to sell buckwheat for eight dollars a bushel—Birckett Mills, which buys only conventional grain, paid at most three dollars. He described his relief at no longer having to handle ominously sweet-smelling pesticides and artificial fertilizers that literally burn soil away, leaving only a pure chemical substrate. And he spoke with wonder of the Martens’ monthly meetings, the novelty of farmers sharing ideas and pooling resources instead of impatiently eyeing each other’s acreage. “You get to become part of a community,” he said.

But, mostly, Lewis came back again and again to that idea of recapturing life on his grandfather’s farm. “Farming is sort of a simple way of life, a sustainable way of life,” he said. Or, at least, it can be for organic farmers. “Conventional farming doesn’t require as much thinking or work,” he told me as we drove back roads on a tour of his various fields. “You do a lot from your pickup truck. Now, with organics, you have to see weeds when they’re tiny. So you have to be in the crop, one step ahead.”

Lewis mused that the real cost of the so-called Green Revolution (the introduction, in the early twentieth century, of technologically advanced farming methods that dramatically increased world food production) was not only the health risks posed by chemicals, but the loss of generations’ worth of knowledge about soils, weeds, crop rotation, natural fertilizer—all the techniques passed down through farming families for growing food in cooperation, not competition, with the land.

Lewis was not describing some communal hippie paradise. The Dairyman’s Diner, where he and I ate lunch with his friend, dairy farmer Guy Christianson, featured a ticking John Deere clock and silent, round farmers hunched over plates of decidedly nonorganic ham sandwiches on white bread. Lewis made vague references to his Republican political leanings and fretted about his retirement money. What he meant was that, as an organic farmer, he could again feel proud of, in control of, and, perhaps most important, interested in his work. After showing me the crumbling wooden barn where he keeps his equipment—various rusting weeders, cultivators, hay balers, and a thirty-year-old blue Ford 5000 tractor with five-foot-tall rubber tires—he marched me to a row of corn, where dry stalks rustled in a late-afternoon breeze. Grabbing a few heads of ragweed—a pesky invader that grows wherever corn isn’t thick enough to shade it out—he launched into a detailed explanation of soil nitrogen, principally how much the ragweed could leach away before seriously damaging the corn. His voice quickening, he pointed to a patch of dandelion and said it signaled a lack of potassium in the ground. “I might need to change the soil composition,” he said, alluding to various natural additives organic farmers are allowed to use—gypsum for calcium, limestone to lower acidity. Then he pulled a few kernels from a cob of corn, handed one to me and told me to bite it. “That’s how I tell when it’s dry enough to harvest,” he said.

When Lewis is ready to sell his grain, he takes it to Lakeview, which occupies a long, low-slung mill building beside a stretch of railroad tracks a few hundred yards from Main Street in Penn Yan. There, trucks back up to a loading dock and exchange bushels of corn, wheat, and soybeans for bags of ground grain and organic seeds. Inside, a wooden ceiling vaults over four rows of grain bags stacked about twenty feet high. On the day I visited, the small staff was working without much conversation. Mary-Howell Martens stood behind a counter in the office, answering the phone and fielding questions from arriving truck drivers. A seed specialist named Chuck Richtmyer inspected bags in one corner, while the foreman, Daniel Hoover, a local Mennonite, drove a forklift. Coating virtually every surface was a fine, diaphanous layer of flour.
The company began almost by accident, Mary-Howell told me. In the 1990s, when she and Klaas were just getting their bearings as organic farmers, three dairies approached them with a problem. To qualify as organic, dairies must feed their cows either organically grown grain or pasture grass. “They said, You have grain. Could you make organic feed for us?” We said okay.” Five years later, in 2001, the Martens had one hundred fifty customers, and decided to use their accumulated capital to buy a conventional grain mill that had recently gone bankrupt—a victim of consolidation and price fluctuation. The Martens, eager to avoid that fate, vowed to run Lakeview “like a co-op,” Mary-Howell said. “Because we’re farmers, I know what it’s like to be jerked around and not treated right.” That means the Martens form personal relationships with customers, give fair and equal prices to the farmers they buy from, and aim, whenever possible, to keep their product local. “I feel like a born-again farmer,” Mary Howell said.

The only flaw in this beatific scene is its future. With demand for organic produce rising 20 percent a year, and national chains such as Wal-Mart and Whole Foods Market squeezing every more efficiency out of organic growers, medium-sized rural economies such as Penn Yan’s face a challenge. “I’m seeing a tremendous amount of agitation among existing organic farmers,” Mary-Howell said at Lakeview. “The big guys are a potential danger. How we’ll deal with that I don’t entirely know.”

An enterprise so capital-intensive leaves no margin for error, Phil said. “We used to be able to make double our input costs,” he told me as we drank coffee at the dining room table and looked out a sliding glass door toward the farmyard. “With six hundred acres we could make a living. Now, to be feasible, we need six thousand acres to make a living. The margins are slimmer. You need bigger equipment to get the work done. You can’t find good help…If anything unexpected comes, it wipes you out. So you have to get bigger. Then, getting bigger, you still need government money…And so you keep growing. Older farmers quit. There aren’t near as many young farmers. You can’t get in and get started.”

Even with his large family, Phil said that at peak planting, spraying, and harvest times—spring to late fall—he works one-hundred-hour weeks, up to eighteen hours a day. It’s a lonely life, said his father, who sat with us reminiscing about the bustling community he encountered when he arrived in South Dakota in 1959. Now, as farms die and consolidate, the land around the Hamburgers’ home is nearly empty. The family drives twenty-five miles to the nearest town, Gettysburg, to attend church. Their next-door neighbor is a mile away. When visitors approach, the plume of dust rising from the road can be seen long before the engine is heard. While visiting, I stayed at a bed and breakfast near Gettysburg. When I arrived late on a cold March night, I found a group of insurance adjusters from Arkansas wandering the lawn in camouflage, firing rifles into the air. They were on vacation after a hectic fall and winter sorting prairie. Though the Hamburgers work as a family, their farm more resembles a medium-sized industry. The sprawling complex they call their “farmyard” features dozens of silos—some as tall as thirty-five feet—a pair of two-story galvanized metal storage sheds, a seed-making plant, semi-truck garages, and a workshop for repairing equipment. Phil told me it costs him nearly two million dollars to put each year’s crop in the ground. (Larry Lewis spends seventy thousand.) That figure includes seed, pesticide, fertilizer, fuel, grain hauling, and land rental. Barb spends much of her time in an office in the house, sorting through changes to subsidy laws and keeping track of taxes and bank records on the computer. A five-foot-tall bookshelf outside the office is lined with binders labeled “Crop Protection Reference” and “P and B Hamburger Farm—Finance.” Phil and his brother drive two green harvesters the size of dump trucks, which cost three hundred fifty thousand dollars apiece and feature computer controls, air conditioning, and a glassed-in cab where Phil listens to Christian audio-books while grinding up corn rows.
Hurricane Katrina claims, and had come to South Dakota to hunt pheasants on land rented out by a nearby farmer—another bid for financial survival.

Over dinner, I asked Phil’s kids whether they planned to stay on the farm. Melody, who is twenty and was on spring vacation from college in Iowa, said she was leaning toward a career in education. Rachael, who is eighteen, talked of wanting to be a missionary. Charles, the youngest at seventeen, said that until recently everyone had assumed he would take over the farm. He is a large, quiet boy who works hard and has mastered most of the equipment. But lately, he said, he has been dreaming of “doing other things. Playing football. Or driving a truck of frozen food.”

I would like to think that America’s agricultural future looks more like Penn Yan than Gettysburg, South Dakota. The numbers aren’t encouraging—90 percent of organic produce (which itself comprises less than half of 1 percent of all U.S. farmland) is bought by national wholesalers and supermarket chains, suggesting that even food cognoscenti remain stubbornly addicted to the summer-all-year, distance-is-no-object abundance of industrial agriculture. I wonder, though, what would happen if those shoppers knew more intimately the effects their food choices have on farmers—not on some hypothetical health or environmental equilibrium, but on a real, live person, a neighbor. If American consumers knew the power they held over Larry Lewis or over Mary-Howell Martens’ three kids, ages ten to seventeen, who all plan to stick with farming, would they buy that weird stuff their great-great-grandmother wouldn’t recognize? Would they pay lip service to words such as “locally grown”? Would they, in short, think of food primarily as a meal?

Hard to say. What I do know is that, near the end of my day with Lewis, we drove to the farm of one of his neighbors, a Mennonite named Eddie Horst. Eddie, his wife, and eight kids milk forty-eight cows and raise the organic grain to feed them on one hundred eighty acres they own and rent. When Lewis and I arrived, Eddie and one of his older sons were repairing a barn. They put down their hammers, and we chatted in the westering sun. “All the kids do their bit,” Eddie said, as a few youngsters in traditional black and white suits and dresses scampered out of the farmhouse. Even “the little ones gather eggs. My oldest son is sixteen. He keeps the others out of mischief.” Eddie told the familiar story of tiring of chemicals (most Mennonite and Amish farmers, though forbidden certain technological advances, do use both chemical pesticides and artificial fertilizers) and realizing he could make more money as an organic farmer. “It’s a more pleasant way of farming,” he said. “Less tractor work. Less stressful...The cattle are in the field. You walk out, take the kids, there’s no farm machinery, no danger.”

The mention of children prompted Lewis to talk about his own youngest son, Matthew, who had appeared to be on his way out of farming a few years previously when he took a job with a local sporting-goods manufacturer. Now, though, Matthew “is as crazy (about farming) as I am,” said Lewis. The two have begun working together, and Matthew has gone part-time at the sporting-goods factory. “He’ll stick with it,” Lewis said. “I want to make it so he can.” We got back in the car and wound through Penn Yan’s rippling countryside to Lewis’s log house. We passed the shed where Lewis stores his seed, and he joked that, forbidden by organic regulations to use even chemical rat poison, he had to trust his cats to keep the seed from being eaten. As we parted, he was deep into an explanation of how a six-inch snow cover in March is perfect for insulating young roots that would otherwise be stressed by the freezing and thawing of oscillating spring weather. He recalled friends from college who had taken office jobs. “They’re complaining about having to go to work,” he said. “Every day, I’m looking forward to getting up and getting things done.”