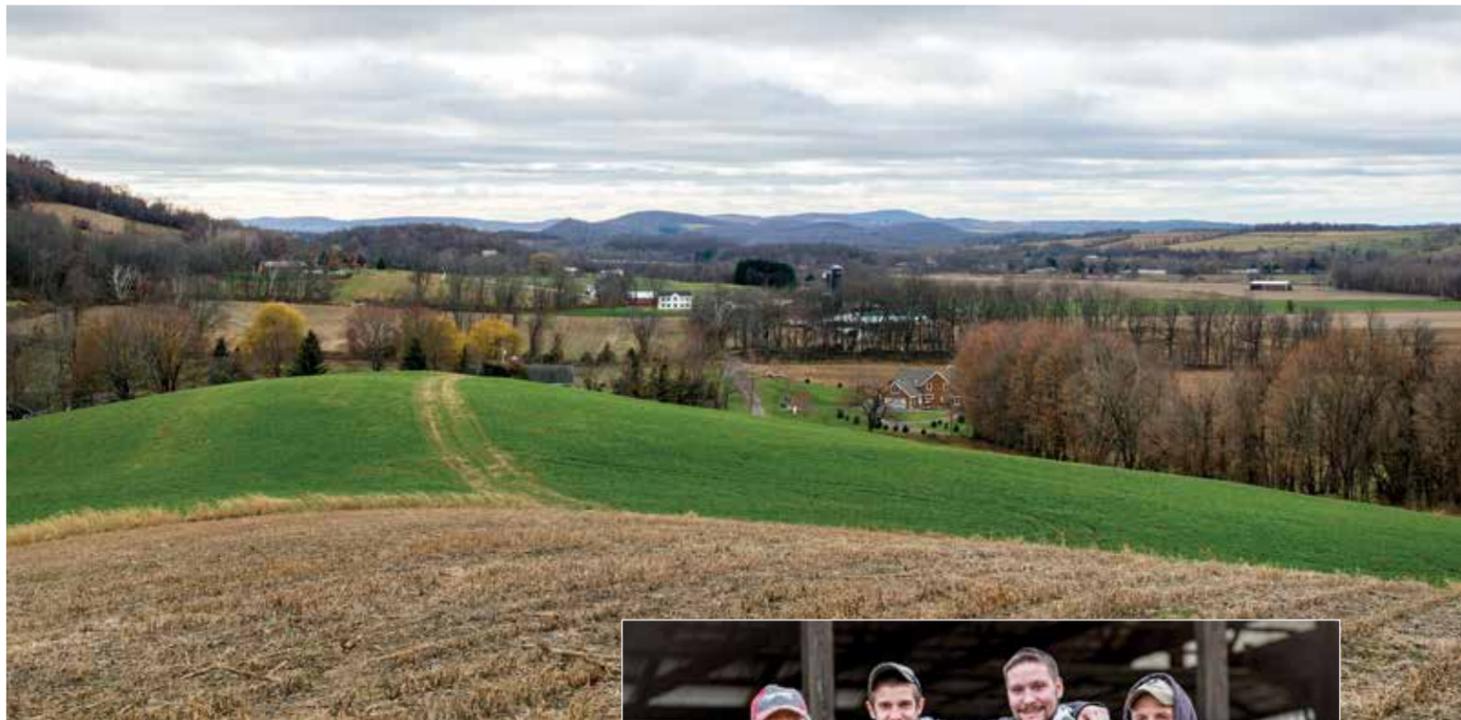




A FOODSHED MOMENT

**PRESERVING FARMLAND IS NOT ENOUGH
IF IT DOESN'T STAY IN THE HANDS OF FARMERS.**

BY ANNE RAVER/PHOTOGRAPHY BY FREDERICK CHARLES



A GORGEOUS OCTOBER MORNING IN THE HUDSON VALLEY AND PEOPLE ARE OUT LEAF PEEPING, BUT NOT CHRIS CASHEN, A FARMER.

Every week, on the outskirts of Hudson, 120 miles north of New York City, Cashen and his crew load about 1,300 pounds of organic vegetables—baby bok choy, salad greens, Japanese turnips, sweet potatoes, Tuscan kale—onto a truck headed for a food pantry hub in Long Island City.

The hot, dry summer meant they had to irrigate from the nearby creek, but the vegetables are beautiful and tasty.

A few miles south, Ken Migliorelli zigzags over the potholed roads between his hilly orchard in Tivoli and the flat sandy fields of his cropland in Red Hook. A Valentine's Day freeze took out all his stone fruit this year—no peaches, nectarines, or cherries—and a hard frost in May reduced his apple crop by 30 percent.

But Migliorelli, who manages 1,000 acres of vegetables, fruits, hay, and grains (there is a brewery here), and



supplies 24 farmers' markets in the city, knows the power of diversity. Depending on the time of year, 130 different kinds of fruits and vegetables fill the Migliorelli stands, including the same strain of broccoli raab his grandfather, Angelo, brought as seeds from Italy in 1933.

In Copake, at Walt's Dairy, David Kiernan milks 168 cows—a fraction of the herd of 400 registered Holsteins on this farm. That milk is on the grocery shelf within 36 hours.

These farms and about 400 others have been preserved with the help of land trusts over the past 30 years. Steve Rosenberg, the executive director of Scenic Hudson Land Trust

and a registered lobbyist, wants to save 5,000 more. New York loses a farm every three and a half days, according to the American Farmland Trust; in 25 years, it has lost half a million acres. And farmers are an aging population.

Lindsey Lusher Shute is the director and cofounder of the National Young Farmers Coalition, based in Hudson. "In the next 20 years, 70 percent of the nation's farmland will change hands," she says. "And the Hudson Valley is under incredible pressure with second-home buyers looking for land."

Rosenberg, a former real estate attorney who grew up watching the

marshes of southern Florida turn into malls and subdivisions, came to Scenic Hudson Land Trust in 1990 to develop a plan that would preserve clusters of the Hudson Valley's most valuable farms first, then go after the rest. "A third of the highest-priority farms over 10 years would cost about \$250 million," says Rosenberg. "That means \$25 million a year for 10 years." It would cost about \$720 million to preserve nine more clusters of the most productive farms—614 to be precise, totaling 163,673 acres—within 150 miles of New York City.

Just where to get the money, of course, is the big question. And a 2013 report by Scenic Hudson, *Securing Fresh, Local Food for New York City*

ABOVE Walt Kiernan feeds the "girls," just a few of his 400 registered Holsteins.

OPPOSITE TOP The Kiernans' easement, at Walt's Dairy in Copake, protects 357 acres—and the view.

OPPOSITE BOTTOM Three generations run Walt's Dairy; Bill Kiernan, left, grandsons Wally and Tim, and Walt are key members of the team.



ABOVE
Jeremias Taquez, with just-picked cauliflower and red cabbage.

OPPOSITE
The Cashens leased this 60-acre field and spent three years bringing it to organic standards. A complicated easement has helped them afford to buy the land.

and the Hudson Valley: A Foodshed Conservation Plan for the Region, suggests the public and private sources of money that need to be organized under one umbrella.

The plan presents startling statistics. Although local land trusts and other groups have collectively saved more than 81,000 acres, 89 percent of the region's farmland remains unprotected. About 4,355 farms totaling 485,286 productive acres could still be sold at any time for development. The plan points out the disconnect: thousands of farmers upstate and the hungry city below. Food policy experts estimate the city's annual unmet need for fresh local food is close to \$1 billion.

Rosenberg didn't invent the word "foodshed," of course. It was first introduced by W. P. Hedden, in his 1929 book, *How Great Cities Are Fed*, when much of Gotham's food was trundled into the city by rail, and a labor strike loomed. Now, the threats are climate change and terrorism. Rosenberg often draws the parallel between the Hudson Valley as a watershed and a foodshed. "The city has invested for 20 years in securing the land around its reservoirs to conserve clean drinking water," he says. "If it's interested in having a secure supply of fresh local food, as the largest stakeholder, it should be securing the farms it comes from."

The analogy certainly resonates with farmers. "It's brilliant," says Cashen, who grows 50 different kinds of vegetables on the 180-acre farm in Claverack that his grandparents bought as a country home in 1948 for \$28,000. "The same logic that drives New York to protect the Catskill watershed should drive it to protect the foodshed that feeds the city."

When Rosenberg first arrived 25 years ago, Scenic Hudson Land Trust was focused on the Hudson River. The group, founded in the 1960s, had defeated General Electric's plan to build a giant hydroelectric plant at the foot of Storm King Mountain, and its landmark



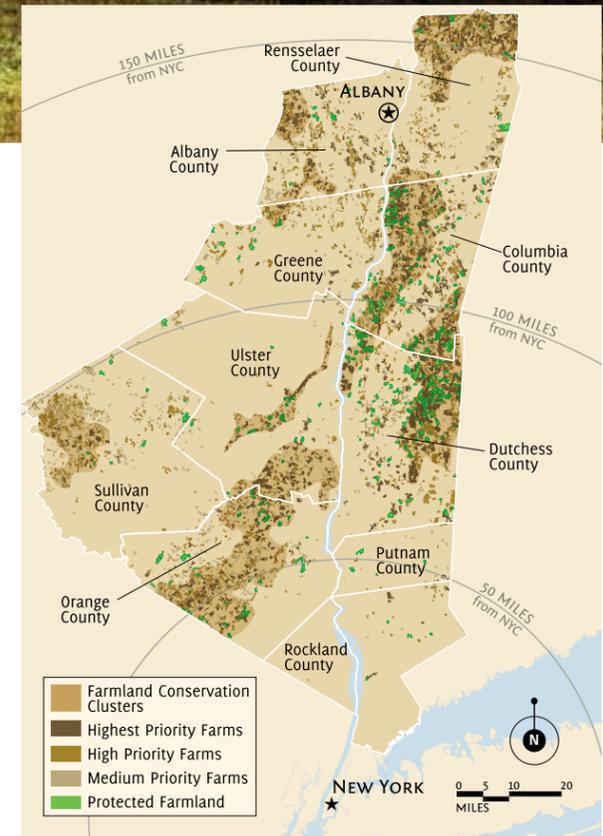
DOLLY HOLMES, MAP

court case launched the modern-day environmental movement. Scenic Hudson had gone on to preserve 25,000 acres of land, mostly along the Hudson River. But Rosenberg widened that view to the region's farmland, which, after all, is 20 percent of its land base, and the key to its cultural history and growing ecotourism.

Since 1992, Scenic Hudson has protected 100 family farms, or 13,000 acres of productive land, most within 150 miles of New York City. Rosenberg has increasingly immersed himself in the politics of food, as inseparable from preservation not only of farmland, but of farmers struggling to make ends meet.

Two seminal reports in 2010 posed major questions about New York City's broken food system. The first came out of the NYC Food & Climate Summit, held in December 2009 at New York University.

Rock stars in food policy, including Anna Lappé, a cofounder of the Small Planet Institute; the nutritionist Marion Nestle; and the Just Food activist Karen Washington, to name a few, examined the elephant in the room, hardly mentioned at the UN Climate Change Conference being held that same week in Copenhagen: the industrial food system, which belches out one-third of the greenhouse gases that warm the planet.





ABOVE
Kale and red cabbage flourish in the Cashens' field, and 1,500 sugar maples in their woods.

INSET
Sap is siphoned from 1,800 taps.

FoodNYC: A Blueprint for a Sustainable Food System, the report that followed in February 2010, from then Manhattan Borough President Scott Stringer's office, noted the city's dependence on produce flown in from California and China, its food deserts and hungry people, its rates of obesity, diabetes, and asthma. And it looked outside the city, at New York's seven million acres of farmland,

its farmers struggling to find local markets and forced to sell cheap to wholesalers.

Another report quickly followed: *FoodWorks, A Vision to Improve NYC's Food System*, from the office of Christine C. Quinn, then speaker of the New York City Council, pointed out the ludicrous realities. Why do New Yorkers eat apples from Wash-

ington State, and drink apple juice from China, for example, when New York State is the nation's second-largest apple producer? The city boasts more than 120 farmers' markets and 100 community-supported agriculture programs, or CSAs, but 1.4 million city residents can't afford to buy nutritious food and three million residents live in food deserts. At the same time, the city's budget for



institutional meals is second only to the U.S. military.

For years, distribution has been a major hurdle. Local farmers can't find a place at the Hunts Point Terminal Market, which sprawls over 100 acres in the Bronx, with an annual \$2.4 billion in sales of fruits and vegetables—mostly grown across the country or world. But in

two years, those farmers will finally have their own wholesale marketplace in the Bronx.

In early August, Governor Andrew Cuomo, city officials, and GrowNYC, the nonprofit group that runs the city's 50-plus greenmarkets, announced plans to build a separate, \$20 million Greenmarket Regional Food Hub on a three-acre site near

the Hunts Point cooperative. Cuomo has pledged \$15 million for the 120,000-square-foot hub, which will include a wholesale farmers' market, cold-storage capacity, and space for local food businesses.

The hub will now serve as a pipeline between local farms and the urban table. It also motivates the state and city "to make sure those farms are secure," says Rosenberg. "So they don't make all these investments and then turn around and say, 'Where are the farms?'"

As Rosenberg made his rounds as a lobbyist, he kept coming up against an information gap. "I would go up to Albany and they would ask me

ABOVE
Eduardo Saban, from Guatemala, loads vegetables at 4:00 a.m. in a truck headed for Brooklyn.

INSET
Not enough maple syrup this year: A warm March shut down the sap flow.



these really straightforward questions,” said Rosenberg one fall morning at his office in Poughkeepsie. “How many farms are there in this foodshed? How many acres? Where are they located? What’s it going to cost? How would you prioritize them?’ Nobody had the answers.”

In 2012, with a grant from the Doris Duke Charitable Foundation, Rosenberg’s staff set out to find the answers. They combed through county tax and land records, and maps of agricultural districts. They verified the possible farms with aerial photos, to make sure they were actually being farmed, or hadn’t turned into golf courses. Using GIS, they mapped the farms already preserved, which revealed contiguous easements, the gaps of unprotected farms among them, and the vast areas where none

had protection. The staff also assessed the soils and productivity of each farm, prioritizing which farms should be saved first, and how to rally the forces to do it.

Other land trusts, including the 30-year-old Columbia Land Conservancy, which has preserved 10,000 acres of agricultural lands (and 16,000 acres of forests, wetlands, and other areas), have focused on the most valuable farms within their particular counties—not the entire valley. And maybe it took Rosenberg, the new kid on the block, to state the obvious.

“The report is useful for raising awareness for people in the city that there’s something called the foodshed and we don’t live on the moon, that there’s a connection between



farms that are up here and down there,” says Marissa Codey, the Columbia Land Conservancy’s director of conservation programs. “When you go to Union Square, half the farmers are from up here. If you protect farms in Columbia County, you are protecting people in the city.”

Scenic Hudson has taken “a critical mass approach to farmland protection,” says Rosenberg, who acknowledges the group’s sizable endowment makes that possible. *Reader’s Digest* money—Scenic Hudson’s 2014 Annual Report cites \$161.9 million in its Lila Acheson and DeWitt Wallace Hudson Valley Land Preservation Endowment—funds about \$2 million a year in farm protection projects. That capital is used to leverage investments from other key stakeholders, from so-called slow money investors—who invest in small farms and local enterprises based on sustainability and social justice—to city, state, and federal funds.

“They provided a lot of funds for farms that we otherwise wouldn’t have protected,” says Codey, speaking of Scenic Hudson. “They are a great partner.” Previous collaborations between the two land trusts have protected 21 working farms, or 2,600 acres of productive land. Now, Rosenberg says, Scenic Hudson is committing about \$2.5 million of its own resources on 15 project proposals, “a number of which are in partnership with other land trusts, which we hope will leverage more than \$13 million.”

Rosenberg’s critical mass approach has loosened funds in government coffers. In May, Governor Cuomo announced \$20 million in grants to buy easements on 28 farms, totaling 5,600 acres, through the Hudson Valley Agricultural Enhancement Program. His press office noted that “60 percent of that land has been designated by Scenic Hudson as a priority to protect in the Hudson Valley/NYC foodshed.”

ABOVE
Chris and Katie Cashen met on his family farm.

LEFT
Fall vegetables, including carrots and red cabbage, are loaded up for the city.

OPPOSITE
Nitrogen nodules on red clover roots enrich the soil.



ABOVE
Ken Migliorelli's fall greens, including chard and kale, supply 24 farmers' markets in New York City.

The foodshed plan spurred Daniel R. Garodnick, chair of the city's economic development committee, into action: "They put forth some very thoughtful proposals here, which is why we are taking them so seriously. It didn't take much for me to recognize that they were clearly right and that they needed a local champion."

In April 2015, Garodnick wrote a letter, signed by 14 city council members, to Mayor Bill de Blasio urging the administration to invest at least \$5 million a year to "conserve the farmland in its regional foodshed." The letter was supported by dozens of groups, including Just Food, the city-based social justice group that has lately linked farmers to food

pantries and subsidized CSAs; Slow Food NYC; the Regional Plan Association; and chef/restaurant owners Dan Barber, Mario Batali, and David Bouley.

"It would be a precedent-setting enterprise," said Garodnick more than a year and a half later. "We've done similar things for the watershed, but never for the foodshed."

In September, the mayor's office was taking a hard look at his proposal to include \$5 million for farm preservation in the city's budget. "It's a high priority for this year," Garodnick said. "We're talking with the de Blasio administration, looking to hammer out the details."

And Rosenberg's tireless lobbying has had an effect.

"We've learned a lot of this from Scenic Hudson, and had ongoing discussions with them on how to shape this plan," Garodnick said. "We want to link our regional farms to New Yorkers who severely lack fresh produce."

In the meantime, land trusts have broadened their missions from simply preserving farmland to connecting farmers to direct markets, through groups such as Just Food and GrowNYC.

Just Food made the difference for the Cashens, in 2004, when they were having trouble making ends meet. "We



were not going into the city," said Chris Cashen, driving through a field full of dark green kale and row after row of celeriac. "We had a very small CSA at the farm. But essentially, we were wholesaling. Prices that were promised were not honored. It was the typical ebb and flow of a commodity."

Now, the Cashens sell their produce directly, through Local Produce Link,

run jointly by Just Food and United Way. "We're essentially contracted by United Way and are providing about 40,000 pounds per year of fresh produce to four food pantries in Long Island City," Cashen says. Just Food also introduced the Cashens to a group in Brooklyn and another in Long Island City that wanted to start CSAs; now they sell about 1,000 CSA shares around the city.



New York City's Greenmarket essentially lifted the Migliorelli clan out of debt. Ken Migliorelli tells how his father, Rocco, peddled vegetables from a cart, when Pelham Parkway was mostly pig farms. By the time Co-op City was rising over Interstate 95, the family left the Bronx for the Hudson Valley. By 1976, they were growing vegetables again, in Red Hook. But most of their business was wholesale.

"We didn't make any money," says Migliorelli. "Then, somebody told us about the farmers' markets in the city, and we started. June 12, 1982, was our first market in Tompkins Square. At the end of 1982, we ended up in the black for the first time since 1975."

CLOCKWISE FROM TOP LEFT
Ken Migliorelli manages 1,000 acres of crops, including 350 acres of vegetables and 200 acres of fruit.



TOP LEFT
Every box can hold 800 pounds of apples.

BOTTOM LEFT
Carrots grow sweeter with the frost.

ABOVE LEFT
Migliorelli's 200-acre fruit farm, purchased in 2002, produces apples, pears, apricots, plums, and cherries.

ABOVE RIGHT
A field of brussels sprouts, ready by Thanksgiving.

Land trusts are also using new conservation tools to keep farms in farmers' hands. Conservation easements, in which landowners sell or donate their development rights to a land trust, generally reduce the value of the property by 40 to 60 percent of its full market value, and restrict its use to agriculture or simply open space.

The process has worked well for farmers who use the much-needed capital to reduce debt or expand their operation. But lately, second-home buyers flocking to the bucolic Hudson Valley have been buying up these preserved lands and taking them out of production.

Even if they rent part of the land to farmers, the lack of security and the inability to make capital investments make this at best only a temporary solution for those working the land. And young farmers without access to inherited land can't afford to buy preserved farmland, unless additional easements further reduce the price to what farmers can afford and also restrict the sale of the land to working farmers. Land trusts have begun working together on these affordability options, or preemptive purchase rights, as they are also called, to keep farmland in the hands of farmers, not estate buyers. But it's not happening fast enough, given the number of farms up for sale, says Lindsey Shute, of the National Young Farm-

ers Coalition, who farms with her husband, Ben.

"The idea of the working farm easement has been very slow to roll out in the Hudson Valley," she says. "Affordability hasn't gotten any better for young farmers trying to purchase."

The coalition's 2013 national survey of more than 200 land conservation professionals found that a quarter of the farms protected by their programs were out of production—because the easements were sold to nonfarmers.

The Shutes started growing organic vegetables in 2004, on land rented from a dairy farmer, until

he died and "the property went for millions," Shute says. "We rented another property, wonderful soil, but we couldn't make capital improvements, and there was nothing in Red Hook for under a million."

Finally, in 2012, the Shutes were lucky enough to buy 70 acres, at agricultural value, from a friend who on the same day sold her development rights to the Scenic Hudson Land Trust. Now their organic operation, Hearty Roots Farm, supports 25 acres of vegetables, 900 laying hens, and 15 pigs. The Shutes supply a CSA in Red Hook, as well as seven CSAs in the city, all with subsidized shares.

Longtime farmers, even those with preserved land, are facing the same

steep prices if they need to purchase more land to expand production.

Chris Cashen, one of nine children, was only 15 when his parents donated the development rights to the Farm at Miller's Crossing. Bound for college, and eventually law school, he found the concept hard to grasp, at first.

"We had this very primitive notion as kids, that land equaled money," he says. "That we had this farm to sell and some day we would have an inheritance that was worth a lot of money and this would be great." But discussions around the kitchen table with Chuck Matthei, the founder and then director of Equity Trust, helped them see the land in a different way.

"We realized that 'Gosh, this regenerative thing of a farm being every year a source of livelihood and occupation and income would be much better than a one-time sale.'"

Fast forward to 1999, when Chris wanted to marry a young market gardener, Katie Smith, and they needed land to expand. They eventually bought the family farm "at a very generous price" from his parents, says Cashen. Their success led them to rent 30 more acres from a struggling dairy farmer, and it took them three more years to bring the soil up to organic standards. By the time the farmer sold his land—more than 400 acres to an investment developer—the Cashens were renting 60 acres that were crucial to their operation.



“Suddenly, the threat of development was real to me,” Cashen says. “My farm was safe. But the land that I had come to depend on was under that threat that I didn’t ever feel on my own land.”

The new owner agreed to rent to the Cashens, until the development broke ground, but when the plans never materialized, he needed a return on his investment. He was willing to discuss alternatives to putting the land on the market, however. So three different land trusts—Columbia Land Conservancy, Scenic Hudson, and Equity Trust—have forged a conservation easement that will allow the Cashens to buy 69 acres at agricultural value, while preserving about 330 acres of the old dairy farm.

A slice of New York State’s recent infusion of \$20 million to protect Hudson Valley farmland, as well as matching funds from Scenic Hudson, will purchase the development rights on the property, so the seller will receive market value.

But young farmers are still struggling. New York State’s \$20 million for Hudson Valley farmland pays only for the purchase of development rights. “Which is a huge disappointment for us, because if it’s just going to protect land from development, that is not sufficient to keep farmers in the valley,” Shute says.

It’s a bumpy landscape.

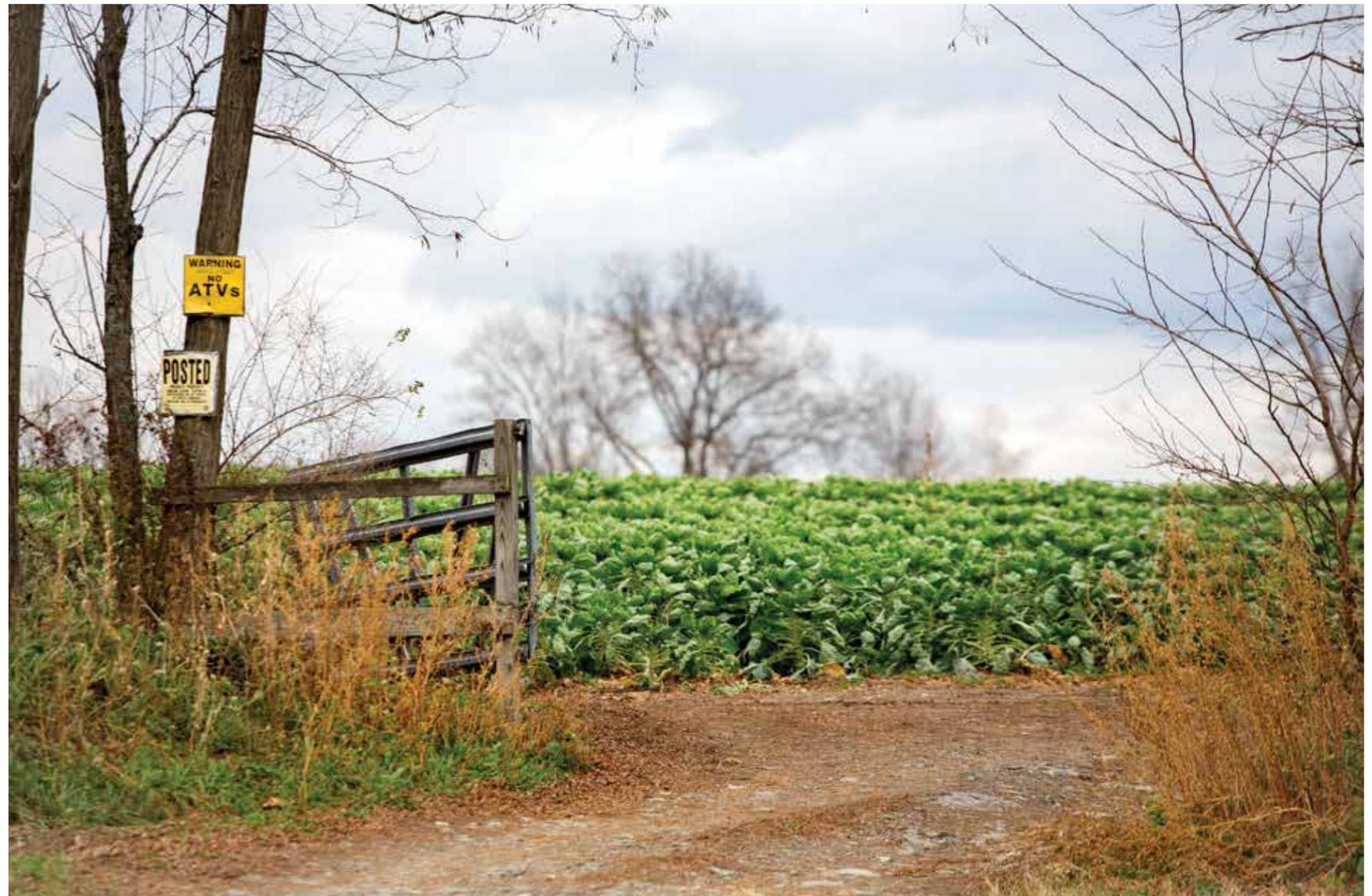
Migliorelli preserved his family’s 132-acre farmstead in 1995. It was one of seven farms in Red Hook, in Dutchess County, that Scenic Hudson preserved all at once, totaling about 1,000 acres, in its first critical mass approach to land protection. “We zeroed in on Red Hook, because that’s where there was the greatest farmer receptivity,” Rosenberg says. But the process took years.

“Some people who were new to this concept didn’t like hearing about it. They didn’t want anything to infringe on their right to develop,” Migliorelli says. “But to me, to preserve

these prime farmlands for future generations is a necessity.” Dutchess County adopted its first Agricultural and Farmland Protection Plan in 1998. In 2003, Red Hook approved a \$3.5 million bond initiative for the purchase of development rights; in 2007, it passed a Community Preservation Act, which allows the use of a transfer tax on real estate to fund easements.

By now, Red Hook has protected 60 percent of its farmland. Migliorelli drives around the flat sandy fields where he grows all that food for New York City. “When Hurricane Irene hit and dumped 17 inches of rain in the area, there were farms that lost 100 percent of their crop. I had 80 to 90 percent of a crop, because the soils here have good drainage. That would have been all developed in that real estate boom after 9/11.” ●

ANNE RAVER WRITES ABOUT THE ENVIRONMENT, INCLUDING GARDENING AND FARMING, WILDLIFE HABITATS, AND LANDSCAPE DESIGN.



ABOVE
Ken Migliorelli preserved his first 132-acre farm in 1995.

OPPOSITE
“To preserve these prime farmlands for future generations is a necessity,” Migliorelli says.