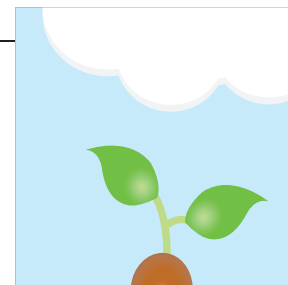


# The HIGHLANDS Current



Help Us Grow  
See Page 3

NOVEMBER 2, 2018

161 MAIN ST., COLD SPRING, N.Y. | [highlandscurrent.org](http://highlandscurrent.org)

## Hate Hits the Highlands, Again

*Swastika, anti-Semitic slur painted on home*

By Michael Turton

A home under construction in Nelsonville and owned by a Jewish resident was vandalized overnight on Oct. 30 with graffiti that included a swastika and an anti-Semitic slur.

The contractor, who is also of Jewish heritage, alerted *The Current* on Wednesday morning after discovering the damage. The property owner asked that his name and the address of the property be withheld because of con-

cerns for the safety of his family. But he said the incident “gives members of the community an opportunity to stand on the right side of history.”

The Putnam County Sheriff’s Office said it is investigating the vandalism, which was made with black spray paint and also included obscenities and the word “Prowler.” A representative for the sheriff’s office said that if it’s deemed a hate crime, criminal mischief charges could be elevated from a misdemeanor to a felony or from a

*(Continued on Page 24)*

## Candidates Address Philipstown Issues

*Forum at Garrison library draws on 2017 poll*

By Liz Schevtchuk Armstrong

The focus was Philipstown during a forum last week at the Desmond-Fish Library in Garrison featuring candidates for Putnam County executive and county legislator.

Sponsored by the grassroots Philipstown Community Congress, the Friday (Oct. 26) gathering drew about 100 people. The questions posed by organizers reflected responses to a 2017 PCC survey in which more than 750 residents voted on a list of local priorities (see Page 9).

### County Legislator

District 1 Legislator Barbara Scuccimarra, a Republican seeking re-election to her

third, three-year term, and her challenger, Philipstown Town Board Member Nancy Montgomery, a Democrat, both said they saw a need for more teen services.

“Identifying a space is the big problem,” Scuccimarra said. Using the senior center at hours when the seniors are not there is a possibility, she said. Another potential site would be the American Legion on Cedar Street, where the seniors currently meet, but “the veterans haven’t had that space to themselves for a long time. They’re very protective of it,” she said.

Until the location is resolved, she recommended creating a bus service to take teens to the Philipstown Recre-

*(Continued on Page 9)*



## A GROWING CHALLENGE

*Farms and Food in the Hudson Valley*



### Part 1: Farmers Young & Old

By Chip Rowe

Joe Hasbrouck is 74. He has been a farmer in the Hudson Valley for his entire life, the fifth generation of his family to work the land. And he’s always been concerned about the disconnect between people who eat (i.e., everyone) and the people who produce what we eat.

“People are so far from farms they think their food comes from the grocery store,” he says.

That view is backed up by surveys, including one by the U.S. Farmers & Ranchers Alliance. It commissioned two surveys, actually: one of 1,002 farmers and ranchers and another of 2,417 consumers. It found that 72 percent of the latter admitted they knew little about how food ended up on their dinner table outside of the fact it came from a supermarket. At the same time, 86 percent of the farmers and ranchers said they felt consumers know little about what happens on farms.

The disconnect extends to our view of how food should be grown. While nearly 80 percent of the consumers in the survey said they wanted healthy choices at the grocery, 64 percent said they want food to be cheap. You can’t always have both.

Hasbrouck believes “nothing will change until people are educated about

how important farming is.”

We hope to contribute to that understanding with this three-part series, which will examine what makes the Hudson Valley such a great place to farm (fertile soil, ample water) but also outline the many concerns facing our farmers, including the loss of farmland to development, the “aging out” of producers and field workers with no one to replace them (Hasbrouck has no heir for his 330 acres), the toll of climate change and the effects of federal policies such as crop subsidies, among other topics.

As we did with our series on the opioid abuse crisis and the effect of climate change on the Highlands, we assigned a team of reporters and photographers to the task. They were led by Cheetah Hayson, a longtime journalist and author of *Pride and Produce*, an exploration of the fertile black-dirt region of Orange County.

Among our many sources was Bob Dandrew, founder and director of the Local Economies Project, which is working to build a resilient food system in the Hudson Valley. With so many threats facing farms here over the next few decades, he says, “everyone should be thinking about where they will get their food.”

*(Continued on Page 12)*



FACES YOU CAN'T FORGET — Cold Spring held its 25th annual Halloween parade on Sunday (Oct. 28) and attracted a large number of ghouls, ghosts and cute kids. For more photos, see [highlandscurrent.org](http://highlandscurrent.org). Photo by Michael Turton





# No One Left to Farm

*What happens when the children move on?*

By Cheetah Haysom

Joe Hasbrouck, 74, is the fifth-generation of his family to farm in the Hudson Valley, dating to the 17th century. His forebears settled in New Paltz along with other Protestants fleeing religious persecution in France. They moved to farm in the Rondout Valley near Kingston on what is now 330 acres of corn bordered by Esopus Creek.

Hasbrouck and his wife, Vivian, have two daughters who each live half a mile from the farm. One is a teacher, the other is employed in banking. Like the offspring of other farmers across the valley, neither has any interest in agriculture. The Hasbrouck farming line will soon come to an end.

A third of the farmers in New York state are 65 or older, and one survey found that 90 percent of them have no successor. Two million acres of farmland could be taken out of production in the next decade or two. More than 4,000 farms have been lost to real estate development in New York since the 1980s, according to the American Farmland Trust.

Liz Corio, vice president of development at Glynwood, a farm-based nonprofit outside of Cold Spring that promotes Hudson Valley farming, notes that, according to an agricultural census completed in 2012 (the most recent available), the average age of farmers in Putnam, Dutchess and nearby counties is 58. “Every year we hear of farmers deciding to just move out and go,” she says.

Fifteen organizations, including the American Farmland Trust, Glynwood and the Dutchess Land Conservancy, have created a coalition, the Hudson Valley Farm-link Network, to prevent that from happening. One of its projects is an online



Joe Hasbrouck

Photo by Rubi Rose

farmland finder, which, like a dating site, matches farms for sale or lease with aspiring farmers. Its listings include 16 farms in Dutchess County, 17 in Orange, 17 in Ulster, and four in Putnam, including the 250-acre Sugarloaf Farm on Route 9D in Garrison.

The group also helps farmers with succession plans.

The life of a farmer is notoriously demanding. As farmers age, the load typically shifts to the next generation. But if there is no successor, farmers often must shift to low-maintenance, low-labor crops, as Joe Hasbrouck did.

“It’s not a lucrative business,” he says. Fifty years ago, when he started, the farm thrived with sweet corn, a labor intensive but profitable crop that required 50 farmworkers during the summer who are today not so easy to find.

Gradually Hasbrouck switched to field corn, which can be harvested with a machine and is used mainly as livestock feed. He also experimented with red beans,

which don’t require much labor, but eventually dropped them. He has an employee who has been with him for about 30 years, and the employee’s son. “We farm about 285 acres and we do everything ourselves,” Hasbrouck says.

As with most farmers, Hasbrouck’s equity is in his property and equipment. Without an heir, a farmer usually is forced to sell to finance retirement.

“My health is not perfect, but I’m not ready to quit yet,” says Hasbrouck. But, he concedes, if he were offered the right price...

“I have no regrets about being a farmer,” he says. “I’ve had a good life. But I have a

degree in agricultural engineering and if I’d had a crystal ball, maybe I’d have gone to work in something where there are benefits like those a person in the business world gets when he retires.”

One of the challenges facing farmers is the lack of a profitable export markets. “Foreign countries get subsidies so their products

are cheaper,” Hasbrouck says. “It’s not that I want subsidies — I want a fair market.”

He adds: “I don’t see people rushing into farming unless it becomes profitable. Middlemen get the profits at farmers’ expense. Agriculture in general was looked down on for so many years. Even now people are so far from farms they think their food comes from the grocery store. Nothing will change until people are educated about how important farming is.”

Hasbrouck Farms is surrounded by farmland that has been abandoned. “You’d see a lot of farmers back if we could at least get a 10 percent profit for our produce,” Hasbrouck says. Climate change has added to the burden. “For example, wheat was a common crop,” he says. “Now almost none is grown because of the increased moisture. It sprouts on the stem — something you never heard of 60 years ago.”

He admits it will be a heartbreaker when he sells, especially if the property stops being farmed. “The son of my employee expressed interest, but he would need considerable financial help,” Hasbrouck says. “It costs me at least \$200,000 a year to run the farm, and it’s a complicated business. He’d need guidance for at least a few years.”

## A Short History of Hudson Valley Farming

By Michael Turton

### 1000–1600

The Munsee and Lenape Indians consumed wild crops such as berries, nuts and root vegetables. Using fire to remove forests, they cultivated a variety of plants, including corn, beans and squash, grown together in raised mounds. Fish were used as fertilizer. Across the Americas, native peoples cultivated more than 300 crops.

### 1609

Henry Hudson called the Hudson Valley “the finest land for cultivation I have ever set foot on.”





# Who Will Pick the Crops?

Farmworkers “aging out” with farmers

By Cheetah Haysom

It’s back-breaking, repetitive, exhausting work. Most days start before dawn and can last until dark. It could be damp and cold when you punch in and scorching hot when you punch out. And the work often involves chemicals that can’t be good for your health.

As with farmers, many of the men and women who do this hard work are getting old and “aging out.” The average age of farmworkers in the U.S. is 38, according to the most recent figures compiled by the U.S. Department of Labor. In 1997, it was 31. Nearly a third of farmworkers in the U.S. are age 45 or older.

The overwhelming majority of farmworkers in the Hudson Valley are foreign-born, mainly in Mexico and Central America. However, in recent years fewer Mexicans have come to the U.S. because the growing economy in their own country offers easier jobs — some at U.S.-owned factories and farms that operate there — and a life closer to their families. In fact, according to an analysis by the Pew Research Center, citing government data, more Mexicans have returned home since the recession in 2009 than attempted to cross into the U.S.

Mary Joe Dudley, who directs the Cornell Farmworker Program, which works to improve working conditions, says the seasonal influx of farmworkers has also been diminished by the fear of the violence due to drug cartels operating at the border and the high price of smuggling undocumented workers into the U.S., which can run as much as \$10,000 a person.

The Hudson Valley is also challenged because New York City offers many better paying jobs than working in the fields, especially in construction and the hospitality industry, notes Liz Higgins, a specialist with the Eastern New York Commercial Horticulture Team, which is run by the Cornell Cooperative Extension and based in Highland.

Picking crops “is hard work,” she says. “On some tree-fruit and vegetable farms workers who have come for many years [from Mexico and Central America] are now getting old, and it’s going to get even



Hudson Valley Farms, By the Numbers							
County		# of Farms	# of Acres	Average Size (acres)	Average Annual Sales	Average Federal Subsidies	% Less Than \$2,500 Sales
	Dutchess	678	112,482	166	\$72,303	\$6,097	34
	Putnam	72	5,908	82	\$45,227	\$4,704	57
	Orange	658	88,030	134	\$153,035	\$10,962	30
	Ulster	486	71,222	147	\$115,019	\$6,688	32
	NY State	35,537	7.2m	202	\$152,380	\$7,955	31
	National	2.1m	915m	434	\$187,097	—	37

Source: U.S. Department of Agriculture, 2012 (most recent available)

more serious in the next five to 10 years. I know farms where workers who served loyally for years had to be let go because they can no longer physically do the job or their skills no longer match the needs of the farm.”

Except for occasional high school students doing vacation jobs, and a few farms that employ Puerto Ricans, farmhand jobs are not being filled by Americans. Some farms have used prisoners or appealed to the unemployed who were trained in other fields, with some success. Many farmers will laugh aloud when told that immigrant farmworkers are taking jobs from Americans.

“One of the problems,” says Higgins, “is the way we talk about the job makes it unattractive to potential employees. It’s seen as no-skill, no opportunities, no dignity and dead-end — something only the desperate would do, when in fact it requires skill to do well, and is extremely important.”

The changing climate has exacerbated the problems caused by a shortage of labor, leading some farmers to leave crops to rot. “You can plan the amount of workers you

need for harvesting different crops and then unexpectedly it’s hotter than normal, all crops ripen simultaneously, and there isn’t enough labor,” Higgins says. “It’s increasingly hard to predict your need.”

When farmers use the H-2A, which is an agricultural work visa, “they have to guarantee working hours, so they don’t want to over-hire,” she explains. “But climate change can shift harvesting times, forcing them to have to get H-2A work extensions. Apple farmers, for example, have varieties that ripen at different times. But if the weather shifts and the varieties all ripen at the same time there aren’t enough hands.”

Higgins reports the growing use of picking machines, but many fresh-market crops, such as some cabbages and apples, can’t be harvested that way. There are machines that can help. Instead of using ladders to harvest apples, for example, farmers are reconfiguring their orchards so they can use a platform pulled by a tractor. This makes the job easier and safer for older workers.

The Trump Administration’s hard line on immigration has caused the most con-

cern among small farms that don’t use H-2A workers because of the added expense. The visa program requires farmers to provide workers with free accommodations that are subject to frequent and strict inspections, and other benefits including transportation. Also, while the minimum wage for farmworkers in New York is \$10.40 an hour (rising to \$11.10 at the end of this year), most workers with an H-2A visa get \$12.80. Some skilled farmworkers are paid \$20 an hour or more.

Farmers who asked not to be identified because they employ undocumented farmworkers said many returned to Mexico shortly after President Donald Trump took office in January 2017. Others who had returned to work on the same farm year after year did not show up for the 2017 or 2018 planting season.

One farmer said two of his workers, a couple from Central America, vanished without a word, leaving him without help. As a result, he was planning to switch from onions and squash to lower-labor crops like soy beans.

At the Alamo Farm Workers Community Center in Goshen, more farmworkers have been asking for help lately with passport applications for their children born in the U.S., in the event the parents are deported, says Mario Fernandez, an outreach worker with the center.

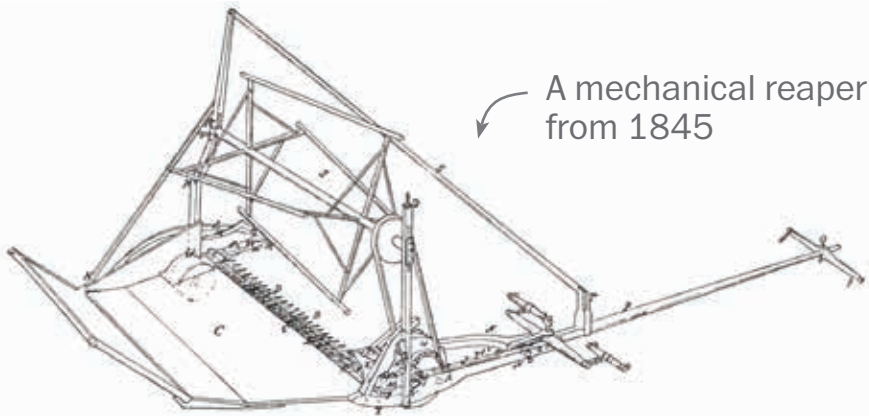
A number of groups have advocated making it easier to get visas for farmworkers. One of them, the Partnership for a New American Economy, estimates the decline in farmhands has reduced fruit and vegetable production by 9.5 percent, or about \$3 billion. Immigrants who work farms in other countries — from Germany (Turks), Italy (Africans), France (poor Spaniards) and Spain (Moroccans) to Costa Rica (Nicaraguans) and Canada (Central and South Americans) — typically have temporary visas for agricultural work that make it easy to come and go.

Many farmers consider the H-2A too burdensome and expensive, says Mary Jo Dudley at the Cornell Farmworker Program. She says each visa costs the average farmer an estimated \$6,000 in time and paperwork. They might also pay \$500 in expenses to recruit each worker and \$300 for transport from their home country. However, she says, the fear of workers being deported in the midst of a harvest has led more Hudson Valley farmers to apply for H-2As.

Advocates have suggested the federal government simplify and expedite the agricultural visa system and include dairy farmworkers, who are ineligible for H2A because they are not seasonal.

## 1640-1839

The Europeans considered farming to be mostly a man’s occupation. (In Native American culture, women were the farmers.) Woodlands were widely removed for fuel and to expand farmlands. Everything was planted and harvested by hand, with oxen and horses used for power, pulling wooden plows. A cast-iron plow was introduced in 1797 and a steel plow by John Deere in 1837. In 1820, the U.S. House established its agriculture committee. In 1834, Cyrus McCormick (right) patented a mechanical reaper to harvest grain.



A mechanical reaper from 1845





# Finding New Farmers

*Who will be growing our food?*

## Young Women

By Cheetah Haysom

Leslie Lewis was 24 and expecting to pursue a career in public relations when she took time off to work at a 6-acre Connecticut vegetable farm.

"After that I knew I wanted to be a farmer," she says.

Soon after, Lewis, who grew up in Illinois, landed a job in development at Scenic Hudson, the nonprofit based in Poughkeepsie. But after a few years in the office, she quit to travel in South America.

In Argentina, she worked at two organic farms. "I was doing what's called 'wwoofing,' which comes from a program called Willing Workers on Organic Farms," a network also known as Worldwide Opportunities on Organic Farms. "You work for room and board," Lewis says. "It was a lovely way to see the world as well as other ways of farming."

When Lewis returned to the U.S., she was ready to dig in and found work on a farm in Red Hook.

"It was owned by a woman, and the only other worker was also a woman," Lewis says. "Women are still a minority among beginning farmers, but there are many more of us than in the past. The work is inspiring and empowering and nurturing. Women are by nature farmers."

The work at Red Hook was intense and demanding. "There's so much more to farming than people know and so many skills to hone," Lewis says. "Which tools for weeding? When are vegetables ready for market? What are the techniques for planting seeds? I realized I had so much to learn."

That is why, she says, she signed up earlier this year as an apprentice at Glyn-



Leslie Lewis and Anthony Post at Glynwood

Photo by Ross Corsair

wood, a nonprofit farm outside Cold Spring that allows beginner vegetable and livestock farmers to live, work and study on the farm for a season. Her lessons have included instruction in finances, small-engine repair, carpentry, soil and forestry.

She also met Anthony Post, a fellow apprentice who abandoned his pursuit of a doctorate in physics to go into farming. The two fell in love and next spring will start farming vegetables as partners on a 1.5-acre parcel they have leased in Gardiner, in Ulster County.

Lewis says that, like the vast majority of young farmers, she and Post are committed to organic and sustainable practices. Their parcel will be part of a larger farm, one of the number of operations in the Hudson Valley that allow beginners to lease a small plot to test their skills. Lewis and Post plan to sell shares of their crops to customers through a CSA (Community Supported Agriculture) system. Residents pay a fee at the start of the season and then can pick up weekly packages of seasonal vegetables.

Lewis says she and Post already have 50 shareholders. Their immediate goal is to learn how to make a profit, so they can expand. But the price of land is a huge barrier, she says.

As for where to farm and what to grow, Lewis laughs and says, "It's like dating. There are so many things to take into account." One

dream is to someday have a small nonprofit farm for women who have recently been in prison. "Farming is therapeutic, gratifying and grounding. It would be a place for rehabilitation and empowerment."

When farmers retire without heirs, most of the land that they leave behind and that younger farmers could lease or buy, has already been used to grow conventional crops, with pesticides and tractors that contradict "no-tillage" organic standards. So, will young farmers dedicated to organic and sustainable farming be able to find suitable and also affordable land?

"There are many remedial things that can be done on that kind of land, including replacing the lost organic matter," Lewis says. "The Hudson Valley is not only beautiful, it has such comradeship in the farming community. It gives us enormous support, and has abundant resources to help people like us become farmers."

"That's why I'm optimistic," she says. "One day I'm going to own my own farm!"

## People of Color

By Pamela Doan

For Larisa Jacobson, farming is more than just farming — it's about creating a more just and healthy world and righting the wrongs of racism, colo-

nialism and oppression.

As the manager at Soul Fire Farm in Grafton, east of Troy, the Beacon resident leads a team that this season trained 120 aspiring farmers, all black and brown people in what has traditionally been a white (95 percent) and male (86 percent) industry.

At 41, Jacobson's resume spans continents and the most challenging, life-or-death issues of our time: HIV/AIDS services for immigrants, sustainable energy and public health, and preserving ethnic identity. As she worked with disadvantaged communities, she says, food and farming intersected.

"Through the lens of structural racism, I saw scarcity and disconnection from the land and access to nutritious food," she says. "Discrimination and barriers to prevent black and brown people from thriving were issues that kept coming up."

Jacobson, who grew up in the Squirrel Hill neighborhood of Pittsburgh with a Chinese mother and a Jewish father, said attending schools that were led by black people and had racially integrated student bodies "helped shape my path." Racism struck close to home on Oct. 27. Her grandfather attended the Tree of Life Synagogue, where 11 people were killed by an anti-Semitic gunman, and her parents live nearby.

At Soul Fire Farm, where Jacobson stays two to six days per week, she and her colleagues have trained nearly 500 people

## 1840-1868

Factory-made farming equipment began to appear on the market in the 1840s and in 1842 an English factory introduced chemical fertilizer. In 1846 George Emerson observed that "the new settler cleared in a year more acres than he can cultivate in 10." Wheat, barley and rye were grown in large, separate fields. Corn, adapted from Native American varieties, provided animal feed. An agricultural census conducted in 1860 showed 393,000 acres of farmland in Dutchess County (compared to 113,000 today) and 95,000 in Putnam (compared to 5,900). The most common crops were oats, corn, rye, Irish potatoes and tobacco.



## 1869-1945

Farmers began to use silos. In 1888 a refrigerated rail car traveled from California to New York. The gasoline-powered tractor appeared in 1892 and the first tractor company was formed in 1905. As wood was supplanted as a fuel by coal, oil and gas, the forests regenerated, replacing fields. Many Hudson Valley farmers migrated west to flatter, more fertile lands. Land values decreased. Farmers began to focus on producing food for urban areas, especially New York City. Specialty crops such as apple orchards and vineyards appeared and technological innovations increased crop yields. Wholesale food distributors decreased the contact between farmers and consumers.







John Lemondes (center) leads other veterans on a tour of his farm, Elly's Acres. Photo by James Bemus



Larisa Jacobson (middle, back row) with her team of growers at Soul Fire Farm. Photo by Eb. Brown

through the Black-Latinx Farmers Immersion Program (the “x” signifies both male and female) and nearly 90 percent have gone on to work in farming and food-justice programs.

Soul Fire’s program covers all of the things you might find in other programs about how to grow food and run a farm but also addresses the trauma people of color suffer from institutional racism, Jacobson says. Her approach uses regenerative practices she describes as “healing the soil.”

The food grown on Soul Fire Farm’s 2 acres is delivered to doorsteps around Albany in a Community Supported Agriculture (CSA) program that works on a sliding scale based on ability to pay. This year, she says, the farm provided free shares to immigrants, refugees and people affected by violence.

Jacobson says the crops include black diasporic and indigenous food at the community’s request such as collard greens, okra, hibiscus, tomatillos, maize, ama-

ranth and chile peppers. “Typically [commercial] food is canned, processed and high in sugar,” she says. “We offer food as medicine; it supports life. Fennel, for example, has been used for centuries to support the immune system and digestion.”

Soul Fire’s website has a “reparations map” that charts members of the Northeast Farmers of Color Network and food-justice projects, allowing visitors to donate land or money to account for land and labor taken over the centuries from indigenous and people of color, she notes. “The map is to coordinate in partnership,” she says. “It’s not an official effort for reparations but in spirit.”

## Veterans

By Jeff Simms

John Lemondes, a retired U.S. Army colonel who is now a sheep farmer in Chautauqua County, south and west of

Buffalo, last year helped launch a New York chapter of the Farmer Veteran Coalition.

The nonprofit assists veterans “who want to get into farming, or need to know what resources are out there to help them,” says Lemondes, 53, whose military career spanned 27 years.

“It’s not a ‘pay-for-your-equipment’ type-thing,” he explains. Instead, the chapter guides veterans toward resources to assist with land acquisition, financing and the other nuts and bolts of an agricultural operation.

“Farming is one of the hardest vocations that exists in our country,” says Lemondes, who first worked, at his father’s insistence, on a farm picking fruit during the summer after fifth grade. “The risk factor is tremendous.”

In addition, the industry is in the midst of a massive demographic shift as large numbers of farmers are close to retiring “and there’s not enough new farmers behind those who are producing our food to take their place,” he says.

That concern led New York to create, in 2014, the Beginning Farmers Workgroup to provide on-the-job training for veterans seeking careers in farming. The Small Farms Program at Cornell University also partnered with the state to expand its training in which veterans receive wages as well as a military housing allowance through the G.I. Bill. And last year, Empire State Development, in coordination with the state Department of Agriculture and Markets, launched a \$250,000 Veterans Farmer Grant Fund.

Cornell has trained more than 800 veterans — from 24 to 67 years old — in the last three years, says Dean Koyanagi, an associate with the university’s veterans in agriculture program known as “Farm Ops.”

“We have a wide range of participants, from people on Wall Street to young guys who have served four years in the military and are finished,” Koyanagi says. “We offer a customized service for each person.”

Most of their participants, regardless of age, are attracted to the farming lifestyle — hard work, long hours and all — but may lack the administrative know-how to run a business, he says. “Our support is to keep track of that veteran, so he or she can actually get all the resources that are out there.”

All the various programs, Lemondes said, show that the state “is recognizing the people [farmers] that the public takes for granted” before they’re gone.

If they’re not recognized, he says, “these guys are retiring, and there’s going to be a problem.”



## BUILDING OUT

**Hudson Valley group pushes to expand market**

By Brian PJ Cronin

Todd Erling is the executive director of the Hudson Valley AgriBusiness Development Corp. (HVADC), an agency based in Hudson.

**How did the HVADC get started?**

We’re a product of a study by the American Farmland Trust in the early 2000s that looked at the challenges facing Hudson Valley agriculture. Four of its 13 recommendations were addressed by creating HVADC.

**You’ve concluded that Hudson Valley farmers could sell \$335 million more food than they do. How do you calculate a figure like that?**

We look at market demand and market access, coupled with studies that look at our foodshed [a geographic location that produces the food for a particular population]. Within about five hours from Kingston, you can access 55 million mouths, including in New England, Philadelphia and Washington, D.C. Our location provides an amazing opportunity, as does having access to viable farmland, great water and our heritage of being the breadbasket of the Northeast.

**What are the biggest challenges for new farmers here?**

It’s an expensive place to produce food. We have a higher cost of living, and our plentiful rain can affect the growing conditions in terms of mold, mildews and certain pests. There’s also the challenge of other markets around the world having access to our customers because of highways and rail. Our farmers have to compete with a competitive food market in urban areas. But we can tell our stories about who grows the food and how it is grown. Consumers seem willing to vote with their forks.

**Which farms have you worked with in the Highlands?**

We’ve been working with Fishkill Farms on a multiyear project to create a hard-cider product because it lets a farm use unsellable or unharvestable apples to make a product with a significant markup compared to sweet cider or shelf-stable apples [that can be stored for long periods without spoiling]. We also helped them, with Scenic Hudson, to expand their footprint by acquiring property adjacent to the farm to produce apple varieties that are good for hard cider.

**What is the first step for the Hudson Valley to become a regional food hub?**

We need to take advantage of existing infrastructure. Many farms have pack houses, cold storage, freezer storage and loading docks, but they are under-utilized.

The larger question is, how do we link those to distribution, wholesale and retail? How do you connect the dots?



Todd Erling  
Photo provided

## 1945–present

As the transition from horses to tractors was completed (the number of tractors in the U.S. overtook the number of horses and mules in 1954), large-scale, mechanized mono-culture crops and genetically modified plants become more common. The first mechanical tomato harvesters appeared in 1959. Health concerns increased due to industrial pollution and the use of chemical fertilizers and pesticides. “No-tillage” farming took hold in the 1970s, in part to curb erosion. A 1989 report concluded that the Hudson Valley region produced only 15 percent of the food eaten by its own residents. Farmers’ markets grew in popularity. As farm families shrank, more laborers came from outside the U.S.





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## Highlands Could Lose Renegades

*Dutchess legislators  
reject proposal to  
repair stadium*

By Jeff Simms



The Dutchess County Legislature this week rejected a proposal to spend at least \$2.4 million to refurbish Dutchess Stadium, adding uncertainty to the future of the minor league baseball team that has played there for 25 seasons.

To further complicate matters, the land under the stadium is owned by the Beacon City School District, which leases it to the county. That lease expires on Dec. 31, and if the agreement is not extended, the district could inherit a stadium it may not want.

Earlier this month, County Executive Marc Molinaro asked the 25-member Legislature to approve \$2.4 million in bonds to add to a \$600,000 state grant to pay for a first phase of improvements to the stadium, which has been home since it opened in 1994 to the Hudson Valley Renegades, a Class A Short Season team currently affiliated with the Tampa Bay Rays.

(Continued on Page 6)

## EPA: Marathon Groundwater Still Polluted

*Owner says redevelopment  
'on the back burner'*

By Michael Turton

The U.S. Environmental Protection Agency, in its latest five-year report on the environmental health of the former Marathon Battery Co. site in Cold Spring, says the groundwater beneath the property remains polluted and will continue to be monitored. It also found that nearby Foundry Cove Marsh has not yet fully recovered from years of discharge into its waters.

Ken Kearney of Kearney Realty, who purchased the 12-acre Kemble Avenue parcel in 2003 with a plan to build a mix of residential and commercial buildings, said development remains “on the back burner” while his company focuses on other projects in the Hudson Valley.

The battery factory operated from 1952 to 1979, producing nickel-cadmium batteries for the U.S. Army and commercial sales under a succession of owners.

Over much of that time, the factory discharged effluent into the Hudson River at the village dock through the Cold Spring sewer system. When the system shut down or was overloaded, waste containing cadmium, nickel and

(Continued on Page 7)



## A GROWING CHALLENGE

*Farms and Food in the Hudson Valley*

### Part 2: Land & Soil

By Chip Rowe

Most people who don't grow food rarely think about dirt unless it's under your nails or covering your car. But we can't talk about the future of Hudson Valley farming, and food, without going deep.

Fortunately, the Hudson Valley is a great place to farm. The soil was prepped over thousands of years by melting ice, and there is still plenty of nearby water. In parts of Orange County, the dirt is so rich you can be prosecuted for carrying it away.

In this, the second of our three-part series, we take a closer look at the foundation of Hudson Valley farming and two major forces that threaten it: climate change and sprawl.

First, the dirt. “It used to be,” writes William Bryant Logan in *Dirt: The Ecstatic Skin of the Earth*, “that a good farmer could tell a lot about his soil by rolling a lump of it around in his mouth.” Logan finally found a farmer who still does that to measure acidity, although he had been advised by his doctor to discontinue because “soil contains bad bugs as well as good ones, and the physician didn't want to have to sort them out in the farmer's gut.”

The lesson, regardless, is that dirt is more complex than you might suspect.

Pamela Doan provides a quick lesson in its structure — scientists spend their careers trying to understand soil, while giving it names that sound like they came from a wine list — while Cheeta Haysom examines the “black gold” of Orange County (she wrote a book about it).

Although we touched on the topic last fall in our series on climate change, Doan takes a closer look at its specific burdens on agriculture and how farmers are pushing back by keeping carbon in the soil. Another strategy is to experiment with new crops; Deb Lucke spent time with farmers who are growing hops with success because of the demand created by small breweries.

Finally, Jeff Simms looks at the effect of sprawl on our valuable farmland and efforts to preserve it for agricultural use through zoning laws and easements. Between 1992 and 2012, according to the American Farmland Trust, almost 31 million acres of farmland — nearly equivalent to the size of New York State — was lost to development at the same time that, by 2050, demands on agriculture to provide food, fiber and energy are already expected to be 50 to 70 percent higher than today. What happens if we lose another New York's worth of farmland by then?

(Continued on Page 12)



NO PLACE FOR HATE — It was standing-room-only for a unity vigil held at St. Mary's Episcopal Church in Cold Spring on Saturday (Nov. 10) to denounce anti-Semitism. See Page 9. Photo by Ross Corsair





# The Dirt on Dirt

By Pamela Doan

To understand our soils, you have to imagine ice in every direction.

Fifteen thousand years ago, the Hudson Valley was covered by a sheet of solid ice filled with boulders and sediment. The land below it was scraped to the bedrock. As the glacier melted, the water carried the sediment away. When the water flowed faster, the boulders moved with it.

That movement created one of the most complex geological regions in the world, with deposits of shale, slate, schist and limestone.

“We have wide soil diversity,” explains Dave Llewellyn, director of farm stewardship at Glynwood, a nonprofit based in

Philipstown whose mission is to ensure the Hudson Valley is a place defined by food, and where farming thrives. “The rich range of soil types across 12 counties contributes to the diversity in crops and livestock, which is also an enormous agricultural benefit, one which many regions don’t have.”

New York state is also at the leading edge of managing soil health. “Historically, managing soil health was purely chemistry — basically, fertilizers,” he says, until Cornell University created an assessment to measure soil health that included biological and physical indicators.

The goal is to make soil more resilient. “Adding organic matter makes it able to store more water, hold together and drain

better,” Llewellyn says. “It also supports the microbiology in the soil, which supports our plants.”

Jeff Walker, a geologist who teaches at Vassar College and has written extensively on the soils of Dutchess County, explains that you can tell if soil is good for farming by the topography. Valley lowlands that were created by glacial streams have sandy, silty and loamy (mixed clay, silt and sand) soils. Crops grow well in these soils. Hills and slopes are covered by ablation till, the larger pieces that were left as the glacier melted. These soils are better for grazing and pastures.

The basic character of soil can’t be altered. You can add lime to make it less acidic, but it will always revert to its original composition. Adding organic matter like compost or using cover crops to add nutrients helps the soil retain nutrients and water and improve soil condition, but it doesn’t create soil.

Scientists study soil in layers called horizons. The top 2 inches or so is the “O” horizon, referring to organic matter. Here you find roots and decomposing leaves. The next 10 inches or so is the “A” hori-

zon with nutrients such as nitrate, phosphorus and potassium that plants take up through their roots.

The “B” horizon, which goes down to about 30 inches, has minerals such as iron that leach down and aren’t used by plants. The “C” horizon, the next 4 feet, is the original sediment or rock layer that created the soil. Below that is bedrock.

Scientists map land with soil surveys that relate to the best uses for an area. There are 12 soil orders. Each is named to describe the soil’s texture and the first part is always local. For example, Walker explains, Hoosic-Wayland-Copake soil was formed by glacial outwash. Hoosic soils are only found

in New York, Massachusetts, New Jersey and New Hampshire.

“Hoosic are gravelly, Wayland are poorly drained silt loam and Copake are well-drained silt loam,” he says. “Wayland formed in swampy areas and Hoosic and Copake are formed by moving water.”

Soils in the Hudson Valley were formed 12,000 years ago and it takes 500 years to create 1 inch of topsoil. Walker describes the process: “Whenever it rains, water per-

“  
The rich range of soil types across 12 counties contributes to the diversity in crops and livestock, which is also an enormous agricultural benefit, one which many regions don’t have.”

## Black Gold

*Dirt so valuable it’s illegal to remove it*

By Cheetah Haysom

It’s not a tourist attraction — yet — but just over the Hudson River, in Orange County, lies 26,000 acres of the most fertile soil in the U.S.

Known as black dirt, it’s so valuable for farming that it has long been illegal under New York State law to remove it from the region. The soil spills into New Jersey, where there is no law, and deep canyons filled with murky water mark spots where it has been trucked away for gardens.

So many visitors ask if they can buy chernozem (Russian for “black dirt” — it’s also found in the Ukraine and other places around the world) that Chip Lain, a sod and soybean farmer, bought a franchise to legally mix a rich soil from a recipe of composts. He sells it by the cubic yard as Big Yellow Bag Black Garden Soil.

Like all the dirt in the Hudson Valley, the black variety was created by a glacier. As it melted, “islands” formed in the vast, murky swamps. Vegetation would grow, die and sink under the water, which shut off the air and prevented rapid decomposition. Thousands of generations of water plants, weeds and sedges, shrubs and trees, all gradually decomposing, created layers of organic matter. Dry periods would encourage growth, followed by flooding. This soil developed at a rate of about a foot every 500 years.

Thousands of years of flooding by the Wallkill River, which winds like a tangled brown ribbon through the plain, contributed to the continuous accumulation of organic matter. The area was known as the Drowned Lands until European settlers in the 1770s started the arduous, 100-year process of draining the swamp and turning it



John Glebocki shows off the prized black dirt found on his farm in Goshen.

Photo by Damon Jacoby

into arable farmland.

Compared with the typical topsoil depth of 2 to 8 inches in most of the U.S., the muck in the Black Dirt region is 10 to 30 feet deep. Most of the soil is 30 percent organic matter, and some of it as much as 90 percent. Elsewhere a farmer would be satisfied with 5 percent.

There is a downside. When the dirt is dry, it becomes so powdery that the wind can whip it into swirling dust funnels that can be highly combustible (farmworkers are advised not to smoke in the fields). To prevent that, most

farmers grow cover crops in the spring and fall.

More helpful to farmers, the black dirt retains moisture. As children of the region love to demonstrate, if you jump on the damp soil in the spring it shudders like a bowl of gelatin. It holds nine times its mass in water, which is great when there is a drought. The muck is so moist that it’s difficult to build on, which has dissuaded development. (The state considers the region to be wetlands, which also makes it difficult to propose condos.) Farmers’ homes and barns are built on higher ground.



colates slowly into the soil and atom by atom it’s moving around.”

We’re losing soil much faster than it’s formed. A 2006 study by Cornell researchers found that erosion rates in the U.S. are 10 times faster than replenishment rates. In some places around the world, the rate is 30 to 40 times faster.

“Erosion is a slow and insidious process,” David Pimentel, a professor of ecology at Cornell, said at the time of the 2006 study. “Yet the problem is being ignored because, who gets excited by dirt? It is one of those problems that nickels and dimes you to death: One rainstorm can wash away 1 millimeter of dirt.” That doesn’t sound like a lot, but on a 2.5-acre farm, it amounts to 13 tons of topsoil.

In the Hudson Valley, where climate change has brought heavier downpours, soil loss is a real concern. In the heavy rains our region has recently experienced, inches of topsoil can be lost in a season which could take hundreds of years to replenish.

For farmers, one simple method to prevent erosion is keeping fields planted year-round and minimizing digging and other disturbances to the soil. This has the added benefit of keeping carbon from being released into the atmosphere, which contributes to global warming. (See Page 16.)



# A GROWING CHALLENGE

Farms and Food in the Hudson Valley



Laura Parker

One of the strengths of agriculture in the Hudson Valley is the diversity of its soil. Reading through dirt reports prepared by the U.S. Department of Agriculture can feel like browsing a wine list.

Laura Parker, an artist based in San Francisco, had that same thought in 2006, when she filled wine glasses with dirt for an installation called *Taste of Place* and invited people to “sample” them. (Five years earlier, she had asked patrons at the public library to write down their memories of the land. That piece was called “How far are you from the farm? A mile or a generation?”).

Here we share a connoisseur’s guide to just a few of the soils of Putnam, Dutchess and Orange counties:

VARIETY	PUTNAM	DUTCHESS	ORANGE
Alden Extremely Stony			●
Bath-Nassau Channery Silt Loam			●
Catden Muck	●	●	●
Charlton Fine Sandy Loam	●	●	●
Charlton Loam	●	●	
Charlton-Chatfield Complex	●	●	
Chatfield-Hollis-Rock	●	●	
Copake Channery Silt Loam		●	
Dutchess Silt Loam		●	
Fredon Loam			●
Fredon Silt Loam	●	●	
Georgia Silt Loam		●	
Halsey Mucky Silt Loam		●	
Hinkley Loamy Sand	●		
Hollis-Chatfield-Rock		●	
Hoosic Gravelly Loam		●	
Ipswich Mucky Peat	●		
Knickerbocker Fine Sandy Loam	●	●	
Leicester Loam	●		
Livingston Silt Clay Loam		●	
Lordstown Channery Silt Loam			●
Massena Silt Loam		●	
Muskego Muck			●
Nassau Channery Silt Loam			●
Nassau-Rock		●	
Natchaug Muck	●	●	●
Oakville Loamy Fine Sand			●
Otisville Gravelly Sandy Loam			●
Pittstown Silt Loam		●	
Raynham Silt Loam	●	●	●
Rhinebeck Silt Loam			●
Ridgebury Complex	●		
Riverhead Sandy Loam			●
Scarboro Mucky Fine Sandy Loam			●
Suncook Sandy Loam			●
Sun Silt Loam		●	
Taconic-Macomber-Rock		●	



Rick Minkus is an onion farmer in New Hampton, Orange County. The high sulfur content of the black dirt makes them among the most pungent on the market.

Photo by Damon Jacoby





# Battling Sprawl

*Groups work to save an overlooked resource — farmland*

By Jeff Simms

While sprawl has claimed millions of acres of farmland across the country, the tide may have turned — for now — in the Hudson Valley.

Rebecca E.C. Thornton, president of the Dutchess Land Conservancy, reports a “strong interest” in farmland preservation but also warns that the risk of losing land will never go away. Should real estate prices fall low enough in a downturn, there is always the chance that someone with the right funding will stockpile land for the next building boom.

“We’ve got Albany to the north and New York City to the south,” she said. “This is always going to be a high-pressure corridor for development.”

About 5,000 farms have been lost in New York state to real estate and other development since the early 1980s, but the number of acres devoted to agriculture in the Hudson Valley has stabilized, according to county data and federal numbers from 2012, the most recent figures available.

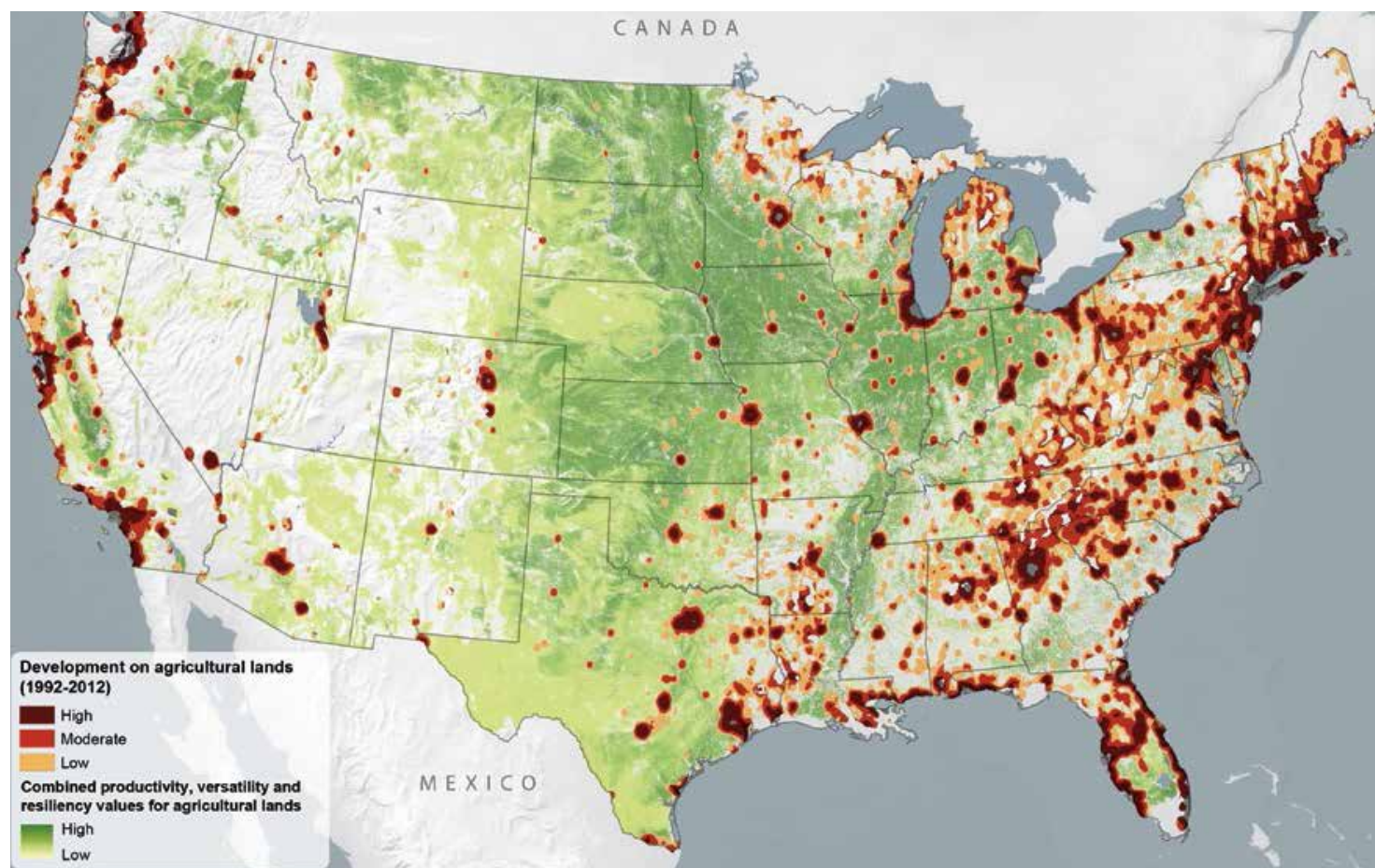
But that may be deceiving. Land prices aren’t great, either, noted Maire Ullrich, the Cooperative Extension agriculture program leader for Orange County, so a farmer may stop milk production but still make hay or rent the land to a neighbor. Although the land is still agricultural, it doesn’t represent its most profitable use. And many farmers are in debt, she said.

“If your loans are greater than what your acreage can be sold for, you’re under water,” said Ullrich. “You can’t just owe \$300,000 or \$500,000 and get another job. You’ll never pay that off.”

Dutchess County has nearly 200,000 acres of farmland, which is about 38 percent of its total area. Orange County has more than 88,000 and Putnam County has about 6,000. Both Orange and Putnam’s acreages were up modestly from 2007, when the previous farming census occurred.

**“We have been too wasteful too long in this country — indeed, over most of the world. We had so much good land in the beginning we thought the supply was limitless and inexhaustible.”**

— Hugh Hammond Bennett, “the father of soil conservation,” 1943



This map by the American Farmland Trust shows where farmland was lost to development from 1992 to 2012. The areas where the most land was lost are dark brown and red. The nation's most productive, resilient and versatile farmland is shown in dark green.

Those figures stand in contrast to national trends, which showed a 1 million-acre loss from 2016 to 2017. In a report issued in May, *Farms Under Threat*, the American Farmland Trust calculated that between 1992 and 2012, nearly 31 million acres of agricultural land (including nearby woodlands) was lost to development, about the equivalent of losing most of New York. It includes 11 million acres of the land best suited for intensive food and crop production. More than 60 percent of all development took place on farmland, it found.

“It is time for the U.S. to recognize the strategic value of our agricultural land and step up our efforts to protect it,” the report concluded, recommending the federal government dramatically increase funding for conservation easements.

Jennifer Fimbel, an educator with the Cornell Cooperative Extension of Dutchess County, said the Hudson Valley has already “gone through a lot” of the pains of losing farmland to shopping centers and housing developments. In recent years, she said, “there’s been a real push in town and county planning to say, ‘What’s going to affect farming first?’”

Fimbel is one of the co-authors of the *State of Agriculture in Dutchess County*, a report issued in early 2017 that showed the county’s agricultural districts have grown by 19 percent over the last eight years, with much of that growth occurring in the northeast quadrant of the county. Over



John Gill, a third-generation farmer in Ulster County, as a preservation measure in 2014 transferred ownership of his 1,200-acre farm to the NoVo Foundation, which is led by Peter and Jennifer Buffett, the son and daughter-in-law of investor and philanthropist Warren Buffett. It is now known as Hudson Valley Farm Hub.

Photo by Noel Camardo

the past 15 years, Dutchess farms have increased sales by 58 percent, it found.

Adopted in 1971, the state’s agricultural district initiative authorized the creation of county programs to protect and promote farmland. In 1992, the state also created a Farmland Protection Program that, coupled with the ag districts, helps provide state and local partners for conservation organizations to protect farmland.

That’s often accomplished through the purchase of development rights from property owners, said Thornton. The landowner receives payment for a parcel in exchange for agreeing never to develop it, even if the land is sold. With the money, a farmer can stay on his or her land and use the funds for “dad to retire, a son to take over, to buy adjoining land or to improve infrastructure on the farm,” she said.

Through such agreements, the Dutchess Land Conservancy has protected more than

3,700 acres of farmland. Scenic Hudson, one of the largest land trusts in the region, has preserved 13,000 acres of agricultural land in the Hudson Valley, as well.

“Success breeds success,” said Thornton. “More farmers are coming to the table,” although “there’s never enough money” to meet all the demand.

Orange County appears to be more at risk than Dutchess because of the network of transportation corridors (Interstates 84 and 87 and Route 17) that bisect the county.

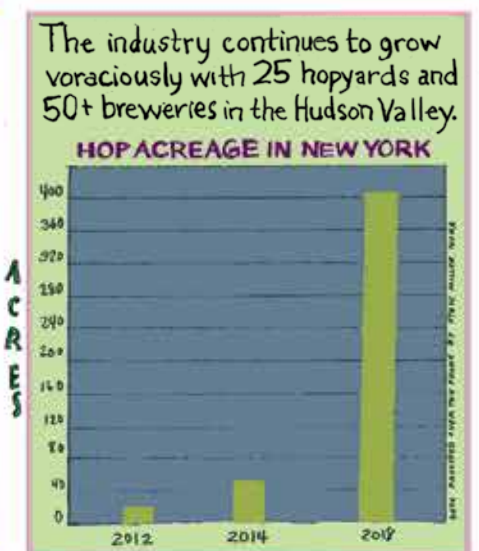
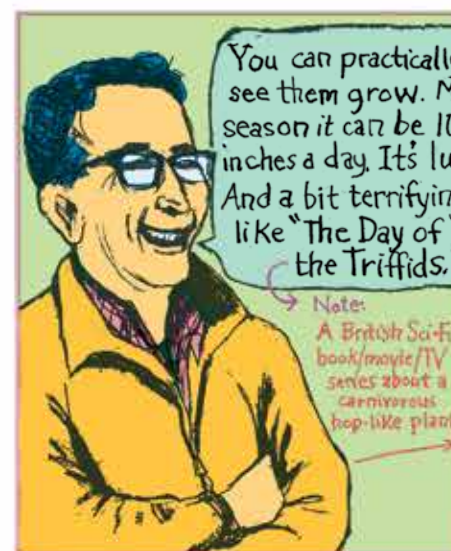
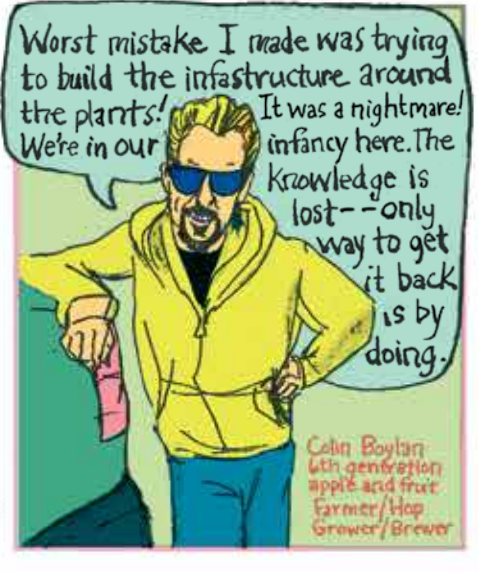
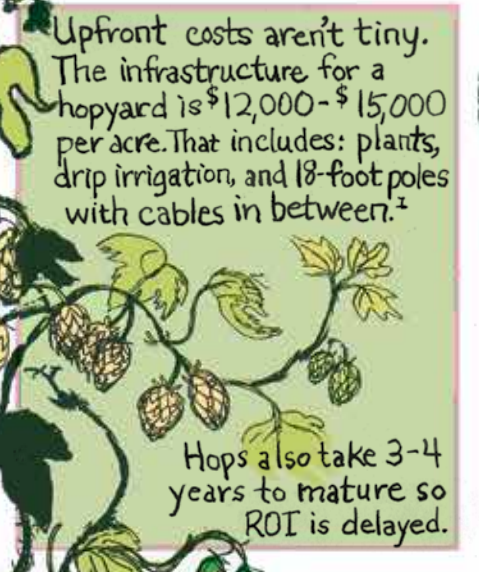
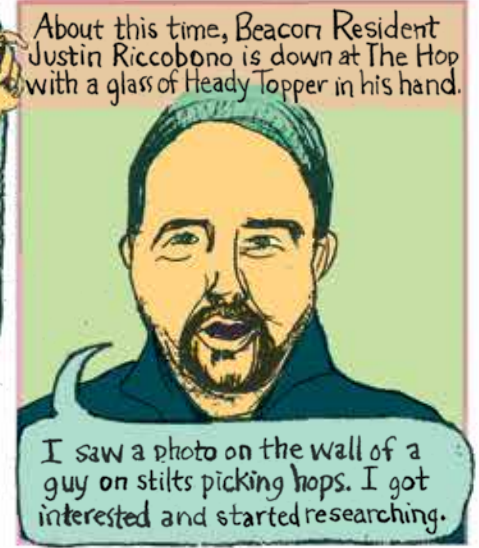
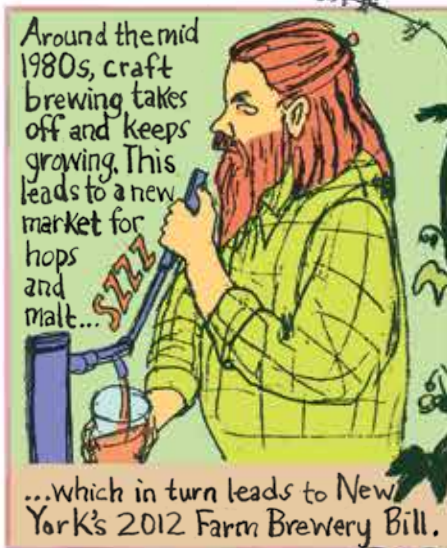
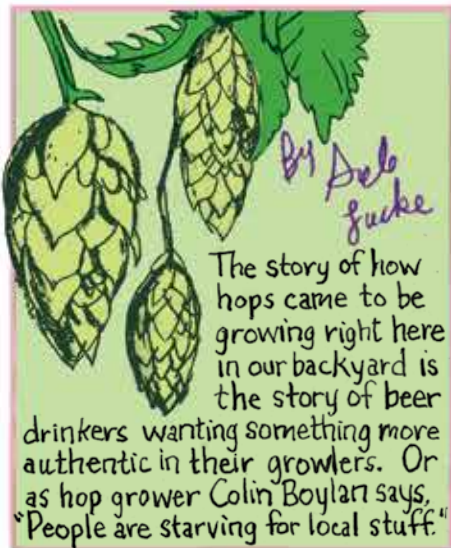
“One of the most pressing threats to farmland here is conversion to industrial uses,” says Matt Decker, director of conservation and stewardship for the Orange County Land Trust. “There’s a very high demand for industrial warehouse space” for companies like Amazon and medical suppliers.

“Those highways tend to be in flat areas and river valleys,” Decker said, which also happens to be “some of the best farmland.”



## UP-AND-COMING HUDSON VALLEY CROPS

## HOPS: A SYMBIOTIC RELATIONSHIP BETWEEN BREWER, FARMER, AND LEGISLATOR.





# Could Soil Save Us?

*Farmers adapt to climate change, and push back*

By Pamela Doan

As it turns out, dirt and trees may save us. According to a new study, agriculture and reforestation have the potential to offset and reduce greenhouse gas emissions that contribute to climate change at rates that could be the equivalent of taking every car off the road.

Storing more carbon in the soil is the key. The good news is that it can also help farmers become more profitable by increasing yields and reducing the risk of damage and losses related to global warming.

In the Hudson Valley, average temperatures have increased 2 degrees in the past 30 years and winters are warmer by 5 degrees. It's part of a crisis of warming oceans and melting glaciers that has subjected the world to more frequent and intense storms, heavy downpours, and erratic and unseasonal temperatures.

This season was a good example of the predicament facing local growers: Hot, dry conditions early in the season, followed by some of the rainiest months from July to September. Quick, irrigate! Quick, drain your fields!

For young farmers such as Sarah Ficken, 29, and her husband, Chris, 31, climate change was one reason they founded New Moon Farms in upstate Munnsville in 2012, where they have a herd of 68 Jersey cows and run a Community Supported Agriculture (CSA) program with 15 to 20 shares.

The couple said they bought land in Madison County because areas farther south will be too hot in 50 years. Their barns take advantage of prevailing winds to cool the inside and their hilltop location helps with drainage after severe storms.



Hannah Ficken, 2, helping to water animals with her father, Chris.

Photo by Sarah Ficken

And, equally important, they tend to their soil and livestock in a way that reduces the carbon released into the atmosphere.

It's called "sequestering carbon," and it's made headlines. Basically, it's the process where plants take in the gas and draw it through their roots into the soil, where it's held in place by organic matter. When soil is plowed or disturbed by digging, the carbon is released as gas. Farmers who don't till the soil during planting and harvest leave the soil, and carbon intact. The Fickens place composted manure on top of the soil to trap more carbon.

After a barn fire, which Sarah described as the "worst best thing that could have happened," they rebuilt to make better use of a most important resource: cow poop.

Their cows live in compost-bedded pack barns. There are no stalls. Instead of having to continually clean out manure, the floor is

covered with 1 to 2 feet of bedding. It needs to be aerated and added to daily but otherwise stays in place until a biannual clean out.

"It mimics pasture, keeps them clean, and we can store all of our manure to use when we need it," Sarah explained.

For example, they use the manure on their own fields after a hay crop is harvested.

As the couple have improved their soil over the past five years, they've seen increased yields. "We prevent erosion, can get crops off the fields when we need to, and we've noticed significantly less runoff from major storms," Sarah said. They use cover crops to keep their fields planted year-round and to add nutrients.

A number of projects underway in the Hudson Valley demonstrate the potential of soil as a carbon sink. Regen Network, a global contracting platform, proposes using blockchain technology to store data

from farms that are using regenerative agriculture to improve carbon retention and soil health. Glynwood is participating on the steering committee and may participate with Regen's proposed incentive program to use cryptocurrency for investors to fund farms that meet certain protocols. Hudson Carbon is a research and education project based at Stone House Farms in Hudson that measures the impact of cover crops on soil carbon, among other things.

The state Legislature is taking note, too. Didi Barrett, who represents parts of Dutchess and Columbia in the state Assembly, spearheaded the Carbon Farm Pilot Project for the Soil and Water Conversation Districts in both counties to undertake a two-year study of the impact of new approaches to soil.

Climate resilience for Hudson Valley farmers means different things for each farm. Sarah Ficken would like to further minimize their carbon footprint with solar or geothermal energy. But first, they need to solve their water dilemma. Their well ran dry early in the season and they need to be able to store water on the property. They have a lot of thirsty cows

“  
Farming and reforestation could reduce greenhouse gases at rates equivalent to taking every car off the road.”



Part 1 | Nov. 2  
Farmers  
Young & Old

Part 2 | Nov. 16  
Land & Soil

Part 3 | Nov. 30  
Are Farms in  
Our Future?

Farmers in the Hudson Valley, and those who work the fields, are getting older, without heirs. Who will follow? A generation of young farmers may fill the gap, including young women, people of color and veterans. See [highlandscurrent.org](http://highlandscurrent.org).

Why is the Hudson Valley such a great place to farm? In large part, it's the superior dirt, but the forces of climate change and urban sprawl threaten both the landscape and the industry. Scientists and planners are pushing back.

In 2004, an American Farmland Trust report concluded that major changes were needed to save agriculture in the Hudson Valley. Fifteen years later, how are we doing? The federal government spends billions on farming subsidies, but does it help the Hudson Valley? The answer to what ails farmers here is likely not green markets, which are popular but may be overdone. Many farmers are instead turning to new (or old) crops, such as hops and grains.

# A GROWING CHALLENGE



# The HIGHLANDS Current



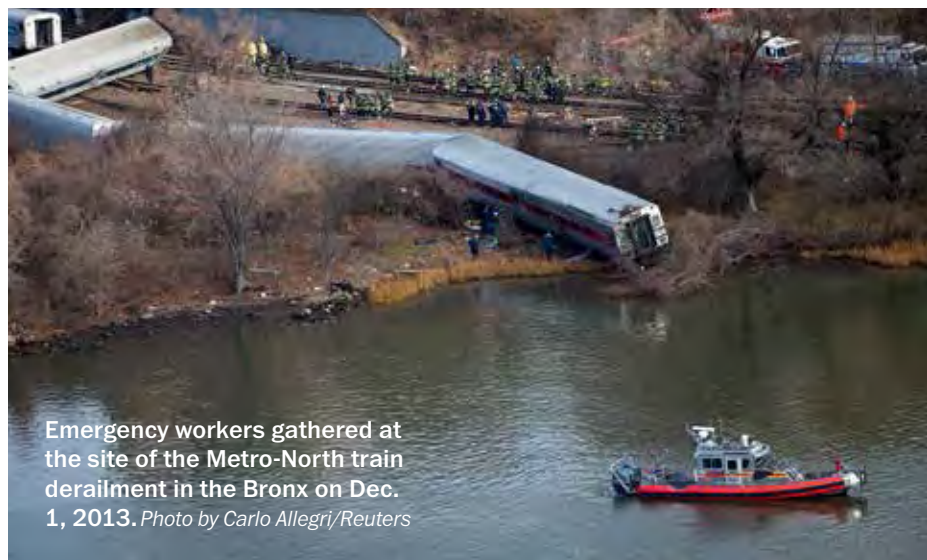
Oh, Romeo  
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NOVEMBER 30, 2018

161 MAIN ST., COLD SPRING, N.Y. | [highlandscurrent.org](http://highlandscurrent.org)

## Waiting for Metro-North

*Five years after deadly derailment, safety system incomplete*



Emergency workers gathered at the site of the Metro-North train derailment in the Bronx on Dec. 1, 2013. Photo by Carlo Allegri/Reuters

By Michael Turton

Five years ago this weekend, on Dec. 1, 2013, a southbound Metro-North train derailed at Spuyten Duyvil in the Bronx, killing four passengers, including Jim Lovell of Cold Spring and Donna Smith of Newburgh.

Lovell, 58, an NBC audio technician, was on the early morning Sunday train to help set up the Rockefeller Center Christmas tree. Smith, 54, was on her way to sing in a performance of Handel's *Messiah* at Lincoln Center.

Dozens of other passengers were injured, some critically. The crash, which occurred at 7:19 a.m. after the engineer

fell asleep and hit the 30-mph curve going 82 mph, led to calls for the Metropolitan Transportation Authority to speed up installation of a system called Positive Train Control (PTC) that would have applied the brakes automatically.

The Railroad Safety Act, passed by Congress in 2008 in response to a train collision in California that killed 25 people, required most rail lines in the U.S. to install PTC by 2015, a deadline later extended to the end of this year.

Lovell's widow, Nancy Montgomery, a member of the Philipstown Town Board who in January will become a Putnam County legislator, was among those who

*(Continued on page 6)*

## Beacon Greenway To Open New Segments

*Continuous trail planned through city*

By Jeff Simms

Beacon officials will hold a ribbon-cutting at 1 p.m. on Sunday, Dec. 2, to open three segments of the Fishkill Creek Greenway and Heritage Trail, starting behind the 1 East Main development.

The new segments continue along Churchill Street and Creek Drive and will mark about the halfway point of completion of the city-sponsored green-



Thomas Wright  
along the trail

Photo by J. Simms

way project, which since 2005 has quietly worked its way from the Metro-North station toward Beacon's east side. When complete, it will run for 4.7 miles, much of it along Fishkill Creek.

"The concept from the beginning was a continuous trail, basically from the train station to the town of Fishkill," said Thomas Wright, who has chaired Bea-

*(Continued on page 24)*



## A GROWING CHALLENGE

*Farms and Food in the Hudson Valley*

### Part 3: Are Farms in Our Future?

By Chip Rowe

When the end of our industrial civilization comes, as it has for the Hudson Valley residents of Union Grove, New York, in James Howard Kunstler's dystopian novel, *World Made by Hand*, everyone will be a farmer. With no oil, you'll need to work your patch of land with horses and plows, but, on the bright side, the Hudson River will again be teeming with fish. (Kunstler has called the world he created "an enlightened 19th century.")

Despite the two recently released dystopian reports on climate change, we're nowhere near that scenario — are we? Regardless, it's always comforting to have friends who are farmers.

In this, the third and final part of our series on the uncertain future of farming in the Hudson Valley, we will examine the progress we've made in preserving and growing our farms in recent decades and examine a few of the driving forces of agricultural health: the federal farm bill, up-and-coming crops such as grains, and strategies to help more farmers earn a living wage.

Many people in the Hudson Valley and beyond have given much useful thought to farming, including what, how and where our food is produced. Some argue that our problem is reflected by the fact that Congress passes a farm bill every five years; better, they say, we have a 50-year farm bill. That would force us to look farther down the dirt road at our prospects as

food production becomes more challenging for the many reasons outlined in the first two parts of our series.

"The problem of feeding the world should be addressed, first of all, by calculating the waste — from farmland and topsoil to thrown-away food — in the world's food systems," the farmer and essayist Wendell Berry recently told *The New York Times*. "The people, fairly numerous and highly credentialed, who argue that only industrial agriculture as we now have it can feed the world are arguing in fact that we can feed the world only by an agriculture that destroys both farmland and farmers. There is a point, obviously, beyond which this kind of agriculture will not be able to feed much of anybody."

In 2004, the American Farmland Trust organized a report on Hudson Valley agriculture. "Some people worry that farming may disappear from the region during our lifetimes," it read. "We stand at a crossroads. Will we protect our farms and strengthen our agricultural industry?" When we asked Todd Erling, executive director of the Hudson Valley AgriBusiness Development Corp., this week to take a look at the report, he said it got him thinking. "We need Crossroads 2.0," he said.

We welcome comments on this or the previous two parts of our series, which can be found at [highlandscurrent.org](http://highlandscurrent.org). Did we miss anything? Let us know at [editor@highlandscurrent.org](mailto:editor@highlandscurrent.org).

*(Continued on Page 10)*



# Growing Cash

What can be done to make farms profitable?

By Cheetah Haysom

Without stable, steady and profitable markets, the risks associated with farming, especially in the face of climate change, could make the Hudson Valley’s 900,000 acres of farmland the riskiest casino in the state.

According to one estimate, after taxes farmers take home about six cents on every dollar spent on the food they grow. With such low margins, profitable markets are crucial for the survival of farming.

Some analysts say there is plenty of room for growth. New Venture Advisors, a food business consulting firm based in Chicago, calculates the Hudson Valley could produce and sell \$1 billion more in food than it does now.

### Farmers markets

Farmers markets, for more than a decade the staple outlet to sell produce in our region, have seen a drop in customers and sales.

No one is sure why, but the market may just be tapped out. Over the past two decades, the number of markets in the state has grown from 235 to more than 700 at the same time that fewer customers are using them. Sales are down throughout the region, says Diane Eggert, executive director of the Farmers Market Federation of New York.

The federation, along with its counterparts in Vermont, Massachusetts and Maryland, recently received a federal grant to study the causes for the decline. A team from Cornell University is helping conduct the research.

Liz Higgins, a specialist in business management at the Hudson Valley Lab of the Cornell Cooperative Extension in Highland, noted that farmers markets have suffered because of changes in the larger food industry.

Among those changes is the growth of ready-made meal kits, prepared foods at supermarkets and Amazon’s offer of free two-hour delivery through Whole Foods. In an effort to attract customers, some farmers markets in the Hudson Valley have started opening year-round, changed the day of the week they are open, or added more products.

### The state of CSAs

Liz Corio, vice president of development and administration at Glynwood, a nonprofit based in Cold Spring that promotes food and farming in the Hudson Valley, says there is a growing focus on how to widen the appeal of Community Supported Agriculture (CSA), in which consumers buy directly from farm-



ers by paying up front for a season’s worth of food. This widely used program helps farmers, especially cash-squeezed farmers (and, particularly, beginning farmers), pay the high costs of starting a growing season. But finding CSA customers is getting harder and the market might also be saturated. Some farms doing CSA this summer reported being undersubscribed. Megan Larmer, director of regional food programs at Glynwood, says the CSA model, which originated in Japan and was introduced to the U.S. in Wisconsin in the 1970s, needs to adapt, and customers need to be made aware of the range of CSAs available, including meat, dairy, vegetables, flowers and half shares for smaller households. One innovation similar to the CSA model is Field Goods, a distribution company based in Athens, New York, that delivers food collected from at least 60 small farms (ev-

(Continued on Page 14)

## PROGRESS REPORT

In 2004, an American Farmland Trust report concluded that major changes were needed to save agriculture in the Hudson Valley. Fifteen years later, how are we doing? We asked David Haight, the trust’s New York state director, and Todd Erling, executive director of the Hudson Valley AgriBusiness Development Corp. (HVADC), to assess some of the report’s recommendations.

ASSIGNMENT	GRADE	
Create a private or quasi-public entity such as a Community Development Corporation with an annual operating budget of \$250,000 to \$500,000.	A	The report led to the creation in 2007 of the HVADC, which promotes agricultural entrepreneurship in the Hudson Valley, has an operating budget of about \$625,000 and assists 45 to 65 agribusinesses each year.
Create an agribusiness retention, expansion and attraction plan.	A	Food and agriculture had not always been part of regional planning, but since the report, HVADC has worked with the Hudson Valley Regional Council (which covers seven counties, including Dutchess and Putnam) to incorporate agricultural data, statistics and issues into its Comprehensive Economic Development Strategy. That, in turn, led to the inclusion of food and agriculture in the state’s regional development plans and food being identified as a priority in the Mid-Hudson region. “That a huge change from where we were in 2004,” says Haight.
Enhance transition programming for new farmers, including mentoring, specialized skills training, estate planning and farm management.	B+	Haight noted that the American Farmland Trust and 14 other groups partnered to create the Hudson Valley Farmlink Network, which plays matchmaker between farmers and landowners. “We’ve helped 140 farmers find land in the Hudson Valley over the past four years,” he said. “Some are getting into farming for the first time, but others are established farm families looking to expand.” In October, American Farmland Trust partnered with New York to launch a similar statewide program called Farmland for a New Generation New York. “There’s still more to do but there’s been a lot of attention and movement with this in the last 14 years,” Haight said.
Increase funding from government and private sources to \$20 million per year and protect 100,000 acres of farmland within 10 years.	B	There is much more public funding available now than in 2004 to purchase permanent conservation easements to prevent development on farmland, Haight notes; this year the state has set aside \$68 million, the highest level ever. (Private groups continue their work; Scenic Hudson has facilitated easements on 13,000 acres since 1992.) In 2016 the state spent \$20 million on easements on 5,600 acres in the Hudson Valley. However, there has been far less done on the local level, Haight said, with the exception of “shining stars” such as Ulster County, Warwick in Orange County and Red Hook in Dutchess. A 2007 law allows municipal governments in Westchester and Putnam to create, with voter approval, land preservation accounts funded by a real-estate transfer tax that could pay for easements. But “the economy tanked and it never took off,” he said.
Create a critical-farms fund and a more effective agricultural “angel” network to provide investment capital.	B	“The report didn’t anticipate the emergence of socially conscious farmland investors (local food is cool now) and entities such as Dirt Capital and Northwest Farm Access,” said Haight. “And some private entities have emerged that offer financing for leasing with the option to buy.” But there is still far more that could be done, he said. Erling noted that the state does have an agriculture loan fund and this year named HVADC as a lender.
Create a marketing campaign to bridge information gaps between farmers and the general community.	B-	Erling pointed to initiatives such as Hudson Valley Bounty, an online directory to help consumers find local food; FeedHV, which helps farms, caterers and restaurants donate surplus food to food pantries; and Taste NY stores, which are stocked with New York food products and originated in Lagrangeville.
Establish farm viability grants that promote innovation and entrepreneurship.	C+	While there is a statewide program called the New York Farm Viability Institute, “we could do better with something specific to the Hudson Valley,” Haight said.
Enhance workforce conditions with measures that include H2A visa reform and better housing options.	D	“This one has been a significant challenge,” said Haight. “There still isn’t a good legal way to have a stable workforce when so many come from outside the country. And the H2A visa program still needs reform, as we said in 2004. It’s not a long-term solution. Housing is still a problem for workers 14 years later but also for farmers, particularly the farther you go south in the Hudson Valley. If you’re an early-stage farmer and you find land but can’t afford to live near it, that’s a problem.”



# Funding Options

*The 2014 Farm Bill was great for the Hudson Valley. How about 2019?*

By Brian PJ Cronin

When Sean Patrick Maloney was elected to the House of Representatives in 2012 to represent New York's 18th District, which includes the Highlands, one of his immediate goals was to be appointed to the Committee on Agriculture, which he was.

"It's critically important to the district," he said, especially its work on the Farm Bill, an omnibus piece of legislature written every five years to outline the nation's agricultural, food and nutrition policies. "We have a couple of thousand family farms in my part of the Hudson Valley. It's more than \$100 million to our local economy. It's critical to our way of life, to our way of interacting with the land; it's essential to the preservation of open spaces, and to the terrific balance we have in the Hudson Valley between a strong economy and a wonderful quality of life."

Maloney considers the Farm Bill that passed in 2014 the best ever for the Hudson Valley. That value, and how the bill has changed, became clearer on Sept. 30, when it expired without a new bill in place. Its expiration left a lot of its programs unfunded, including many that were introduced in 2014 to help the Hudson Valley and other regions driven by smaller, family-run farms, with a strong farming culture and an interest in sustainable agriculture.

The bill also provides for various subsidies to farmers to help stabilize their income when crop prices or yields fall. They average about \$4,700 annually to farmers in Putnam County, \$6,100 in Dutchess and \$11,000 in Orange. (The state average is \$8,000.) Nationwide, the federal government spends about \$20 billion on subsidies, and about 40 percent of farmers receive them. The largest payouts go to producers

of corn, soybeans, wheat, cotton and rice.

One key program funded by the 2014 bill was designed to bring in new farmers to succeed those who are "aging out" (see Part 1). The Beginning Farmers and Ranchers Development Program trains new farmers and helps them buy and develop their own acreage.

"Many of its initiatives are designed for low resource or historically underserved farmers: military veterans, farmers of color and indigenous farmers," explained Jessica Manly, a representative for the National Young Farmers Coalition, an organization based in Hudson. With federal funding, the coalition created a Farmland Affordability Calculator to help farmers figure out how much capital they need. The same federal program provided Glynwood in Cold Spring with \$400,000 to train farmers.

"This was an area of real bipartisanship," said Maloney about the program. "And it should be again."

Glynwood also received funding from the 2014 Farm Bill that it has used to instruct livestock farmers on how to grow grasses more resilient to climate change. An additional \$249,000 in federal funding allowed Glynwood to create the Hudson Valley CSA Coalition to promote Community Supported Agriculture. Liz Corio, vice president of development and administration at Glynwood, said that so far the coalition seems to be working, as farmers taking part are reporting increases in membership.

"We hope that ultimately, like our work with cider, that it will be a self-sustaining and self-organized effort that really adds value for these farmers," she said.

The CSA Coalition is working on connecting with potential customers who historically have not had access to CSAs, either in terms of location or affordability. Corio said that means continuing to make shares more affordable for low-income families through



discounts or the Supplemental Nutrition Assistance Program (SNAP), commonly known as food stamps.

That puts the program at odds with the proposed 2019 Farm Bill under consideration in the House of Representatives. The SNAP Program, which makes up the majority of the Farm Bill funding, is once again a target of partisan bickering. A small group of House Republicans is pushing for stricter work requirements for recipients of SNAP benefits. The Senate version of the bill, which has enough bipartisan support to pass, has no new requirements. This roadblock has proved frustrating to many in Congress, including Maloney.

"The last Farm Bill saved \$100 billion, and most of that is because of SNAP," he argued. "Those nutrition programs have been saving

us money. It is one of the most efficient programs in the federal government, it helps people, and it has a magnifying effect on economic activity in general, particularly when food-insecure families can buy produce locally from farms like the ones we have here in the Hudson Valley."

With the Farm Bill delayed, some are wondering if it's time to think in broader terms with a "50-year" farm bill, rather than 5-year

legislation, to shift the focus from short-term industrial agriculture toward longer-term considerations such as soil health, reducing toxins, sequestering carbon and boosting rural farm communities.

At Glynwood, Corio said there would be definite benefits to that approach. "When you're talking about natural systems and the big fixes to wicked problems that affect our food system, you can't talk about them in five-year sections," she said.

Maloney said he wouldn't rule out longer-term plans being part of future farm bills, and many of his contributions to the 2014 Farm Bill, including increased support for conservation easements, looked beyond 2019. But he suggested that a more prudent course of action would be to authorize longer-term projects as their own bills, so they aren't at risk of losing funding every five years depending on the direction of the political winds.

That approach would allow the Farm Bill to continue to be revised in five-year increments to address changes in agricultural markets. "For example, dairy farmers were not well served in the 2014 Farm Bill, and we need to make changes to the margin pricing program that supports them," said



## GREEN TAPE

By Cheetah Haysom

Many people are unaware of the number of rules and regulations required of farmers, including those in the Hudson Valley. According to one study, among the most regulated are apple farmers, who must comply with an estimated 12,000 restrictions and rules that govern orchards, up from about 9,500 a decade ago. Tree fruit farmers were recently issued rules on the proper angling of ladders.

Regulations by the federal Environmental Protection Agency are among the most extensive, covering livestock, crop production (including greenhouses), forestry, provision of drinking water, facilities, fuel, equipment, chemicals, air emission and waste. Inspections for compliance are regular, often at peak harvest season.

New York State has many of the same regulations, just more stringent. Its laws regulating farm labor — their work conditions, pay, living facilities and health — are among the strictest in the country.

Farmers say they understand that food safety is vital to their livelihood. But the time and expense involved with compliance with so many rules can be prohibitive. "The number of regulations goes up, but the cost of complying never goes down," says Maire Ullrich, the agriculture program leader at the Cornell Cooperative Extension office in Orange County. It would help the agricultural community tremendously, she says, if the system could be simplified.

Maloney. "They want us to pay attention in intervals if something's not working."

With Democrats about to retake the House, the 2019 Farm Bill has been moving closer to completion in the current "lame duck" session, although SNAP benefits remain a sticking point. Even if Congress can't iron out the particulars over the next few weeks, it could re-authorize the 2014 bill for another year. That's not without precedent: The 2014 bill began as the 2013 Farm Bill. Considering how well the 2014 bill worked out for the Hudson Valley, Maloney admitted a delay might not be the worst thing in the world.

"But it's not a substitute for doing our jobs," he said. "And it's not a substitute for having a good bill when that process is finally complete."



Green beans at Vera's in Philipstown



Carrots at the Cold Spring Farmers' Market

Photos by Christine Ashburn

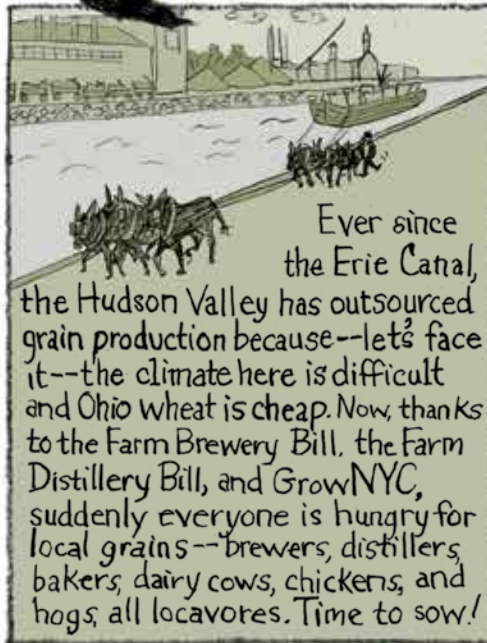


# REPORTS FROM THE WHEAT FIELD, THE RYE FIELD, THE

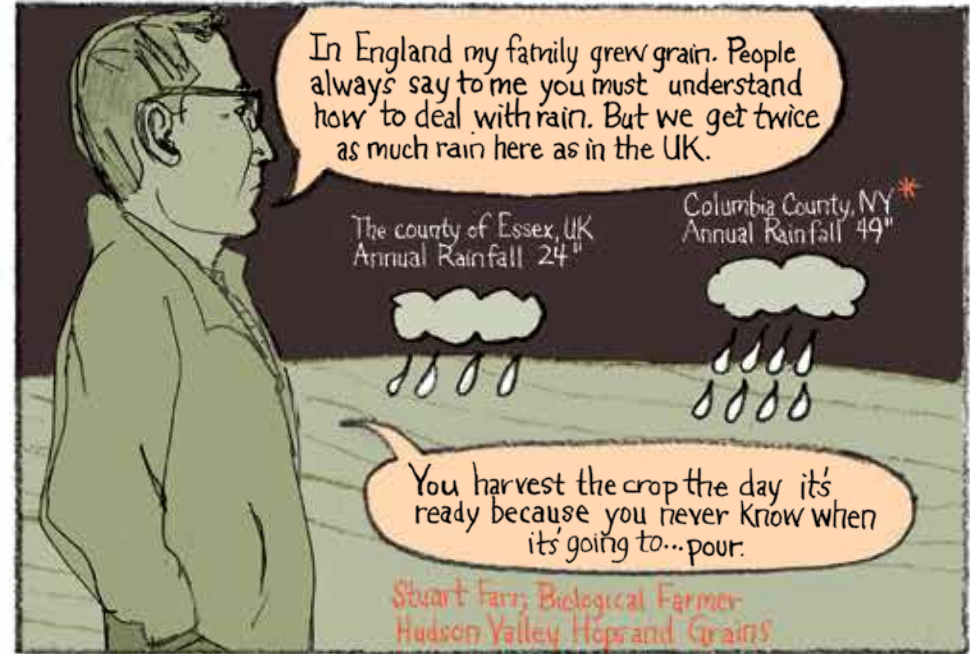
As part of our series on preserving farms, I set out to talk to farmers and other members of the grain food chain about their recent attempts to grow grains in New York.

By *Arlo Gucke*

Am I in the right field?



Ever since the Erie Canal, the Hudson Valley has outsourced grain production because--let's face it--the climate here is difficult and Ohio wheat is cheap. Now, thanks to the Farm Brewery Bill, the Farm Distillery Bill, and GrowNYC, suddenly everyone is hungry for local grains--brewers, distillers, bakers, dairy cows, chickens, and hogs, all locavores. Time to sow!



In England my family grew grain. People always say to me you must understand how to deal with rain. But we get twice as much rain here as in the UK.

The county of Essex, UK  
Annual Rainfall 24"

Columbia County, NY  
Annual Rainfall 49"



You harvest the crop the day it's ready because you never know when it's going to...pour.

Stuart Farm, Biological Farmer  
Hudson Valley Hop and Grains

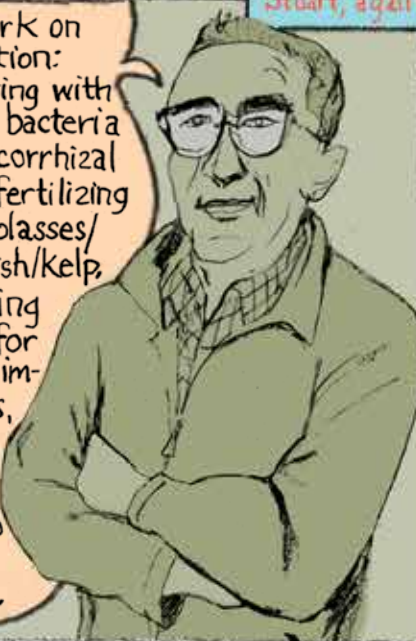
A wet environment can mean a great yield, but increases the risk of Fusarium, the fungus that causes the aptly named Vomitoxin.

Regulations mandate less than 1 part per million for human consumption and 5-10 ppm for livestock feed--pigs are the least partial to Vomitoxin.

Meeting these standards is hard, even harder for organic farmers who do not use fungicides.

We work on prevention: inoculating with specific bacteria and mycorrhizal fungi, fertilizing with molasses/liquid fish/kelp, analyzing plants for mineral imbalances, and using cover crops to rebuild the soil.

Stuart, again



With stone-milled flour you get the flavor of the grain. With roller-milled flour you get the carbs and protein, which have very little taste. The flavor is in the wheat germ, bran, and amino acids.

Grains taste of a place. The same seed in different ground will produce a different flavor.

We make fresh flours. Small batch. No flour is good after 3 months.

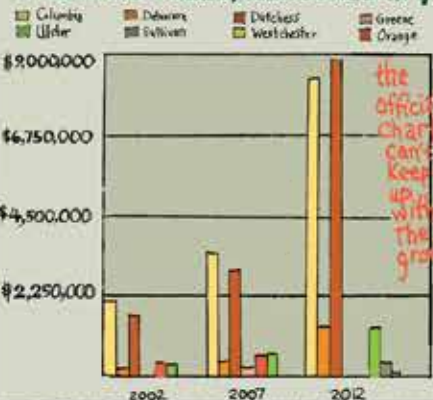
Don Lewis  
Farmer/Baker/Miller  
Wild Horse Farm, Community Grain Project



Don continues--

Eataly USA is my largest customer. On their behalf, I contract with 14 different growers--50+ acres locally and 500 statewide.

NY GRAINS SALES, MEASURED IN \$



Originally, I was interested in grain as a cover crop. With vegetables, I rotate fields every 2-3 years. If the cover crop is plowed under I get no income.



Ron Migliorelli  
3rd generation Farmer  
Migliorelli Farms

I started with wheat--was unsuccessful--too much Vomitoxin. I tried rye--sold that to a distillery.

I started growing barley on a patch of Hoosic gravel soil, very well-drained. This year, I got the seed into the soil 2 weeks early and was able to harvest in July. Then, it rained for weeks and other farmers lost their crops.

Maybe 3-4 years out of 6, I get it right.

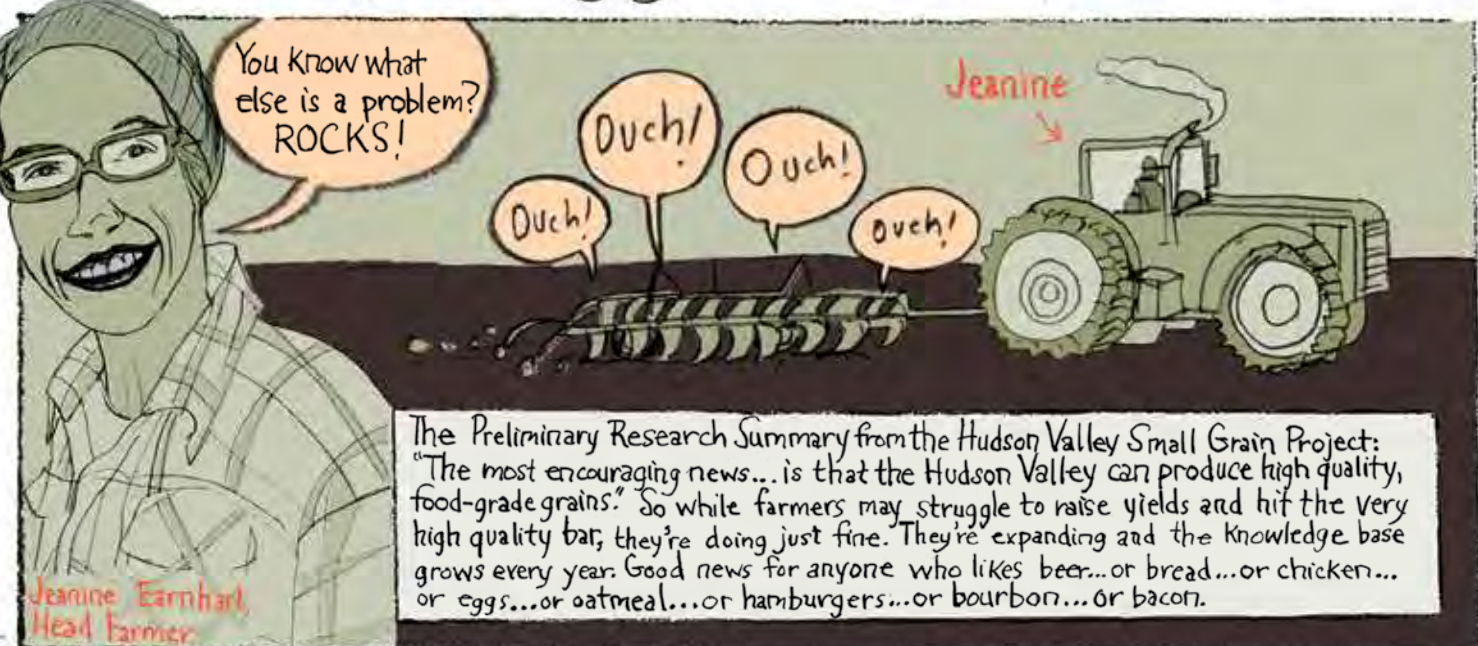
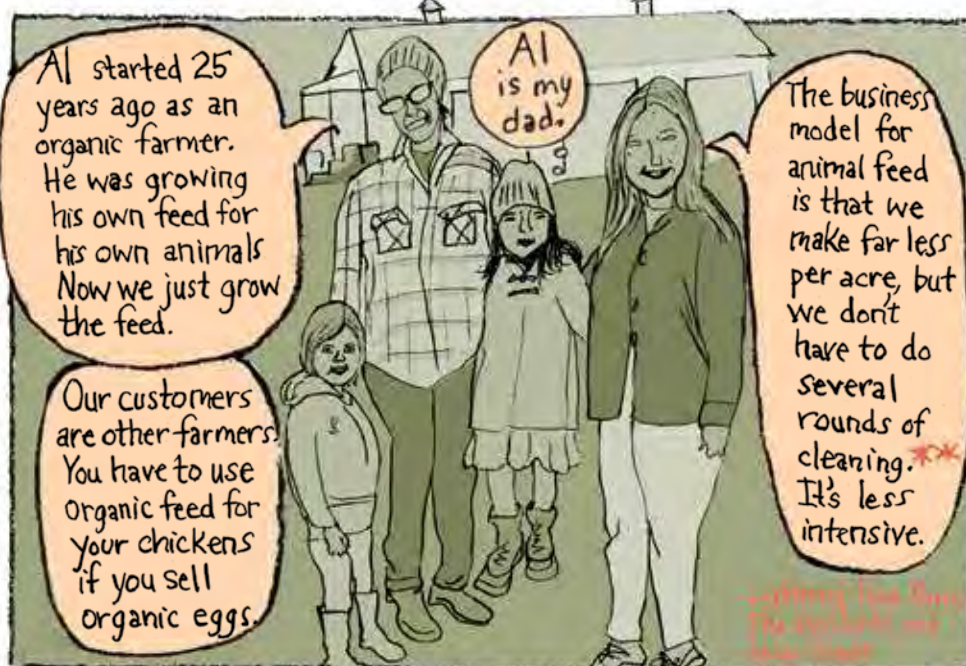
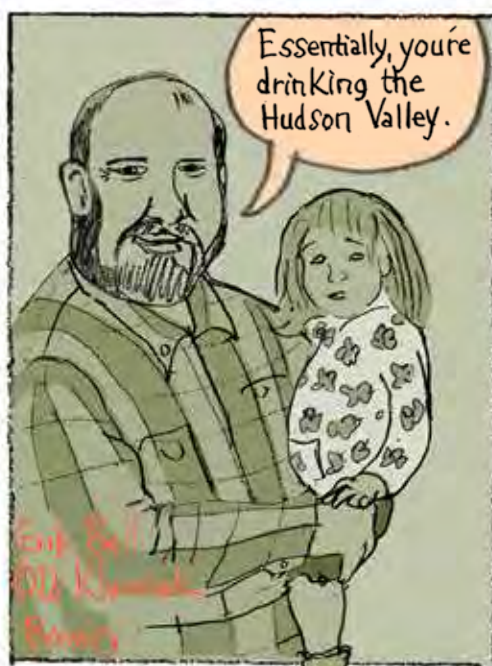
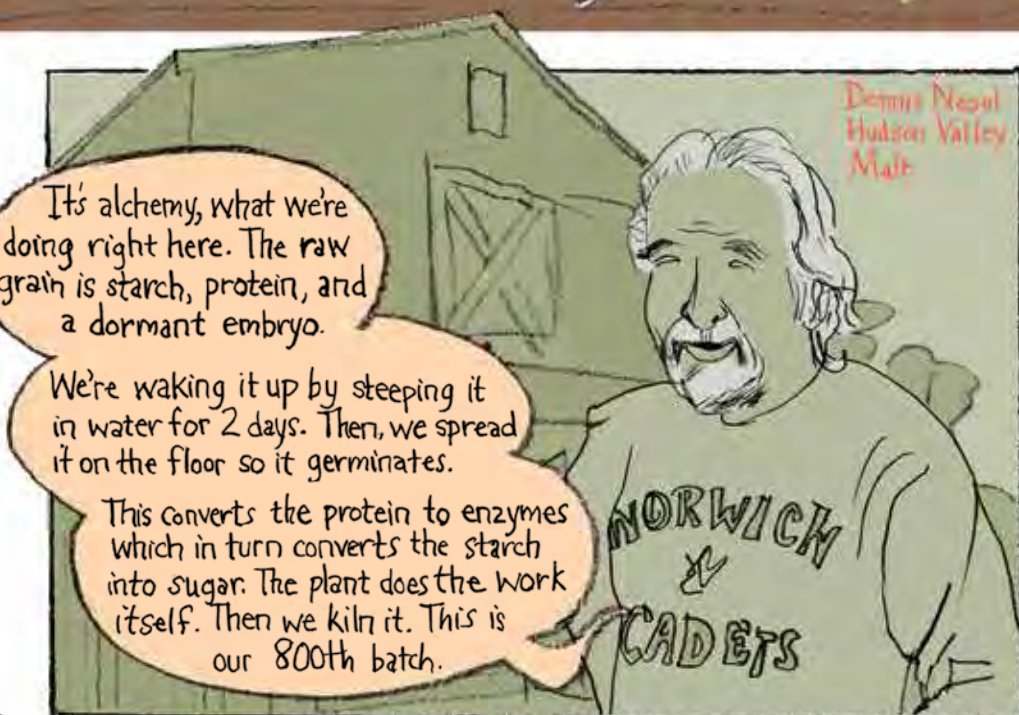


I modified this silo for barley so the air can circulate. It has to be stored at 11-12% moisture... too wet, it molds... too dry it doesn't stay alive.



# FROM THE FIELD

## THE BARLEY FIELD, AND THE OAT FIELD



One assumes nature designed livestock to be able to digest a weed or two.

© deblucke 2018



# A GROWING CHALLENGE

Farms and Food in the Hudson Valley



Donna Williams of Field Goods  
Photo by Roy Gumpel

## Growing Cash *(from Page 10)*

everything from produce to jams, cheese and farm-made foods) in eastern New York, northern New Jersey and western Connecticut.

Positioned on the Hudson River, Field Goods was started in 2011 by Donna Williams, an agricultural consultant who wanted to find a way to expand farming in Greene County. Her colorful vans now deliver bags of food to more than 700 public and private pick-up sites, including in Beacon.

### Agritourism

The price of stands at New York's greenmarkets, as well as the costs of trucking, including pre-dawn labor and bridge tolls, has pushed many farmers to look for alternatives.

As the popularity of local food and farm-to-fork has grown, so has the appeal of "agritourism," or visiting a farm for fun. Many farms, helped by the Hudson Valley Agribusiness Development Corp., have boosted profits by creating farm stands, pick-your-own and on-site dining.

### Local wholesale

A few years ago, GrowNYC, the nonprofit that runs the greenmarkets program in New York, realized there was a need for a major wholesale market for locally grown produce

to supply urban restaurants and fresh food outlets. It set up shop at Hunts Point, in the Bronx, one of the largest food distribution centers in the world. The market has traditionally been the wholesale point for produce for everywhere else — that is, the 49 other states and 55 foreign countries.

GrowNYC now runs a large wholesale section for local food where restaurants and other businesses can buy produce supplied by farmers throughout the region. It's become a major new market for the farming world and prompted the state to invest \$20 million to build a 120,000-square-foot market next year.

### Feeding institutions

The American Farmland Trust created a program to entice institutions across New York state, including schools, colleges, senior centers and hospitals, to purchase food from local farms. It's potentially a huge market. By one estimate, publicly-funded institutions spend nearly \$1 billion on food to feed more than 6 million people through public institutions, including 1.6 million schoolchildren.

Most of the food destined for these institutions grown in the Hudson Valley is distributed at Hunts Points. This year, for the first time, the state will allow public schools that purchase at least 30 percent of their lunch ingredients from New York farms to receive a reimbursement of 25 cents per meal.

## THE CORN IN YOUR GAS

By Brian PJ Cronin

There's corn in your gas tank. And if the federal government gets its wish, there's going to be more of it.

Ethanol, a grain-based alcohol made from corn, was first widely used as fuel 110 years ago, with the 1908 Ford Model T that could run on either gasoline or ethanol.

Gasoline won that battle, but today almost all the gas you buy at the pump, including anywhere in the Highlands, is still 10 percent ethanol, a blend known as E10. That's because of amendments made in the 1990s to the Clean Air Act that required gasoline to be mixed with something (aka "oxygenated") to make it burn cleaner. After the first oxygenate, a chemical compound known as MTBE, started showing up in drinking water, the industry switched to ethanol.

Corn is a major field crop in New York State, with more than 1 million acres planted annually. About 20 percent of the 100 million bushels produced in the state are converted to ethanol at a plant near Albany, according to Sunoco, which runs it.

From an environmental perspective, there's a lot about ethanol that makes sense. It produces fewer emissions than gasoline, and it's made from a renewable resource that removes carbon from the air as it grows. In a nod to help struggling farmers, President Donald Trump has said he will push the Environmental Protection Agency to allow gas blended with 15 percent ethanol (E15) to become the standard.

That announcement made both oil companies and environmental groups nervous. Corn may be renewable but its dominance in U.S. agriculture has been disastrous for the long-term health of topsoil and waterways. Corn is typically grown as an "industrial monocrop," which causes excess phosphorus and nitrogen runoff, leading to the increase of toxic algae blooms and the ever-growing "dead zones" in the Gulf of Mexico and Lake Erie.



In a paper published in 2015, a researcher from the University of California at Merced, Elliott Campbell, concluded that most areas of the country can feed between 80 percent and 100 percent of their populations with food grown or raised within 50 miles. However, the most heavily populated areas of the West and East Coasts, including New York, can feed less than 20 percent of their populations that way. One question facing policy makers is whether local food systems could scale beyond farmers markets and replace conventional food systems if the latter failed due to climate change. Based on Campbell's analysis, which took into account diets, food waste, crop yields and population distribution, as much as 90 percent of America could be fed by local sources. Unfortunately, the Highlands is located in the other 10 percent.