October 23, 2011

University Programs Raise Crop of New Farmers

By Sara Lipka

Burlington, Vt.

On a soggy, raw October morning, in a far corner of the University of Vermont’s Hort Farm, a dozen students gather by a picnic table and survey their three-quarter-acre plot. Since spring, as part of Vermont’s first farmer-training program, they have cultivated crops where weed scientists used to run trials. Today is their last market harvest.

Sizing up their season, they guess at total revenue, which turns out to be $2,300. A few sigh. "If I was a for-profit farmer," one says, "I’d be saying we have to pick up our sales."

Stepping over irrigation lines, the aspiring growers traverse rows of deep-green kale and decaying fall tomatoes. Into sacks they drop handfuls of dry beans whose pods would crinkle if they weren’t so wet. Little by little, the harvest fills the bed of an old, red Chevy pickup.

The students’ ages and backgrounds vary, but their motives coincide. Danielle George, 38, was a pastry chef in Brooklyn, N.Y. "I got really interested more in what it would be like to grow food," she says. Brittany Hastings, 24, left a job in publishing: "I just couldn’t handle being inside, stationary."

The local-food movement has accelerated interest in small-scale organic farming, if not established the best way to start. And with strong ties between agricultural conglomerates and many land-grant colleges, higher education hasn’t necessarily helped. But on a smattering of campuses, students can run organic gardens and study sustainable agriculture, and on a few, Vermont the most recent, they can now take a crash course.

Such training is urgent, says Frederick L. Kirschenmann, a distinguished fellow at the Leopold Center for Sustainable Agriculture, at Iowa State University. In the near future, energy
costs, water shortages, and climate change will force domestic agriculture to shift from vast expanses of corn and soybeans to networks of small, diversified farms and urban gardens, he says. "We need that human capital and those young farmers."

The strategy at Vermont, as with its models at the University of California at Santa Cruz and Michigan State University, is immersion: six to nine months of full-time farm work integrated with instruction. An undergraduate who works in a campus garden may be able to grow pumpkins but not market them; a master's student in horticulture may have researched soil-borne pathogens without learning how to control them. The noncredit training programs' goal is to recruit recent graduates and career changers and, for $4,800 to $9,000 in fees, equip them with all the production and business skills they need to become successful small farmers.

At Vermont's Horticulture Research Center, students come in from the field, shed their Patagonia vests and Arc'teryx fleece, and open their laptops around a table. The program's director, Susie Walsh Daloz, threshes beans while quizzing students on which crop families self- and cross-pollinate. She shares the history of several heirloom bean varieties, such as Cherokee Trail of Tears, whose shiny, black seeds the tribe carried.

The harvest is decent, Ms. Daloz says, despite a late sowing and a lot of rain, including a lashing from Hurricane Irene. Once the beans dry, the students will be able to take some to cook and eat, or to plant wherever they go next.

**Offshoots Spread**

The farmer-training model first sprouted in Santa Cruz. In the late 1960s, on a then-fledgling campus, a band of freethinking students joined Alan Chadwick, a charismatic master horticulturalist and frustrated Shakespearean actor, in carving a scraggly hillside into a garden.

The university began a formal, yearlong program in 1975, encouraging students to learn by doing. Now participants pay $8,500 for the Apprenticeship in Ecological Horticulture: six months on a 25-acre farm, growing fruits and vegetables while taking classes and workshops. The three dozen spots draw up to 180 applicants.

The program intrigued John Eiernbaum, a professor of horticulture at Michigan State who had been studying year-round organic
production in greenhouses. He visited Santa Cruz in 2005, when Corie Pierce was an apprentice there. After she finished, he hired her to help transplant the model to East Lansing.

Over its first three seasons, the for-credit program was expensive—about $30,000 for students from out of state. And most of the participants weren't seeking academic credit, says Ms. Pierce. Last year the Organic Farmer Training Program became noncredit, lowering its cost to $9,000 for nine months of vocational training or, according to its promotional materials, "a solid foundation in the principles, practices, management, and hard skills needed to operate an organic farm." Michigan State can take 15 students; twice that many typically apply.

Cynthia L. Belliveau, dean of continuing education at Vermont, was tracking those programs. A self-declared foodie and an instructor in the department of nutrition and food sciences, she thought a lot about small farms in the local economy. She knew that the university ran a summer institute in sustainable agriculture, and that its extension service offered workshops for new farmers, but last winter she decided to create a comprehensive farmer-training program.

"I said, 'I know there's demand here,'" the dean recalls. She heard about Ms. Pierce, who had moved to the area, and hired her as a consultant.

A no-nonsense New Englander starting her own farm, Ms. Pierce helped develop the new curriculum. Unlike Santa Cruz and Michigan State, Vermont didn't have much land the students could use, but Ms. Belliveau was eager to collaborate with neighbors like the Intervale Community Farm.

The planners rushed, not wanting to wait another year, and by last February, Ms. Daloz was fitting skills into the schedule: compost management, tractor use, wholesale marketing. She planned a series of Wednesday classes on soil fertility and pest management, among other topics.

A local farmer and alumna of the Santa Cruz apprenticeship, Laura Williams, joined the crew in April and set to work tilling the small plot. "It was pretty quick to turn that into a farm," she says.

The university set tuition for the six-month program at $4,800 and would have proceeded with as few as six students. It accepted 14 and started a wait list. Two dropped out, but a dozen, ranging in age
from 21 to 57, will complete next month a certificate in sustainable farming.

They spend two days a week on their plot and another two at markets or local farms, where hosts lead discussions and work. The August floods from Hurricane Irene brought unexpected lessons: federal regulations, risk management. Students saw firsthand how swiftly chest-high waters can fill fields and ruin a harvest.

The floods at Intervale (the Hort Farm was spared) freed up time for independent studies, which have become outlets for students’ various expectations of the program. Four participants, for example, are conducting a budget analysis of a local farm’s winter crop of microgreens.

Beyond weather, the program faces another challenge: a $19,000 deficit. "We were willing to run it at a loss to get it going," says Ms. Belliveau. But she is hoping for 20 students next year, to balance the budget. In the future, the program could enroll up to 30, she says. "The mantra of a continuing-education dean is, You need more."

The two other programs have become self-sustaining, almost. At Michigan State, tuition and produce sales cover staff salaries and farm operations. But budget cuts at Santa Cruz’s Center for Agroecology & Sustainable Food Systems, which runs the apprenticeship, have forced it into some fund raising.

"The fees that we charge don’t cover the costs," says Jonathon Landeck, assistant director of the center. Thanks to an anonymous donation, though, next year’s tuition will be only $6,000.

Package With a Price
Paying in part to work—hard—can raise tensions. On the farms at Santa Cruz and Michigan State, apprentices labor alongside hired undergraduates.

"Wait, why am I paying to be weeding for four hours?" Ms. Pierce says the programs’ participants sometimes complain. "People like to get frustrated with weeding."

The farmers and educators behind all of the training programs worry about costs because students can’t use federal or state aid if they’re not earning academic credit. But even as administrators look for donors to finance scholarships, they defend their model.

Compressing fieldwork and instruction saves students time, says Ms. Pierce. Sure, they could find jobs on farms, and many go that route, but the lessons there come more slowly, she says. "Do you
have five years to work for $8 an hour?"

Like land and equipment, training is an investment for aspiring farmers, says Jeremy Moghtader, director of Michigan State's program. "What they're paying for is the fact that we've created an integrated, well-structured teaching and learning environment." Down the line, he says, the lessons may save the students expensive mistakes.

Universities can readily fit valuable resources into a package, says Vermont's Ms. Daloz. She has invited entomologists, plant pathologists, and weed scientists to speak to her students. "We're here to talk about it, think about it, take notes, get an expert in," she says. "I think almost every day when I'm with these guys, I would have killed for the amount of access they have."

And the programs are producing farmers. Of the Santa Cruz program's approximately 1,400 alumni, a few dozen grow locally; several hundred others run community and schoolyard gardens and small farms from San Francisco to New York. Ms. Pierce says young farmers joke about the two degrees of Santa Cruz: Everybody knows somebody who knows a former apprentice.

Vermont's organizers want to help expand that network. They have sowed two more acres in peas and oats to prepare the soil for a larger teaching farm. At the Northeast Organic Farming Association's winter conference and other meetings, they will recruit more students.

Meanwhile, this year's crew is almost ready to set off. Ms. George, the former pastry chef, hopes to pursue urban agriculture in Chicago; Ms. Hastings plans to spend a year on a farm in upstate New York, where she hopes to settle.

The group hangs out this October evening in the continuing-education house, sharing a poduck dinner before watching Greenhorns, a documentary film about young farmers. In the next 20 years, it says, 400 million acres of farmland will be transferred to new owners.

Chaya Lipkind, 29, hopes to be one of them. Ms. Lipkind, who spent several years at a financial-services startup before enrolling at the New School, in New York, finished a bachelor's degree in liberal studies wanting to farm.

"I had the motivation, but I didn't have the know-how," she says. Now she is eyeing a friend's land in Monticello, N.Y. She needs to