ORGANIC FARMING

Introducing Cornell's Freeville Organic Research Farm

By Marguerite Wells

In case you missed it, Cornell started a 30 acre organic vegetable research farm in 2001, and it is now solidly underway. Since the land was bought in 2001, it took three years of getting organized and making the transition to organic, and now we've had two summers of research conducted there. I'd like to share a bit of the how, when, and why of the organic research farm's existence, and what kind of work we do there.

To begin with, let me introduce myself. I'm Marguerite Wells, Organic Research Farm Coordinator, former manager of Cornell's student organic farm, Dilmun Hill. With a lifelong background in organic farming, I am very pleased to facilitate the exciting research going on in Freeville, and hope that it benefits farmers of all kinds around the Northeast.

Organic agriculture developed outside the mainstream of land grant universities, and few land grants have programs specifically aimed at this industry. We saw a need for organic research to happen on a truly organically managed farm, since the soil and pest characteristics found on conventional farms do not mirror the conditions on organic farms. To best evaluate organic techniques, we felt they needed to be tested on organically managed ground.

The organic research farm is part of Cornell's Department of Horticulture. It is adjacent to the existing Thompson Vegetable Research Farm in Freeville, NY, which has conducted conventional vegetable research for decades and may already be familiar to you. The organic farm is a 30 acre parcel at the northeast corner of the existing research farm, contiguous with established research land.

The land had been growing conventional grains and forages for several decades before we acquired it, so we needed to transition the land to organic management before doing truly organic research on it. We planted cover crops, spent some time mapping the land, testing the soil, and otherwise getting to know the piece of ground. We also planted a buffer strip of mixed trees and shrubs between the organic and conventional land, to help block any spray drift, and provide habitat for beneficials.

By the end of 2003, the land had spent 3 years under organic management, and was ready to host research projects. The summer of 2005 was our second season of research, with a total of 5 different research projects underway.

See the accompanying sidebar for brief descriptions of our five research projects underway, and contact information for the lead researchers. We welcome input and grower interest. We aim to serve the needs of not only established organic farmers, but also those who are considering transition, or who simply want more information on new, more sustainable practices. Feel free to call me and talk about what's on your mind.

In addition to the above research, we maintain a plot of varied cover crops, to help people to become more familiar with some of the many cover crop species available to northeast growers. We expect new research projects to begin in the spring of 2006.

Some issues that we are currently grappling with that we'd particularly like to hear from you about include:

- How best to emulate an organic production farm while conducting research.
- How to embed research into a farm scale rotation plan.
- How to broaden the dialogue so that farmers and other organic stakeholders can be most meaningfully involved.

We look forward to hearing from you!

Marguerite Wells is the Freeville Organic Research Farm Coordinator. She can be reached at 607-255-9911 or mw38@cornell.edu.

"We aim to serve not only established organic farmers, but also those who are considering transition, or who simply want more information on new, more sustainable practices," says author Marguerite Wells, Coordinator of the Freeville Organic Research Farm.

Organic vegetable research fields at Freeville.

Projects Underway at Freeville Organic Research Farm

Potato Variety Trial: Trialing several dozen potato varieties, both common varieties and new breeding selections, to evaluate their performance in organic systems. We are looking at stand establishment, pest and disease resistance, and yield. Donald Halseth, deh3@cornell.edu 607-255-5460

Organic transplant media: We've been evaluating consistency and long term growth impacts of organic transplant media with tomatoes. Greenhouse and field trials evaluate different potting mix amendments for organic tomato cv 'Mt. Fresh' production, including effects on microbial ecology of roots as transplants and longevity of these effects in the field. Treatments include: an industry standard potting medium (Sungrow); a control peat and vermiculite medium with no amendments; and this control medium amended with thermophilicly composted dairy manure; the same dairy manure but vermicomposted; alfalfa meal; sesame meal; or a liquid feed. Anu Rangarajan, ar47@cornell.edu, 607-255-1780. Janice Thies, jet25@cornell.edu, 607-255-5099.

Plant breeding for organic systems: Trialing public vegetable varieties on organic farms. Breeding an open-pollinated, cucumber mosaic virus (CMV) resistant bell pepper adapted to Northeast and similar climates. Also breeding melons, summer and winter squash, and cucumbers for success in organic systems. Margaret M. Jahn, mmj9@cornell.edu, 607-255-8147. George Moriarty, gm23@cornell.edu, 607-255-1241.

Weed and soil management using soybean and cowpea cover crops: The objective is to develop cowpea and soybean cover crop systems, for summer legume use, with and without small grains mixed in, that can suppress weeds while improving soil health. Dan C. Brainard, dcb15@cornell.edu, 607-255-2522.

Effects of soil fertility on nutrient dynamics, weeds, and crop quality during transition to organic vegetable production: Our goal is to refine the best management practices developed by experienced organic growers to develop more productive organic systems that will contribute to optimizing organic vegetable production while ensuring sustainability. Four cropping systems are being compared in terms of soil nutrient dynamics, soil health, crop yield, weeds, pathogens, and arthropods. Charles Mohler, clm11@cornell.edu 607-255-0199

HOME AND FAMILY

On Raising Rural Kids…

By Celeste Carmichael

Ever read the *Small Farm Quarterly* Youth Pages? The stories, written by youth, are amazing! With each issue I become more convinced that I want my family to have a small farm experience. As the Youth Page editor I have become acutely aware that unique opportunities exist on farms for developing healthy minds, bodies and spirits. In most cases it seems pretty clear that the young people writing the articles have found something (often raising animals) that they are excited about. They seem to be happy kids, who are tuned in to their environment and connected to caring adults. I can't help but wonder how we, as parents, leaders, teachers and friends can help more youth, particularly rural youth, to make good choices.

You may find it hard to believe, but there is a body of evidence that indicates that growing up in the country presents certain risks. Statistics from across the states show that children in a rural environment face many of the same challenges as inner city kids and they fare worse on several key indicators of positive youth development. For example rural youth are more likely than their urban counterparts to use drugs and alcohol. I'm not making this up.

What disturbs me the most is that while there is a great deal published about the problems that rural kids face, there is not much available to help kids (and their families) avoid the toughest of the challenges. So, given our interest, yours as a small farm enthusiast, and mine as a youth development worker and mom of three, I thought that *Small Farm Quarterly* might be a good place to explore this issue and share interesting resources. In order to do that and keep our collective attention I will be interviewing "experts from the field"– aka. real parents, rural youth and those raised in a rural environment.

My first interview is with Vicki Kerrick, a friend and the babysitter of my 15 month old, quick-as-lightning son. Vicki and her husband Bill have raised six children on a small dairy farm in Moravia, NY. From my own perspective they are a family rich in spirit, family values and laughter. Will that raise resilient kids? Read on.

A VOICE OF EXPERIENCE: INTERVIEW WITH VICKIE KERRICK

CC: What were the positives/negatives to raising your children in a rural environment?

VK: Bill and I both grew up in a rural environment – as rural as can be. In fact some people back home might say that Moravia is an urban city (pop of the Town of Moravia is 4,000). Since I grew up this way and my kids grew up this way, we don't know any different.

Growing up in a rural environment we always had to make our own entertainment, and we had to make do with what we had. We didn't have stores close by to run out and find the perfect thing. I think that this helped our kids to become problem solvers. Having the fanciest or newest thing doesn't make you learn any better.

Sometimes being rural meant that you had to take long trips in a car to get to the surrounding cities. This may seem like a negative to some, but I think that it is a positive. Being together helped us to maintain a closer knit family.

Continued on next page