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Composting Local Food Scraps: Regenerating Soil, Supporting Jobs, and Growing Food
From the Editor
By Nicole Belanger, NOFA/Mass Public Relations Coordinator

Necessity is the mother of invention. And invention is the mother of possibility. As we look to strengthen local, organic agriculture, we seek models to build upon and ideas to nourish our imaginations.

People like this year’s Winter Conference keynoter, Mark Shepard, are lending their ideas to a vision of a strong future. Aiming to shift agriculture away from clear-cutting and annual planting to complex ecologies that build fertile soil over time, Shepard and his family model perennial agriculture and self-renewing gardens on their 100+ acre Wisconsin property. With the hope of showing others what is possible, they are producing more food with less money, less time, and less energy inputs. In the second part of his interview, he shares more on the economics and his ideas for expanding the model. Read more about his work (on page 8) and see some highlights of the upcoming January 11, Winter Conference (on page 7).

Shepard recognizes what has become common knowledge: there is no shortage of food in the USA. Perhaps we are lacking vision for the economics and distribution, but there is no lack of food. Everett Hoffman, like many who see the untapped value in unused food, is enthusiastic about putting so-called waste to good use. On page 17, Hoffman shares what is happening in the Boston area to create closed-loop food production systems. These systems turn local food scraps into nutrient rich compost used on local gardens and farms. Eliminating the need to truck food or farm inputs into cities from afar, Hoffman aims to “educate our community about the value of these scraps and model ways to divert them from landfills and incinerators.”

Resources, ideas, and influences are so important as we shape organizations and infrastructures to fit the needs of our lives and our communities. Start drawing up your list for this year’s bulk order and mapping out your Winter Conference workshops. Look forward to seeing you in Worcester this January at the Winter Conference!

Nicole
An Expanded 2013 Fall Appeal Matching Challenge Continues!

It is getting cold outside, but NOFA/Mass is warmed by the vision, loyalty, and support of its membership community. The response to our Fall Appeal has clearly demonstrated how much NOFA/Mass members value and support the important work of educating about and advocating for organic farming and food in Massachusetts.

The Fall Appeal began with energy and commitment. Initially contributing to a $7000 Matching Fund, a group of NOFA/Mass members allowed each pledge to have twice the impact (as well as donations of $100 or more to be matched 2:1). This extraordinary and generous incentive motivated our community. We at NOFA/Mass stood grateful and touched by the demonstrated commitment of our members as we reached our goal sooner than expected.

But - little did we know - the largesse of the season had not yet ended! Inspired by the tremendous response to the initial matching fund, several additional NOFA/Mass members stepped forward to expand this awesome opportunity for organic food and farming by offering $3000 more, bringing the overall matching fund to $10,000. So, with 3 weeks left to go in the Challenge, donations still have at least twice the impact (and donations of $100 or more will still be matched 2 to 1)!

NOFA/Mass sends its sincere thanks to all members that facilitated the matching funds, as well as those who gave at all levels. All of you have lifted NOFA/Mass into the New Year, inspired and focused on the work ahead.

If you haven’t yet donated, join us! Your support is always welcome, but if received by December 31, your contribution will be doubled! Make a donation at www.nofamass.org/donations

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A Strategic Plan for NOFA/Mass in 2014
By Julie Rawson, Executive Director

At our most recent board and staff retreat at member Kofi Ingersoll’s Bay End Farm and Overbrook House in Buzzard’s Bay a strong desire coalesced to prioritize developing a serious strategic plan for NOFA/Mass. From my long term perspective of 29 years in NOFA/Mass, we have made slow, but generally steady, progress as we work to stay close to mission, keep a solid footing in the grassroots, develop a strong multi-layered and faceted structure, foster a vibrant and diverse funding stream, provide practical staff and board development and support, and maintain integrity amongst the larger community.

Several times per year we consider how any potential program direction or decision fits with our basic mission to educate and advocate for organic agriculture in Massachusetts. Now it seems imperative to plan a little longer, to continue to integrate our diverse programming initiatives into one whole. Ideally, a strategic plan such as this is sparked when an organization wants to move from good to better, or best. I feel we are well poised to do so.

We in NOFA are of course do-it-yourselfers, and we will probably follow a hybrid model of strategic planning that seeks some support from professional planners while doing most of the legwork ourselves. Stay tuned and stay in touch. Many voices, including yours, will be valuable in the process.

Below are some strategic planning highlights:

1. Succession Plan - As Jack and I get older, admittedly central figures in NOFA for almost 30 years, there is genuine organizational concern over a succession plan, not only for our roles of Executive and Education Director and Policy Director, but also because the NOFA/Mass office resides in our house.

2. Realizing Development Potential - Three years ago we had a marvelous development session with Pat Gray, formerly of the Food Project. Since then we have developed a strong board member giving program, increased grant income, built a rock solid marketing program, and filled holes in member attrition rates (we are now gaining members after some years of declining memberships). When the 2014 Winter Conference is over, we will have pulled off three very successful fundraising events this year, reaching diverse audiences. We are now receiving bequests and gifts of stocks and realize that we are on the tip of the iceberg in realizing our development potential.

3. Staff Compensation - With this strategic plan we will have to determine what level of financial remuneration support we want to provide our staff, and then work to fulfill that goal.

4. Building Financial Reserves - The recession of 2008 taught us that we need to have a financial cushion in place. We are building reserves with an eye toward financial stability in hard times.

5. Balancing Food Access & Education - We need to decide what amount of our time should be dedicated to organic food access and organizing education for the increasing numbers of farmers and consumers in the state. Providing strong and relevant education for our existing practitioners (farmers, gardeners, land care professionals, and homesteader/do-it-yourselfers) must stay in balance with other priorities like consumer education and access.

6. Advocacy Work - And at what level do we participate in local, state, national and international organic advocacy work?

7. Supporting Beginning Farmers - The needs and support of the ever-burgeoning beginning farmers in the state are another concern for an organization of 30+ years like ourselves that strives to remain relevant to a new generation of farmers.
**Looking for Board Members**

Every once in a while the need for new board members develops. Now is a time of transition in the NOFA/Mass board. We have three slots available after the recent addition of four new board members. We are presently looking for males, farmers, folks from the Berkshires and NE Mass, people with a special talent for development or finance, and most importantly, a passion to move NOFA/Mass forward and a fair chunk of time to devote to being a member of this very “on the ground” board.

Lynda Simkins has stepped down as president after a long run since 1989. Lynda will stay with us as a member of the strategic planning committee, continuing to share her gifts of straight talk and vision for the organization. Jean Claude Bourrut left for his beloved France after serving in the organization for over 20 years, not always as a board member, but also as the Boston bee expert and gatherer of people. He was our treasurer for many years and pulled us forward to fiscal solvency, for which we are extremely grateful. Luke Pryjma was with us for a short time on the board, and left to join our staff as the Winter Conference Workshop Coordinator. In this role Luke puts his voracious hunger for information on how to better farm organically to good use. Joan Fitzgerald was with us for two years as a board member and helped us move forward in our understanding of how to practice good development strategies. Joan, like Lynda and Luke, will not be leaving us, but will be helping us put together a support team of lifetime members to continue to devise creative ways to raise funds for our organizational priorities. Sadie Richards leaves us after two years of very focused work supporting the Metro Boston position. Sadie will stay involved with our social justice activities. Joe D’Eramo left this year after a one year term, and will continue his support of our efforts while he finishes building his homestead.

Harmonie Arcisz, a marketing staff member at Organic Valley, Caro Roszell, once NOFA/Mass Land Care Program Coordinator and now full time farmer in the Pioneer Valley, and Bleu Grijalva, farmer in RI and SE Mass with low income housing developments, have all joined the board. Sam Perkins of Lincoln, an avid gardener, will also join the board.

Below is the NOFA/Mass board job description. We want a full slate by January 11 at our annual meeting. Give me a call at 978-355-2853 or email at julie@nofamass.org if you are interested. Leslie Cox, Sharon Gensler, Caro Roszell and I will interview you after a short application. If you have an interest in getting more into the heart of our work and have some time to give, we would like to talk to you.

**Board Member Job Description**

**Purposes of the Northeast Organic Farming Association shall be as follows:**

a) to educate members and the general public about the benefits of a local organic food system based on complete cycles, natural materials and minimal waste for the health of individual beings, communities and the living planet;

b) to disseminate information about the practices and principles of organic farming and gardening and to refine organic growing practices through research and farmer-to-farmer exchange;

c) to demonstrate through example and replication the feasibility and benefits of restoring local agriculture;

d) to promote not-for-profit cooperative marketing and agricultural buying services for Massachusetts organic growers and encourage cooperation among farmers, growers and their customers;

e) to promote the application of organic practices to activities involving land and food.

All NOFA/Mass members are eligible to serve on the NOFA/Mass Board of Directors. A term runs for one year. The board works to support the educational purposes of NOFA/Mass and to maintain clear direction for the organization.

**Responsibilities of a member of the Board of Directors of NOFA/Mass:**

- Participate actively in educational and member service programs and projects via working group or committees
- Provide responsible oversight of NOFA/Mass through membership in at least one board standing committee. The committees are: Executive, Strategic Planning, Development, Finance, Personnel, Board Development, Public Policy and Interstate Council
- Be an advocate and spokesperson for NOFA/Mass in accordance with the stated purposes and policies of the organization
- Be a paid up member with an expectation of attendance at all board meetings (8 per year)
- Attend the annual board/staff retreats in February and December
- Participate in some aspect of NOFA/Mass’ fundraising
- Make a yearly financial donation to NOFA/Mass
Save Time and Money: Buy Bulk! Order Opens January 1st
By Cathleen O’Keefe, Bulk Order Coordinator

Do you buy cover crop seed, fertilizers, mineral amendments, compost, potting soil, pest controls, animal health/ feed supplements, potato and allium seed, or tools for the farm or garden? Would you like to save money on those items? If so, the bulk order might be perfect for you!

Each January, NOFA/Mass organizes a bulk order with popular suppliers for distribution at sites in western, central, & eastern MA, central CT & RI. Take advantage of significant savings through group purchasing power and collective shipping, while helping NOFA support organic practices throughout the Tri-State region. No order is too small or too large; everyone who participates saves by purchasing together.

We work with the following suppliers: Organic Growers Supply, Moose Tubers, Ideal Compost, Vermont Compost, Crop Production Services, and Fertrell. New this year, we are excited to be offering Fertrell’s line of organic hybrid corn and alfalfa seed.

The order is open to both NOFA members and non-members and will be available to download January 1, 2014. **You’ll only have a month to get your order in, so start planning now!** To be prepared, we suggest getting your soil tested, with recommendations. Most results are available within 2-3 days via e-mail.

**PLEASE HELP!** As always, the Site Managers can use help unloading the truck, organizing, and breaking down orders. This is another reason why we save money - everyone chips in a little work. Tubers will be delivered and distributed in the first week of April, one week earlier than last year. Everything else is delivered and distributed the week of March 10th. Many of our farms are busy preparing for the season, so all of your help is greatly appreciated. Just circle “I can help breakdown” on your order form, arrive on the breakdown date at a time to be determined, and take home your order early. Volunteering is a great way to meet other NOFA members and to participate in a wonderful communal tradition.

If you’d like a paper copy of the order or have ideas for additional items to add, please contact Cathleen O’Keefe, Bulk Order Coordinator; (413) 387-2316, bulkorder@nofamass.org
Winter Conference Workshop Highlights & OLC Lawn and Turf Course
By Cathleen O’Keefe, Winter Conference Coordinator

This year’s Winter Conference line-up is more diverse than ever, including an all-day seminar, keynote and post-conference dinner with Mark Shepard. A proponent of restoration agriculture, Shepard questions the easy availability of future staple crops, particularly in urban population centers.

A sample of conference workshops:

**Sugaring 101** (all levels)
Leslie S. Cox
All Levels
Enter the world of sugaring! Learn the basics of maple syrup production. Go away feeling confident with the tools and timing to produce maple syrup.

**Local Food Production Resilience** (intermediate)
Ben Falk
Learn the strategies used to adapt the home, farm and watershed to increasing prevalence of extreme climate events, resource costs, and other “shocks to the system.” Innovations employed at the Whole Systems Research Farms are the foundation for this presentation and will tie together the numerous components of a resilient food system, visually and via real-world examples, so that participants leave with a clear sense of food production possibilities.

**Enhancing the Viability of Commercial Urban Farms** (all levels)
Andy Pressman
Urban farmers face many well-known risk management challenges. Learn strategies for lowering risks and increasing profits. Understand how to overcome barriers that commonly affect urban farmers in order to produce high quality crops on a commercial scale. Information on business planning, market diversification, and techniques for intensive crop production will also be discussed.

**An Integrative Approach to Healing Lyme** (all levels)
Emily Maiella
Understand the diagnosis and treatment of acute and chronic Lyme disease. Therapies addressed include various herbal formulations, diet modification and immune system modulation. Conventional medical approaches will be discussed briefly. Learn what contributes to the development of chronic Lyme, and what it means to have active Lyme, versus “post Lyme syndrome.” There will be preserved tick samples to learn tick identification.

In addition, the NOFA/Mass Organic Land Care program will be holding their annual Lawn and Turf Course at the Winter Conference. Veteran instructors Chip Osborne and Bernadette Giblin - along with a host of others - will offer practical, applicable information about organic lawn and turf management techniques.

Register Now for the Lawn and Turf Course, Winter Conference, and post-conference dinner.

Kids and teens are welcome! The children’s conference (for ages 3-12) provides a lively, interactive way for your kids to get educated. Teens are welcome to attend adult workshops.

Discounts are available for certified organic growers, NOFA members, students, children and teens, and groups of five or more attendees.

The following all-organic catered lunch will be available for purchase (Adults $15, kids (3-12) $8):

- **Soup:** Vegan Butternut Squash Bisque
- **Entrée:** Chicken or Tofu Marsala w/ Mushrooms
- **Sides:** Golden Beets, Arugula and Candied Walnuts (goat cheese & eggs offered on the side), garlic potatoes & roasted root vegetables, fresh baked rolls & breads with infused olive oil
- **Dessert:** Apple Cobbler
- **Beverages:** Cider & Water (Coffee is available for sale on the First Floor of Student Center. Tea will be offered at no charge at the NOFA/Mass hospitality table)

Don’t forget to visit the exhibitors for all your garden and farm supply needs.

We need your help... as a bit of hospitality, we will be offering donated coffee and breakfast items until the first workshops begin. Would you be willing to make a donation this year? We would be happy to pick up your tax-deductible donation along with any literature you would like us to display at the conference. Please give our donations coordinator Siedeh (pronounced like Side A) a call at 617-803-0618.
The following is part two of an interview with 2014 Winter Conference keynoter, Mark Shepard, by Cathleen O’Keefe, Winter Conference & Bulk Order Coordinator. Shepard lives on and manages a 106-acre perennial agricultural forest, called New Forest Farm in Viola, Wisconsin. It is a planned conversion of a typical row-crops grain farm into a commercial-scale, perennial agricultural ecosystem using oak savanna, successional brush land and eastern woodlands as the ecological models. Their keystone species are chestnut, apples, hazelnuts, cherries, currants, raspberries, mulberries, elderberries, grapes, forage. In addition they raise cattle, hogs, chicken, turkey, ducks and sheep, and grow sunflowers for oil production.

Cathleen O’Keefe: In your book, Restoration Agriculture, you claim that for the Restoration Agriculture model to be profitable, we need to adopt a model like Organic Valley. What would that model look like for restoration agricultural farmers?

Mark Shepard: I think it was Samuel Adams who said if we don’t hang together, we will surely hang separately. That pretty much sums it up. Small farmers need to collaborate & market their different products together, which is what I’ve been able to do. If I’ve got 15 different crops going on within a restoration agriculture system, I either need to have a serious mega-farm with a zillion acres in order to justify all of the harvest, maintenance, and processing equipment, or we need to collaborate. We have to have enough chestnuts in order to justify all of the processing equipment. Either I have to do it on one farm, or we could all do it as a group of farms. It seems a lot [saner] that we would all collaborate. Our chestnuts would go [to] one place, our hazelnuts would go one place, our beechnuts to another place, that sort of thing.

When you’re a farmer, you just have to get used to the fact that you’re going to be getting paid close to poverty wages for what counts as a commodity. You’re producing a raw product that goes into the industrial system, so just get used to that. Well, that only makes sense if you own the company that is processing the product and marketing the product. Once you own a piece of the action, then your real capital gains over your lifetime are the increase in the profitability of the company that is processing and marketing the product.

There are a number of different collaborative ventures that I’m a part of. My produce all goes to Organic Valley. My oil crops are all part of a different collaborative that started with members in Organic Valley. The hazelnut thing is mostly non-Organic Valley members. My original investment in the Organic Valley coop is the best investment I’ve made in my life.

You talk about using more perennial, native species for agriculture crops, but most people don’t recognize nettles & wild blueberries, for example, as food.

But they’ll buy a clamshell full of them or [spend] $14 [on] dandelion greens [at the store]. Here in America we have some kind of crazy notion that we have to plow and plant something that some seed catalog told us was good. When [you] plant annual row crop systems, if you try it on your 10 acres, you’re not going to have enough product to reach the market. So what you’ll do is go to farmers’ market on Saturday with a bushel or 4 baskets of blueberries, and find out that, gee whiz, everybody else has blueberries too. Well, that’s not the real market. The real market is the market that supplies the stores where most of humanity gets their food. It’s done through brokers, wholesalers, huge trucks, trains and container ships that move around the world. That’s what feeds humanity, not the little basket down the street corner.

Listen to the interview in full at https://archive.org/details/MSInterview
In addition to his keynote speech at the Winter Conference, Mark Shepard will be teaching the following all-day seminar on Restoration Agriculture.

Session 1: Introduction to Restoration Agriculture/Farm-scale Permaculture
Learn how we can accomplish both ecological restoration and agricultural production of staple carbohydrates and proteins by imitating perennial ecosystems with productive agricultural practices.

Session 2: MAKS: The Modified American Keyline System: Earth-shaping to manage your water resources
Learn how to manage your water resources by using the Keyline design system. Keyline design uses simple, inexpensive earth shaping and cultivation techniques to optimize water distribution on the farm. Keyline design spreads water from valleys to ridges, encourages water penetration into the soil, increases soil organic matter, and increases the depth of humic layers. In addition, Keyline design sequesters atmospheric carbon more rapidly than any other known technique.

Session 3: Putting it all together: The step-by-step Restoration Agriculture process
Learn a systematic approach to developing a restoration agriculture farm. Know your ecological neighborhood, and design for water optimization. Establish wooded polycultures, build fences and roads, establish agroforestry practices, and then manage for eternity.

Shepard will also be speaking at a post-conference dinner. Don’t miss this opportunity to learn from perennial agriculture and permaculture design expert, Mark Shepard. Register Now!

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Local, Organic Dinner Delights at WSU January 11th

Join NOFA/Mass for a seasonal, locally sourced, organic dinner with Permaculture Design Expert Mark Shepard. The delicious dinner, crafted by innovative Worcester State University (WSU) Chef Rich Perna, will be held at Worcester State University’s Student Center Lancers Loft Dining Hall at 6 pm, immediately following the Winter Conference.

WSU Chef Rich Perna is committed to sourcing local and organic food, a breath of fresh air among university kitchens. Growing up with gardening grandparents, Perna inherited a love of growing and preparing food, even learning to pick wild mushrooms and dandelions. He and his wife now garden organically with their own children.

Spirited by the opportunity to host this NOFA/Mass dinner, Perna says, “I love the fact that NOFA/Mass is a leader in organic farming and that they are here to teach us and make the world a better place. Everyone should know where their food comes from and how it’s grown.”

The dinner promises to please attendees, featuring two stews (one grass fed beef and one vegetable), local cheese board (with cheese from Cricket Creek Farm), seasonal salad (featuring acorn squash, greens, cranberries, and local goat cheese), housemade foccacia bread, vegan/gluten free corn bread, and a local pear tart.

Perna’s vision for the dinner is this: “to have our Chefs cook an amazing meal with Local and Organic foods. Simple, yet delicious.”

Dinner tickets are $24/NOFA members; $30/ non-members

To purchase tickets for the dinner, visit http://bit.ly/IHAwCZ or with registration questions, email Christine Rainville at wcregistration@nofamass.org.

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Organic Lawn & Turf Course: Changing the Landscape of Landscaping
By Ben Grosscup, Education Events Organizer & Summer Conference Coordinator

On Saturday, January 11, five prominent northeast land care specialists will present a full-day course on organic management for lawns and turf, along with strategies for marketing organic land care services.

Chip Osborne, a professional horticulturalist with 40 years of experience, designed the course as a continuing education opportunity for professionals. Applying their understanding of soil biology in an organic turf program enables practitioners to make a profit and to deliver quality services to municipalities and homeowners at an affordable price. He will provide technical details on principles of turf grass nutrition and information about saving an organic program under challenging growing conditions.

Monique Allen will explain how land care practitioners can assess the land they are stewarding to discern where turf grass is the most appropriate plant. Planting grass in unsuitable locations may encourage chemical use in the long-term because of the challenge of maintaining such areas.

Bernadette Giblin presents lessons learned from her work with the CT NOFA-OLC Program. Here she trains landscapers in social media marketing, driving the demand for organic land care in Long Island Sound communities.

Two land care specialists share their practical experience working with different clients. Brittany Phillips of Complete Land Organics in New Hampshire will describe her experience working with homeowners. David Melevsky of Go Green Landscaping, Inc. & Organic Mosquito Control in Maine will cover municipal client relationships.

The course runs simultaneously with the NOFA/Mass Winter Conference taking place at Worcester State University.

Read the full outline of the course and get links for online or mail-in registration here.

Listen to a 16-minute interview with Chip Osborne here.

For more information on this event, contact Ben Grosscup at 413-658-5374 or email ben.grosscup@nofamass.org.
Soil and Nutrition Conference Features Graeme Sait & Moves to Somerville
By Ben Grosscup, Education Events Organizer & Summer Conference Coordinator

The 2014 Soil and Nutrition Conference will feature Graeme Sait – one of the world’s leading experts on biological farming. From Sunday to Tuesday, February 2-4, 2014 in Somerville, MA, Sait along with his co-presenter, Joel Williams, will present a version of his internationally acclaimed Certificate in Sustainable Agriculture, which many participants have described as life changing.

Sait is author of *Nutrition Rules* and founder of Nutri-Tech Solutions (NTS) – a world leader in biological agriculture. He has trained over 20,000 farmers and consultants globally, and when he is not jet setting to the next presentation or consulting appointment, he lives in Queensland, Australia. In this intensive three day conference, Sait promises to deliver guidelines to improve production and profitability on the farm, improve the health and vitality of the farmer, and increase the likelihood of achieving peace and harmony in life.

In a recent conversation, Sait said the only way civilization can sequester carbon in the soil is by creating humus, which in turn depends on promoting the soil life which sustains humus. He points out that you can’t get humus out of a bag; you have to build it in the soil that is already there. Sait plans to cover how nurturing certain kinds of soil life can solve different farm issues.

Plants have an immune system much like human beings, Sait claims. He focuses on increasing plant immunity rather than killing disease vectors. He builds strong cell walls in the plant by supplying minerals like calcium and silica, which are necessary for cell walls to develop. Strong walls block fungal hyphae from penetrating into the cell, making plants immune to fungal disease – a regular occurrence we know by names such as “alternaria”, “early blight”, and “powdery mildew.”

Sait quotes some disturbing recent health statistics, which indicate the health of Australian farmers (in terms of heart disease, diabetes, and depression) is much worse than that of the rest of the population. Claiming that the health of the farmer is crucial for facilitating the health of the soil, he plans to cover a range of approaches for the farmer’s health, ranging from nutrition to breathing exercises.

The Soil and Nutrition Conference is co-sponsored by NOFA/Mass and the Bionutrient Food Association. After being held in Northampton for its first two years, the conference is moving to Somerville for its third year. The new location provides space for additional attendees (in 2013, the event attracted 150 participants).

JJ Gonson, proprietor of Cuisine En Locale, hosts and sponsors this event. She recently moved her company, which features weekly shares of cooked foods from local farms and catered events, to a historic Somerville event hall, Anthony’s Functions. Attendees will be able to sign up for all-organic meals when they register, and the food coordinator is seeking to source most of the ingredients for the meals from attendees.

Read the full outline of the conference and get links for online or mail-in registration here.

Listen to an 18-minute interview with Graeme Sait here.

For more information on this event, contact Ben Grosscup at 413-658-5374 or email ben.grosscup@nofamass.org.
Homesteading Observations: Gardener’s Delight Down South
By Sharon Gensler, Homesteader and NOFA/Mass Outreach Coordinator

I’m feeling a little ashamed to say I’m away from the homestead again, but I am still “on the job.” Last month, I wrote to you from an urban homestead in Portland, ME, this month from a gardener’s delight in Covington, Louisiana. My baby brother, Larry, now 51, has become an avid organic gardener. He and his partner, Jenny, tend their 200 square foot vegetable plot with loving care. They are able to eat fresh produce year round without any special protection we northerners need, like tunnels or hot beds. They’ve created other beautiful landscape areas with exotics like Bird-of-Paradise and banana trees. Not possible in Massachusetts!

After years of his quirky sister talking about organic food, he eventually caught on. Ten years ago a CSA came to the New Orleans area and he signed up for a share. Loving to cook, his taste buds taught him the flavor difference and fresh organic produce became a staple. Katrina wiped out his CSA farm and shortly thereafter he moved to a new home where he started his first small but expanding veggie garden.

I’ve been able to encourage him and offer gardening advice. He now uses permanent beds and a broadfork instead of a tiller. We compare soil-life to intestinal flora and fauna (he’s a gastroenterologist). However, much about gardening down south is foreign to me. He’s had to learn on his own, as there’s nothing comparable to NOFA/Mass available to folks in his region. Questions concerning plant varieties, timing for planting, insect, and disease issues are often quite different. For example, because of extreme summer heat, his tomatoes are planted, harvested and composted before ours are at the green marble stage.

Now we’re sitting on the porch, basking in the sun while talking food. Pru and I came south to celebrate Thanksgiving with my transplanted northern family. Now that the traditional feast is over, we are planning how to blend the 100 pounds (total free baggage allowance!) of goodies from our homestead with the fresh produce from his still flourishing garden, to create our menus for the week. Whatever we come up with will be delicious, nutritious and packed with love.

It’s great to relax after the crazed time getting ready to leave the farm. We spread soil amendments on the pasture in the bitter cold with an inch of snow on the ground, dug and stored the last of the root crops, removed garden debris, and got all beds covered with mulch; slaughtered the last two meat birds; finished the last touches on the new compost toilet; and installed a new hot water heater to name just a few of the last minute essentials. We would hate to return to 2 feet of snow and not have been prepared.

Of course, there is going to be plenty to keep us busy the rest of December. It’s a great time for mending fences and trellises, sharpening and repairing tools, splitting and stacking cordwood, and planning for the next season. It’s the time for dreaming up the next project and evaluating its merits, for visiting with friends and building community, for making and distributing all those homestead-based gifts, and for reading a good book by the wood fire after a cross country ski.

Even though I love to visit the south, I’ll be looking forward to returning to the homestead where the soil is frozen and I’m forced to take things slower. Yes, I still can get my hands in the soil in the greenhouse, but that’s a lot less intense than gardening full scale. So, from our homestead, and from the Louisiana gardeners, here’s wishing you all a great holiday season and fruitful down time.
Landworks Farm Evolves
By Suzy Konecky, NOFA/Mass Beginning Farmer Program Coordinator

Kathleen Geary and her partner David run Landworks Farm together in Petersham, Massachusetts. They grow a diverse array of mixed vegetables for their farm stand, a farmers’ market in Petersham, and the North Quabbin Community Co-op. Kathleen and David share the work of running the farm; they both plant, weed, and bring the produce to market.

Kathleen and David enjoy growing the gamut of vegetable crops, but are considering a change for future years. They are toying with the idea of changing their business model to a storage crop CSA, focusing primarily on growing winter vegetables. One reason for the change is that it would help Landworks Farm fill a niche in their local foodscape, while moving away from a heavily saturated market of summer vegetables. “There is kind of a glut of farmers’ markets right now,” says Kathleen. There are three markets on Saturdays in the three towns that touch Petersham, and one on Thursdays in Orange. The wide availability of fresh produce from these markets is wonderful for eaters, but can be challenging for producers. Going to the farmers’ market in Petersham is a lot of time and energy for a small return. Transitioning to a new business model would allow Kathleen and David to produce vegetables and market them a new way. They are only having the preliminary discussions about this, and will spend the winter assessing the potential benefits and drawbacks of the idea.

Kathleen is a mentee in the NOFA/Mass Beginning Farmer Mentorship Program and feels lucky to have a mentor to bounce ideas off of and to help guide her as she makes these decisions. Kathleen’s mentor is Julie Rawson, who farms at Many Hands Organic Farm in Barre, MA. Kathleen has turned to Julie with many questions and ideas. Julie shared her crop-planning schedule, which was useful for Kathleen to see, especially as she contemplates this change on her farm. Kathleen and Julie have also talked about labor, which is a big piece of the overall farm puzzle for Kathleen and David.

Currently the two of them run the farm alone, but they are considering other labor arrangements. They will possibly hire someone to work part time, or perhaps have an apprentice work with them. They currently have friends helping out in a volunteer capacity, but they don’t want to ask too much of them. Kathleen shares that when her brother came to visit this summer she put him and his wife to work weeding for an entire morning. She says, laughing, “perhaps that isn’t really the best model.” Julie has worked with many different labor structures at Many Hands and is able to give Kathleen an honest perspective of the benefits and challenges of different structures.

As a mentee in the Beginning Farmer Mentorship Program, Kathleen was able to use her $100 voucher (given to all mentees for NOFA/Mass events) to attend Michael Kilpatrick’s seminar on farm profitability. Michael Kilpatrick encourages farmers to figure out the cost per row foot of the produce they are growing, “which I found stunning and scary,” says Kathleen. Now Kathleen is combining what she learned from Michael Kilpatrick with what she learned at last year’s Advanced Growers Seminar and is looking at all her notes. She is intrigued by the idea of creating a more careful record keeping system with regards to planting schedules. Currently Kathleen and David keep track of the money that comes in, but they don’t keep track of the production process and timeline. “This is what I have taken from both years at the Advanced Growers Seminar, a record keeping system is needed and it doesn’t have to be fancy.” Creating a simple system will help Kathleen and David evaluate how they can make efficient changes on the farm so that it can better meet their goals.

Kathleen and Julie have also discussed infrastructure related issues, such as irrigation. Right now Landworks Farm doesn’t have any irrigation. In 2012 when it was extremely dry they filled a sap tank with water that
they pumped from an old well and drove it around on a trailer in order to be able to irrigate a few fields. The system was not ideal and they are exploring different options going forward; Kathleen is especially interested in a gravity-fed system.

Checking in regularly with Julie is helpful because Julie’s years of experience inform the guidance she offers to Kathleen. Kathleen is in the process of figuring out what is reasonable for her and David to expect of themselves, given their other work and obligations. They are not only assessing what additional labor might look like, but what is reasonable to ask of themselves, how much time and effort they have to put into this operation, and how to optimize the time and energy that they do have. A mentor is a great person to bounce ideas off of, whether it is for a change in farm business planning, or specific questions about irrigation or pest management.

Finally, Kathleen appreciates the Beginning Farmer Mentorship Program because of the chance to connect with other farmers who are coming to agriculture a bit later in life. She shares, “there are a lot of kids in their twenties...not that there is anything wrong with the young whipper snappers,” but it is helpful to meet others who are coming to it later, and see how people manage and balance it all. “I appreciate the program, and the opportunity to have organization around that.”

NOFA/Mass is NOW accepting applicants for the 2014 Beginning Farmer Mentorship Program. To find out more about the program, please visit us online at: http://www.nofamass.org/programs/mentoring and consider applying NOW. Please contact Suzy Konecky at suzy@nofamass.org with any questions.
Composting Local Food Scraps: Regenerating Soil, Supporting Jobs and Growing Food
By Everett Hoffman, Compost Counselor

There’s a reverberating buzz around composting in Boston! I jumped into my compost career after seeing an overwhelming desire for more composting at the Boston Urban Agriculture Kickoff and Visioning meeting in January 2012. With Article 89, Boston’s urban ag zoning codification, nearing implementation, the time for compost is now.

Last month I hosted a NOFA/Mass Compost Workshop at my home in Jamaica Plain. Here a group of passionate composters had an invigorating conversation about the issue of wasted food and the developing urban compost scene in Boston. Together we began to explore the role composting plays in creating urban closed loop systems and strengthening the urban-rural connection.

Food grown regionally, nationally and globally feeds Boston’s diverse population. As food is processed and consumed, some is inevitably deemed unwanted or unfit for eating. Instead of viewing these scraps as food waste to be sent to the landfill or incinerator, as composters we see them as organic resources for our sustainable growing systems.

To harness this resource, we must educate our community about the value of these scraps and model ways to divert them from landfills and incinerators. These scraps are separated from other trash, taken from the source to processing sites where they can be composted and then delivered to farms and gardens to enhance the soil. Food is then brought back to our community and turned into scraps once more, and so on, in a local closed loop system, sustainably replenishing our soils and ourselves.

While conceptually simple, it takes many hands, minds, and hearts to deal with the challenges and complexities of changing our wasteful system. On the education front, several local initiatives are testing and modeling what is possible. The Boston Natural Areas Network trains urban growers at community composting workshops. Greenovate Boston, the mayor’s office sustainability initiative, recently concluded a pilot program where individuals brought 6,000 lbs of scraps to farmers’ markets throughout the city, drawing a link between waste diversion and greenhouse gas reduction. Local restaurants, such as City Feed & Supply, Life Alive, and BoLoco, encourage customer behavior change with “front of the house” composting. The Food Project, City Growers, Higher Ground Farm, and other urban farms demonstrate the role compost plays in replacing contaminated urban soils to grow food in Boston.

The organics hauling sector is also thriving across Greater Boston. There are several large organics haulers, such as Save That Stuff, a local recycling company that diverts between 10 and 40 tons of organics a day from grocery stores, universities and dozens of restaurants. On the smaller scale, Bootstrap Compost collects two tons of scraps a week from over 630 households and dozens of offices and cafes. CERO, the Cooperative for Energy, Recycling and Organics, is a startup serving businesses in Mattapan, Dorchester and Roxbury. Renewable Waste Solutions collects scraps brought to the Greenovate Boston farmers’ market drop off program.

The last critical component of an urban closed loop...
system is scalable local composting. Backyard and garden composting is abundant in Boston. There is even a municipal composting site, managed by City Soil, which turns the city’s leaves into compost for community gardens. However, there is not a single compost site in Boston that can legally accept food scraps generated off site.

Permitted urban compost sites enable us to process more separated organic resources closer to their point of generation and tighten the closed loop. Haulers and growers will be able to save money on transportation and reduce their carbon footprint. Composting creates meaningful green collar jobs and hands-on educational opportunities. Moreover, when we make composting local, it creates a powerful narrative. Urban compost sites in New York City have had tremendous success in engaging their community. When we can directly show people how the nutrients flow through the system, and how that affects our economy and our lives, the message becomes intimate and relevant.

While we develop ways to harness more organic resources locally, Boston generates far more scraps than we could ever process or use in our dense urban environment. Therefore an urban-rural connection is an essential link in our nested growing systems; urban environments concentrate organic resources and rural environments have the space to compost them to enhance regional agriculture. Haulers currently bring their organics to commercial composters such as Rocky Hill Farm in Saugus and Brick Ends Farm in Hamilton. Bootstrap Compost has partnerships with Buckle Farm in Dighton and Wright-Locke Farm in Winchester. Support for these partnerships is essential, especially as the 2014 Massachusetts Food Waste Ban comes into effect.

In cultivating nested urban and regional closed loop systems, we are able to grow new soil for Boston using our own organic resources—a story we can tell to everyone. Through composting, we can show each person who eats in Massachusetts the value of food scraps and their impact on our closed loop systems: regenerating local soil, supporting local jobs, and growing local food.

Everett Hoffman is a compost advocate working with City Soil and Bootstrap Compost. To learn more about his work developing a commercial food scrap compost site and compost heat capture projects in Boston, email Everett@citysoil.org.
For decades, NOFA/Mass has been organizing and hosting winter and summer conferences, offering hundreds of workshops each year to thousands of farmers, gardeners, homesteaders, landscapers, and consumers. The workshops range from policy topics to nutrition to crop management and more, all with an eye toward using and supporting sustainable organic practices that improve the health and well-being of people and their environment.

Thanks to a grant from the USDA via the Massachusetts Department of Agricultural Resources (MDAR), this year we are capturing the teachings from many of the conference workshops – specifically those related to growing fruits and vegetables – and making them available in our newsletter and online. In doing so, we’re making lessons about organic practices more broadly available, building the beginning of what we hope will become a library of essential information for organic growers.

Look for additional installments in upcoming issues, and the full collection online at www.nofamass.org.

Growing Shiitake Mushrooms In The Woods

Presented and reviewed by Ross Conrad

Shiitake mushrooms are among the most widely grown mushroom in the world, second only to the common button mushroom. Log-grown shiitake mushrooms are relatively easy to raise, certify organic, and use to create a small-scale commercial operation if you have the basics: space, shade, access to hardwood logs and water. Shiitake growing is a great way to make use of forest or marginal land, such as steep hillsides that may not have other uses.

Log-grown shiitake mushrooms tend to be thicker and more flavorful than commercial shiitake grown in sawdust. Hardwood logs, or bolts, for growing mushrooms can be cut from trees on your own land, bought from someone else (usually for $1-$2 per bolt), or occasionally gleaned from road crews clearing trees along your street. The top branches from firewood or lumber trees work wonderfully. Logs from trees cut in late winter or early spring that are full of sap are preferred.

In Japanese, “shii” translates into oak and “take” means mushroom. Thus, red and white oak are the native woods for growing shiitake mushrooms, however they also grow extremely well on sugar maple (Acer saccharum), American hornbeam (Carpinus caroliniana, aka ‘musclewood’), hop hornbeam (Ostrya virginiana, aka “hardack”), and beech (Fagus grandifolia) trees. Most folks use logs that range in diameter from a minimum of 3 to a maximum of about 8 inches and are about 3 feet long. This provides a sizable log that will not dry out too quickly but is still relatively easy to move around by hand.

Once obtained, allow the logs to sit in a shaded area for anywhere from about 3-8 weeks before inoculating them with shiitake spawn. While a regular drill will work for drilling the inoculation holes, for commercial production a high-speed drill or angle grinder with a special drill bit and drill stop should be used to speed up the process. The size and depth of the holes will depend on the type of spawn used. Once the holes are drilled, fill them with the spawn in order to bring the shiitake mycelium in contact with its new food source—the log.

Once filled, the holes and areas where the tree bark has fallen off should be coated with a layer of melted food-grade wax. This will help to retain moisture and prevent competing fungi from contaminating the log. The logs are then left
in a shaded area for 6-18 months to allow the mycelium time to grow throughout the log. This is known as the ‘spawn run’. Many growers will stack the logs on top of each other in rows of four or five for four or five levels high. This type of stack, known as a crib or rick stack, makes use of vertical space to compactly store large numbers of logs. Within 4-8 months, the white mycelium growth of the shiitake should be visible on the ends of the bolts indicating healthy colonization of the logs.

For commercial production you will want to stimulate a set of logs to fruit all at once so that significant numbers of mushrooms are ready to pick and deliver around the same time. This is accomplished through the forced fruiting method of production known as shocking. Logs are submerged in cold water for 12-to-24 hours. The change in temperature and the increase in the log moisture content stimulates the shiitake mycelium to fruit. During the fruiting and harvest stages logs are stacked differently in order to aerate the logs and make the mushrooms easy to see and pick. Stacking the logs against a fallen tree trunk or a sapling lashed horizontally between two trees in an A-frame configuration works well for this. Depending on the temperature and humidity levels, shiitake may be ready to harvest anywhere within 4-12 days after shocking.

Shiitake mushroom are ready for harvesting when the veil under the cap is broken and the cap is about 70-75 percent open. Mushrooms with caps that are fully open are still edible, but since the mushroom will continue to mature after harvest, picking the fruit while the edges of the cap are still slightly curled under ensures that your customer will receive the highest quality mushroom you can offer. Logs can be allowed to sit and fruit naturally following a heavy and lengthy rainfall. Natural fruiting will result in fewer mushrooms, but the mushrooms will tend to be significantly larger than those that are produced from logs that are forced to fruit through shocking. While much depends on the strain of Shiitake being grown, most logs should be allowed to rest for about 8 weeks before being shocked again for a second harvest. Keep harvests to twice a season if you want logs that will last for four or more years.

Keep in mind that the actual process of producing log-grown shiitake mushrooms tends to be a bit different for each grower as changes are made to accommodate each producer’s climate, land, and resources, as well as spawn type and markets. This short outline of the process should give you a good idea whether log-grown shiitake mushrooms will fit well into your operation.

Some suggested resources:
Northern Forest Mushroom Growers Network:
http://blogs.cornell.edu/mushrooms/factsheets/

Field and Forest Products
N3296 Kozuzek Rd.
Peshtigo, WI 54157
800-792-6220
http://www.fieldforest.net

American Mushroom Institute
One Massachusetts Ave, NW, Ste. 800
Washington, DC 20001
202-842-4344
http://www.americanmushroom.org


Growing Organic Cucurbits: Cucumbers to Zucchini

Presented by Atina Diffley
Reviewed by Adam Dole

At the outset of her talk Atina Diffley steered the audience to the farmer’s resource page of her website, www.atinadiffley.com. There you can find links to many helpful sites and publications covering all aspects of organic farming.

She says successful production of organic cucurbits starts with soil building. To build the depth of loose soil on her farm, 50% of the land is in soil-building cover crops at any one time. She recommends the following titles to all organic farmers: Building Soils for Better Crops, Managing Cover Crops Profitably (available free online from SARE), and also SARE’s organic crop rotation guide (also free online).
Cucurbits are the most sensitive of the vegetables to soil conditions; site selection is critical. When beginning the season’s crop plan, select the sites for cucurbits first, and put them on lighter land. The origins of many cucurbit crops are dry regions and even deserts, Diffley explained. Therefore cucurbits thrive in sandy, well-drained soils, not clay. Also, on her farm they rotate land planted to cucurbits multiple miles apart for pest and disease control.

Pests
Atina advises farmers to understand the life cycles of insect pests in order to effectively control them. She guided us through her strategic thinking process and shared resources for combating a number of cucurbit pests.

**Striped Cucumber Beetle**
This insect vectors cucumber wilt and also bacterial wilt. Adults feed on the leaves of cucurbit plants, spreading disease. Larvae feed on plant roots. The Striped Cucumber Beetle overwinters in crop/weed debris, bordering vegetation, woodlots, and fence rows. In order to eliminate overwintering habitat, Diffley recommends clean and thorough deep cultivation, compost application and cover cropping in the fall, to facilitate decomposition of debris where beetles could overwinter. Rotation is only effective if over a very long distance.

Since Striped Cucumber Beetles emerge in late April or early May when temperatures reach 55-65 degrees, delaying planting until after June 10th is an effective strategy for control. Obviously for crops you want to bring to market early, delayed planting is not a good option. In such cases trap cropping is an effective strategy. Two methods of trap cropping were discussed. The first involves planting susceptible cucurbits in last year’s cucurbit field, and spraying or burning beetles as they emerge. Second, surround your primary cucurbits with a susceptible trap variety two weeks prior to your main crops. Plant multiple rows if pressure is heavy, and be sure to completely surround the main crop plants. Control beetles in the trapcrop with Pyganic and monitor the pest population. Row cover can also be used until the threat of Striped Cucumber Beetle has passed.

**Aphids**
Too much nitrogen attracts aphids, advises Diffley.

**Squash bugs**
The highly toxic saliva from Squash Bugs, which mainly feed on plant foliage, causes the leaves to wilt and entire plants to sometimes die. The fruits are also fed upon. This pest overwinters as an adult in cucurbit fields, crop debris, and adjacent woodpiles or buildings. Clean cultivation is a good management strategy. In northern climates Squash bugs produce one generation per year. Squash bugs do have natural enemies such as parasitic wasps. Diffley recommends piling old squashes in the autumn, which attracts the Squash bugs, and burning the pile to kill overwintering adults.

**Vine Borers**
This pest overwinters in crop debris in soil to 2 inches deep. Removal of crop debris and clean cultivation are effective for control.

Diseases
**Fusarium Wilt**
This fungus can survive in the soil for many years. It can be spread by wind or on equipment. The best defenses against Fusarium wilt are using certified disease-free seed, using resistant varieties, and rotating crops out of a particular soil for at least 3 years. Atina recommends the NC State resistant cultivar list. Always wash cultivation equipment thoroughly before entering a new field.

**Blossom End Rot**
This disease is a Ca deficiency in the plant, though not necessarily in the soil. There may be adequate calcium, but the plant cannot access it. Roots may not be developed enough. Soil microbes are needed to access soil Ca.

In general, wider plant spacing in the field allows for more air circulation and helps prevent disease. Atina plants cucurbits 7-9’ between rows.

Healthy plants with vigorous roots do not require soil-test nutrient levels as high as conventional systems. Avoiding excess nitrogen application is a first step toward controlling aphids. Aphids vector hundreds of viruses which they carry on their mouth parts. Barrier trap crops, such wheat, can alleviate the spread of viruses by cleaning the mouthparts of the aphids. Applications of non-selective herbicides can increase aphid populations. Aphids have many natural enemies including lady beetles, lacewings, parasitic wasps, hoverfly larvae, damsel bugs, and soldier beetles.
Transplanting Cucurbits
According to Atina, striped cucumber beetles can smell cucurbits seed germinating, and so planting out transplants can allow your plants to outgrow beetle attacks. She uses two seeds per cell. Allowing the plants to become slightly root bound is good. She uses a low-tunnel laying machine for early cucurbits, including cucumbers. Having cucumbers before other farmers is a huge economic benefit. She doubles the size of her first cucumber planting because the demand for the first cukes of the year is extraordinarily high (she makes her most money on the first planting). “Stay in the market,” she advises. “Never break the delivery pattern” to customers.

Pollinators
Pollinators are very important for cucurbits; they require multiple visits for adequate pollination.

Irrigation
Atina uses only drip irrigation on cucurbits. In general, she does not recommend regular irrigation, unless required to keep the crop alive, until fruiting begins. Allowing cucurbits to be a bit dry causes the plant to develop vast root systems. Normally she will not irrigate watermelons unless a large rain is expected following extended dry weather. A buffer irrigation before the large rain event can preserve melon quality.

Cultivation
Cucurbits have extensive root systems that extend beyond the area covered by vines. At 6 weeks old, root systems are well developed, and cultivation deeper than 1” is detrimental.

Harvest, Washing, and Packing
Use of good technologies can save a lot of physically wearing labor. Harvest washer/conveyors save farmers’ wrists, hands, and backs of farmers. They are available through Roeter’s Farm Implements. Also, 3 point hitch forks on the back of the tractor can carry bins which can be filled with melons or squash for delivery to minimize handling of these heavy crops.

Growing Excellent Tomatoes

Presented by Amy LeBlanc, Whitehill Farm
Reviewed by Shawn Ilinitch

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Growing excellent tomatoes requires understanding your plants’ unique needs throughout each stage of its life, according to veteran farmer Amy LeBlanc, owner and operator of Whitehill Farm in East Wilton, Maine. During the summer, she and her husband grow tomatoes, peppers, eggplants, and culinary herbs. They also participate in farmers’ markets and sell products online.

The first step in growing excellent tomatoes is determining your desired planting date. LeBlanc suggests starting seedlings 6-8 weeks before the last anticipated frost, with adjustments made if you plan to use a greenhouse or hoop house. LeBlanc estimates her last frost date around Memorial Day, so she aims to start her seedlings around April 1.

LeBlanc chooses a lighter potting soil that is compost-based. She finds that soils that are rich in peat do not allow her plants to breathe and develop properly. She spaces her seeds in 6 by 9 inch trays with approximately ½ inch spacing (3 rows of 12 seeds per tray). When potting, she tries to mound the soil slightly, which keeps the soil level near the outer edge of the tray and prevents a pool and moist air at the soil surface. The mound will settle with watering.

At this stage in their lives, tomatoes need two things — warmth and moisture. Since light is not necessary, LeBlanc keeps her seed trays on top of heat mats in her bathroom. Optimal germination temperature is between 70-80 degrees, and moisture must be maintained in the soil mixture. Usually it takes 6-14 days for germination.
The needs of tomatoes begin to change after germination. At this point in their lives, tomatoes need light and less heat (although they must be kept above 55 degrees). A windowsill may not provide enough light. The seedlings also must be checked regularly to see if they are leaning toward the light. If so, they must be adjusted. LeBlanc has found the most success using fluorescent lights positioned about 3 inches above the seedlings. She uses two different bulbs to provide full spectrum lighting. Each lamp has two different bulbs – a 6500K blue spectrum and 4800K red spectrum.

Once the seedlings have developed their second true set of leaves, they are ready to be transplanted into individual containers. According to LeBlanc, it is the height of the seedling that is most important. Because of the close spacing she began with when seeding, by now her plants have grown tall, allowing for deep burial. The seedlings should be buried to their first set of true leaves, allowing roots to form along the remainder of the stem.

In 7-8 weeks, the seedlings are nearly ready for the garden. Plants should be hardened off before they go to the field. They should be left outside in a shady area protected from wind. Each day their exposure to sun should be increased, and they should be ready in a few days.

When transplanting, plants should be placed as deep as possible in a well-drained soil that is rich in organic matter. LeBlanc removes the bottommost leaves of her plants and buries them up to the remaining first true leaves. While she doesn’t use trenching (burying the plant sideways at an angle to develop more roots) she says it can be effective if you want to grow taller plants. LeBlanc mulches immediately after planting and then waters her plants. She uses a mild fish emulsion for a week or side dresses with compost or an organic granular fertilizer. When blossoming begins, LeBlanc does a foliar feed (applying fertilizer directly onto the leaves) using a very mild fish emulsion.

Tomato growers have options for supporting their plants, including stakes, cages, and trellising, according to LeBlanc. If using traditional cages, you need to drive a tall stake into the northwest side to prevent it from tipping over later in the season. LeBlanc says she makes large, heavy duty towers made of concrete reinforcing wire. These cages, buried deep, do not need the additional stake and can be used forever.

Once transplants have firmly established themselves, their needs change once again. To understand the growth of tomatoes, one must know the two stages of vegetable growth. During the vegetative stage, when a plant uses the products of photosynthesis to grow more stems and leaves, growth is the priority. The priority shifts to fruit and seed production during the generative growth stage. tomatoes can undergo both stages simultaneously.

LeBlanc says she continuously monitors the top 8-10 inches of the plant; this represents the most recent growth. Signs of vegetative growth include thick stems, light yellow flowers, heavier foliage, and small fruits that are slow to ripen. Generative growth characteristics include thinner stems (especially at the top 7-10 inches of growth), darker yellow flowers, sparser and lighter green leaves and larger fruits that ripen promptly.

When tomatoes have reached their mature stage, growers can encourage ripening by reducing vegetative growth. At this point, no fertilizer should be applied. Growers should water much less frequently, but they should water deeply when they do. Cooler nights that occur later in the season also encourage the generative stage. According to LeBlanc, when you stress plants they feel the need to finish their life cycle by producing their fruits and seeds.

Finally, even the most veteran tomato growers may face diseases and pests. LeBlanc says it is important to recognize the difference between diseases and cultural and environmental factors such as overwatering, drought stress, or temperature. For example, blossom end rot is a secondary infection that indicates a calcium deficiency that can be caused by uneven watering.

LeBlanc suggests the following websites to diagnose nutrient deficiencies and diseases in tomato plants:

- [http://vegetablemdonline.ppath.cornell.edu/DiagnosticKeys/TomWilt/TomWiltKey.html](http://vegetablemdonline.ppath.cornell.edu/DiagnosticKeys/TomWilt/TomWiltKey.html)

Daily scouting is necessary to reduce pest problems. LeBlanc says she has found success checking her plants every night with a handheld black light to help locate tomato hornworms. The worms can be easily distinguished from the plants using this method and easily picked and destroyed.
To organic farmers everywhere for treating their animals and earth with care and treating us with some of the finest organic ingredients around, thanks.

Donegan Family Dairy, VT. One of the Organic Valley family farms that supply milk for our yogurt.
Blue Heron Organic Farm  
PO Box 67, Lincoln, MA  
781-254-3727, farmer@blueheronfarmlincoln.com  
www.blueheronfarmlincoln.com  
We sell to many Boston area restaurants; please see website (click on ‘Restaurants’) for seasonal availability. The farm stand is open June-October, please visit website for more information about farm stand hours and farmers’ markets.

High Meadow Farm  
28 High St, Hubbardston, MA  
978-928-5646, jassy.bratko@gmail.com  
www.highmeadowfarms.com  
Farm stand open 9 a.m. to dusk daily. Certified organic apples, 100% grass-fed beef, woodland raised pork, pure maple syrup and honey.

Ladybug Farm Produce  
143 Williamsville Road, Hubbardston, MA  
978-928-3731, ladybugfarmproduce@gmail.com  
ladybugfarmproduce.webs.com  
Tuesdays to Thursdays noon to 7:00 p.m. Closed 12/24, 12/25, 12/31, 1/1/14. Herbal vinegars, homemade jams & jellies, 2nd cut organic hay, organic eggs, sewing items (check website).

Long Life Farm  
205 Winter St, Hopkinton, MA  
508-596-1651, laura@longlifefarm.com  
www.longlifefarm.com  
Closed for 2013 season. 2014 CSA Vegetable Shares go on sale 1/1/14, certified organic.

Many Hands Organic Farm  
411 Sheldon Road, Barre, MA  
978-355-2853, farm@mhof.net  
www.mhof.net  

Marlborough Street Farm  
127 Marlborough St, Springfield, MA  
413-782-2136, brennanstaub@gmail.com  
Community Supported Agriculture pick-ups are Monday, Wednesday, and Friday between 4:30 and 6:30 p.m. Diversified organic vegetables and fruits, preserved goods.

Red Fire Farm  
Granby Farm Stand at 7 Carver St, Granby, MA  
413-467-7645, thefarmers@redfirefarm.com  
www.redfirefarm.com  
Our Winter Farmers’ Markets start on Saturdays in Nov, Dec, or Jan in Springfield, Amherst, Northampton, Greenfield, Wayland, and Cambridge. See our website for details. Winter Vegetables of all types (sweet potatoes, carrots, onions, potatoes, candy-stripe beets, garlic, turnips, kohlrabi, winter squash & more). Also winter greens like salad mix, spinach, kale and bok choy. Discounts on Bulk Orders if you want to do your own storage - visit our website for the list of produce and prices. Deep Winter CSA Shares available - organic winter greens and winter vegetables, plus local treats - from January through March. Visit our website for locations and to sign up online!

From Field to Fridge  
Farms listed in the NOFA/Mass Organic Food Guide have the opportunity to highlight here what they currently have available for sale. Pick up some of their goods and help support your local organic and sustainable farmers today!

To access a farm’s full Organic Food Guide listing, click on that farm’s name.

If you would like your farm or business listed on the Organic Food Guide website, contact Rebecca Buell at foodguide@nofamass.org or 978-724-3561.
**Robinson Farm**  
42 Jackson Road, Hardwick, MA  
413-477-6988, info@robinsonfarm.org  
www.robinsonfarm.org  
Winter Farm Shop hours 7 a.m. to 6 p.m. daily. Check our website for retail locations.  
Offering our “Award winning” Farmstead aged cheeses (cow), our grass-fed beef/veal, raw milk,  
Sidehill Farm yogurt, Westfield Farm goat cheese,  
Hardwick Sugar Shack maple syrup, High Meadow Farm pork, local honey, jams, crackers, and “Real Pickle” fermented veggies.

**Sidehill Farm**  
58 Forget Road, Hawley, MA  
413-339-0033, info@sidehillfarm.net  
www.sidehillfarm.net  
Our farm shop is open year-round, seven days a week, 7 a.m. to 9 p.m. Raw milk, yogurt, beef, our just-out-of-the-cave Hawley Blue cheese, and our farm-shop-only sour cream. All from our grass-fed cows and available in the farm shop. Come visit!

**Tracie’s Community Farm, LLC**  
72 Jaffrey Road, Fitzwilliam, NH  
603-209-1851, farmertracie@hotmail.com  
www.traciesfarm.com  
We have carrots available in 25lb bags for $30. Email to order and we’ll have a bag waiting for you with your name on it. You can leave payment in our farm store lock box. We’ll also have local cheese and ice cream available until sold out in the farm store.

**White Barn Farm**  
458 South St, Wrentham, MA  
774-210-0359, info@whitebarnfarm.org  
www.whitebarnfarm.org  
Three more weekends! Farm stand in the barn:  
Fridays noon to 6 p.m. and Saturdays 10 a.m. to 2 p.m. December 6 & 7 will feature a local craft market.  
The solstice is our season finale! Beets, celery root, parsnips, Gilfeather turnips, rutabaga, watermelon radishes, Black Spanish Radishes, Purple top turnips, storage kohlrabi, green cabbage, red cabbage, gnome cabbage, parsley, sage, thyme, and possibly kale, salad mix, spinach, and baby bok choy. See the website for updates. We bring in fresh eggs from Puddingstone Organics and Pat’s Pastured. We have Franklin Honey and Liberty Farm Maple Syrup. We sell fresh roasted coffee beans from Sheldonville Roasters and fresh baked bread from Iggy’s Bread. We have been buying in potatoes, sweet potatoes, winter squash and now probably onions and carrots from local farm friends who use organic methods.  
Jordan Brothers Seafood truck is at the farm stand Fridays 2 to 6 p.m. and Saturdays 10 a.m. to 1 p.m. Check out our website for up to date details.
Events

OUT HERE: Queer Farmer Film Project, with director Jonah Mossberg
+ My Gay Banjo live acoustic set
Sunday, December 15 - 5pm to 8pm
The Root Social Justice Center, 28 Williams St, Brattleboro

The Vermont Premiere of the queer farmer documentary OUT HERE: A Queer Farmer Film Project. Director Jonah Mossberg will be at the event. The movie will be followed by an acoustic performance by My Gay Banjo.

Donations encouraged to pay for travel costs for director & performers.

For more info, contact homopromovt@gmail.com

Free Farm Commons Webinars - Community Supported Agriculture Legal Issues
The nonprofit firm Farm Commons is hosting eight free webinars this winter on a variety of legal issues faced by farmers who sell directly to consumers.

Schedule of upcoming webinars:
Community Supported Agriculture Legal Issues – December 17
Hosting On-farm Events – January 13
Workers and Employees – January 28
Selling Products to Larger Buyers – February 10
Starting a Farm – February 25
Adding Value to Farm Products – March 10
Food Safety Liability and Regulations – March 25

Free. For more info and to register, visit http://www.farmcommons.org/webinars

Seed School
January 12 – 17, 2014
Hampshire College, Amherst, Massachusetts
Seed School is a groundbreaking, six-day educational course that trains people from all walks of life to build local seed systems rooted in the ancient tradition of seed saving. Students walk away from this innovative learning experience with the knowledge and inspiration to start their own independent seed initiatives, such as community seed libraries and exchanges, seed growers cooperatives, heirloom seed businesses, and participatory plant breeding projects.
Announcements

Looking for Lead Farmer

Located in Kingston MA, Greenway Farm has a full time opening position for a full time LEAD FARMER. We need you to have experience with greenhouses, aquaponics, bees, fish, compost, vermicompost, chickens, thermal, wood chip heating systems, and of course knowledge about plants and trees (diseases, growth, care, etc).

We seek to pull the best from both worlds: intelligent and effective systems, and systems that help to undo some of the damage wrought by the Industrial Age.

There is fully equipped RV trailer to live at in the farm.

For more information, contact Mary O’Donnell (617) 688-6088 or mary@nofossilfuel.com.

Farmers needed in Africa

International volunteer opportunities - we need your farming skills!

GHANA or UGANDA: Teach at Agricultural College; no teaching or university experience necessary. We need farmers with a strong background in organic farming, permaculture and/or sustainable agriculture.

CAMEROON or INDONESIA: Organic farming. Farmers in the rural villages are just starting to learn organic farming and sustainable agriculture. They are eager to learn more about composting; rain water harvesting; drip irrigation; soil improvement & crop rotation so that they get much better yields.

For more info, visit http://www.ngoabroad.com/ and send answered Questionnaire and resume to: info@NGOabroad.com

These are volunteer opportunities. Applications are accepted on a rolling basis.

Massachusetts Farm Bureau Wins Six National Awards

Massachusetts Farm Bureau Federation (MFBF) is pleased to announce that it has received recognition from the American Farm Bureau Federation (AFBF) for winning six out of six Awards of Excellence in the following areas: Education and Outreach, Leadership Development, Member Services, Membership Initiatives, Policy Development & Implementation, and Public Relations & Communications.

For more information, visit http://bit.ly/1iGNyKx

Ag Day at the Statehouse

Save the Date - Agriculture Day at the Statehouse will be Wednesday, March 26, 2014.
New and Renewing NOFA/Mass Members in October and November

Monique Allen
Mrs. Annye Anderson
Harmonie Arcisz and Dennis O’Loughlin
Karen Barlow
Alyssa Bauer
Joshua Baum
Dan Bensonoff
Annette Bodley
Richard Boucher
Jen Boudrie
Esther Braun
Karen Bray
Cape Cod Home Staging Co
Anne Cavanaugh
Edward Chapman
Jim and Ariana Coate
Elena Colman
Concord Free Public Library
Betsy Corner
Anthony Costello
Nancy B. Couper
Duncan and Cynthia Cox
Leslie Cox and Nancy Hanson
Cutting Edge Grass Seed
Aysim Dalmau
B.J. Daniel
Ellen de Lemos
David DeGhetto
Santo DeMauro
Dismas Family Farm
Fred and Libby Eustis
Jonathan Fedus
Clio & Eric Fisher
Laurie B. Gates
Lendine Gauvin
Sharon Gensler & Pru Smith
Rachel Gilbert
Phil Gilfeather-Girton
Donna & Richard Gilmore
Doris Goodwin
Richard Gordon
Paul Grady
Christine Greene
Nancy Grimes
Jeannine Haendiges
Elizabeth Harris
Caitlin Herlihy
Kristine Hoag
Homemade Today
C Linda Howitt
Mike Iannoli
Leo & Marjorie Immonen
Catherine Ives
Beth Jackson
Erik Jacobs
Wayne Jaquith
Venette Jean-Pierre
Maryanne Jule
Ilsa Jule
William Kadish
Mary-Kate Kane
Leslie Kelly
Suzy Konecky
Anthony Kostek
Dale LaBonte & V. Irvine
Frank & Bernadette Lagrant
Francoise LaMonica
Ellie Lassiter
Raeann LeBlanc
Jeanette LeBlanc
Rebecca Leung
Megan Lewis
Leanne Limoges
Emma & Milton Hanzel Linderman
Johanna R Lynch
Anne Maddocks
Crystal Maloney
Geoff Mamlet
John Mandler
Kim Matland & Linda Farmer
Billy and May McCaffrey
Sarah McClean
Lucy McKain
Mary Miller
Nasrin Morovaty
Jessie Myska
Matthias Nevins
Dana Nicoll
John O’Keefe
Maryann Palchak
Scott Parsick
Robin V. Peters
Margiana Petersen-Rockney
Winton Pitcoff and Michal Lumsden
Rachel Playe
Kristen Ploetz
Serena Putterman
Nancy Quigley
Louise Racine-Bastarache
Becky Reed
Dawn Reidy
ReVision Urban Farm
John Rice
Alison Robb
Catherine Rooney
Kate Rossiter & David Pontius
Ned Rossiter
Elizabeth and Ben Schodek
Lee Shane
Sarah and Keith Shields
Abraham Smith
Marilyn Ray Smith
Heidi Thunberg
Carol Tinkam
Fran Vantreese
Sandra Walsh
W Weimar
Brooke Werley
Jean White
Wild Oats Market
Toni Young
Thank you to Fall Appeal Donors in November

Robert Banning
Gregory Barnett
Gwen Blodgett
Sierra Heath Bright
Katie Campbell-Nelson
Cape Cod Organic Gardeners
Derek & Katie Christianson
John Delmolino
Distinctive Landscape Company
Carl Fawcett
Sarah Gant
Jamie Hall
Allen Healy and Caitlin Jones
Arthur Hildreth, Jr
Susanna Hilfer
John Hoffman & Kate Stevens
Sandra Hume
Jean Iversen
Barney Keezell
John La Stella
Lydie Labaudiniere
Kimberly Ladue
Emma & Milton Hanzel Linderman
Barbara Link
Susan Lozoraitis
Margaret A Lynch
Jean Maestre & James McAuliffe
NinaMarcinowski and Family
Jacqui Marsh
Masao’s Kitchen
Erin & Daniel Matica
Richard McNulty
Ervin & Gloria Meluleni
Phyllis Mettauer
Paul Peckham
Sam and Charlotte Perkins
Odessa Piper
Susan & Tom Powers
John Reinhardt
Rev. Janet V. Sandquist-Skagerlind
Judith Seelig
Robin Silva
Cal Sleczer
Maureen Sperry
Vera Spohr Cohen and R. B. Bigelow
Jack Stacy
Liz Strachan
Mary Trumbauer
Peggy Ueda
Jim Watkins

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Ask for Kristie Schmitt.
NOFA/Mass Workshops & Events

Check our website for new workshops and updated details:
http://www.nofamass.org/events

27th Annual NOFA/Mass Winter Conference
January 11, 2014 - 7:00am to 7:30pm
Worcester State University, Worcester

Organic Lawn & Turf Course at NOFA/Mass Winter Conference: Changing the Landscape of Landscaping
January 11, 2014 - 9:00am to 5:00pm
Worcester State University, Ghosh Sci/Tech Center (Rm 102), Worcester
$80 NOFA Members/ $100 Non-members (If registering by December 15, 2013)
Veteran instructors will offer practical, applicable information about organic lawn and turf management techniques.

Seasonal Organic Dinner with Mark Shepard
January 11, 2014 - 6:00pm to 7:30pm
3rd Floor of the Student Center- Lancers Loft Dining Hall, Worcester
$24 NOFA members; $30 non-members
Join Mark Shepard for a seasonal and organic dinner immediately following the Winter Conference.

Soil and Nutrition Conference: With Graeme Sait and Joel Williams
February 2, 2014 - 9:00am to February 4, 2014 - 5:30am
Anthonys, Somerville
By January 18: $195 for NOFA or BFA members; $244 non-members
By January 29: $210 for NOFA or BFA members; $263 non-members