

SPRING 2012

SMALL FARM QUARTERLY

Good Living and Good Farming – Connecting People, Land, and Communities



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SMALL FARM QUARTERLY - SPRING 2012

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Cover photo: Ben Falk holding a harvest of brown, short-grain japonica
rice from his farm in Moretown, VT. Photo by Jeb Wallace-Brodeur

SMALL FARM QUARTERLY

Good Farming and Good Living —
Connecting People, Land, and Communities

Small Farm Quarterly is for farmers and farm families — including spouses and children - who value the quality of life that smaller farms provide.

OUR GOALS ARE TO:

- Celebrate the Northeast region's smaller farms;
- Inspire and inform farm families and their supporters;
- Help farmers share expertise and opinions with each other;
- Increase awareness of the benefits that small farms contribute to society and the environment.
- Share important research, extension, and other resources.

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Cornell Small Farms Program Update

Announcing 2012 Small Farm Grant Awards

Each year, the Cornell Small Farms Program awards grants of 3-5K to organizations in New York that present compelling projects that will serve and support small farms. This year, four proposals were selected. "Bringing the sheep goat marketing website back home" will focus on modernizing and updating the popular marketing directory located at the address www.sheepgoatmarketing.info. The second project, "Assessing Local Foods Distribution Systems: Farmer Experiences and Models for Building Successful Farmer-Distributor Relationships" will interview farmers to identify what farmers need to do to comply with distributor purchasing requirements, how it impacts marketing practices, cost of marketing, risk management, product pricing, and

overall farm viability. The goal is to be able to better inform small farmers about how to successfully conduct wholesale sales and gather some benchmark data about impacts of wholesale sales on small farms. "Promoting Workplace CSA in the Southern Adirondacks" seeks to help work sites and community centers within the greater Glens Falls region investigate the feasibility of sponsoring a CSA. Finally, "Chenango Regional Video and Social Media Grazing Outreach Program" will provide grazing farmers with information on grazing best practices, and to serve as forums where grazing farmers can share questions or successes with other farmers or agricultural educators. We'll be publishing resources and findings from these projects as they become available!

Small Farms Program to Host Dairy Field Days

In an effort to bring visibility to the innovations of New York's small dairy producers, the Cornell Small Farms Program is providing financial support to Cooperative Extension Educators wishing to host small dairy field days during summer, 2012. We plan to fund a total of six field days in regions across the state on dairy farms milking under 100 head. Field days will take place between June 1st and September 20th and will highlight innovative production or marketing strategies that represent new opportunities to enhance small dairy viability in NY. If you are a dairy farmer or cooperative extension educator in NY and would like to participate, please contact us! We'll be announcing the field day schedule on our website in late spring, www.smallfarms.cornell.edu

Small Farms Summit, an interactive meeting with an opportunity for all participants to take part in lively discussion, both locally, and across the state. 150 farmers and supporters gathered at 5 locations around New York to evaluate emerging opportunities and prioritize investments to enhance the viability of small farms. Some of the new emerging issues from the audience included: research and extension around agroforestry, including silvopasturing, forest products and alley cropping; enhancing online communities for farmers to exchange ideas, equipment, land; consumer education around small-scale locally produced food; Liasons/educators to convey NYS Agriculture and Markets regulations to farmers. The Small Farms Program will spend the next two months synthesizing results from the multi-site conference and be publishing a report in early June. It is our hope that the report will inform educators, researchers, policy makers and community organizations the major areas in which to invest support for small farms over the next 5 years.

We Want To Hear From You

We welcome letters to the editor - Please write to us! Or send a question and we'll do our best to answer it. We're also looking for beautiful, interesting and/or funny small farm photos to print.

Write or email Violet Stone,
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Small Farms Summit a Success!

On February 29th, we hosted our 3rd

Message from the Managing Editor

Happy Spring!

Looking out the window of the Cornell Small Farms Program office here in Ithaca, NY, the crocuses and aconites have burst into bloom, and students are luxuriating in the warm, kind breezes arriving earlier than usual. For many, the surprise descent of warm weather is a reason to celebrate, to roll up your sleeves, and dust off that lawn chair set from the basement and relocate it in the sun. But, volatile spring weather can also bring anxiety over trees budding prematurely or a sudden hard frost ruining a warm season planting. No wonder everyone is talking about the weather; it can make a fruitful crop, or a sparse one, and there is little we can do about it.



Violet Stone

With so much risk involved, why do people farm? I encourage you to take a look at Mason Donovan's article, "Tomato Therapy", where he explores spiritual reasons for why people are drawn to farming. Solace, beauty, solitude, and sense of purpose are among his findings. For additional perspectives, check out Jill Swenson's Book Nook column featuring "Small Farm Memoirs". She describes one author's reasoning: "It is discovering the wrenching pleasure of exhaustion from physical labor and that good food is the best reward"

Whether the warm Spring days are bringing you comfort, or bringing you uncertainty, I hope the growing season ahead turns out to be a fulfilling one. As always, we would love to hear from you! Drop us a line anytime!

Sincerely,
Violet Stone

Join the Cornell Small Farms Program on Facebook!

You can now receive small farm news, events and much more on Facebook! This venue will help us to continue providing great resources to the Northeast community without cluttering your email inbox! Visit Cornell Small Farms Program on Facebook and click the "Like" button to see our resources pop up in your newsfeed.

Farm Memoirs

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COMMUNITY AND WORLD**Gleaning More of New York's Harvest**

By Rebecca Schuelke Staehr

A new collaboration among farmers, Cornell University and New York's food banks aims to increase the amount of gleaning, or food donated directly from farms to the state's hungry.

Gleaning is an ancient concept, thought to date to Old Testament times, and carried through the medieval feudal system, when farmers and large landowners were encouraged or required by law to allow the poor to gather crops in the field after the harvest. In contemporary times, gleaning generally refers to volunteers collecting food from fields and donating the goods to food banks or pantries that serve the poor. Food may be left behind because of mechanical harvesting losses, cosmetic blemishes to the produce, lack of markets for the crops, and other reasons, including the desire to help others. Today, gleaning also refers to food donations out of farmers' packing lines and storage houses.

New York farmers are no strangers to donating food. In 2010, New York farmers donated more than 5.6 million pounds of food, according to New York Farm Bureau. "I would like this project to get bigger and bigger," said Joan Smith, a dairy farmer from New Hartford, NY. Smith recruited five neighboring dairy farms, in addition to her own, to donate beef to the Food Bank of Central New York. The food bank used grant funds to pay the costs of processing and packaging the meat at a federally-licensed slaughterhouse, and to make deliveries to local food pantries.

Cornell's gleaning project was launched in the summer of 2011, inspired by farmers who contacted Cornell about their interest in seeing an increase in donations of food from the farm. Recent projects and research tended to focus on the benefits of farm gleaning efforts to the hungry, but often overlooked the benefits and risks, especially liability, for the farmer. Cornell Cooperative Extension, the New York State Agricultural Experiment Station at Geneva, and the Cornell University Agricultural Experiment Station collaborated on a research effort that reviewed gleaning efforts in New York State, including opportunities and obstacles.

Among the top findings is that strong interest exists in expanding gleaning efforts. This interest comes from many sectors: farmers, hunger relief agencies, agricultural advocates, and others. A few major limiting factors are: increasing knowledge about gleaning as an option, how to access gleaning programs, and suitable logistics for a successful gleaning effort. The logistical concerns include delivering food to those that need it most in an economically viable manner, ensuring food safety, and preventing farmers from incurring additional expense. The study also found that farmer liability, especially in allowing volunteer harvesters on private property, may be greater than many assumed.

The United States has long been known as a land of plenty-and paradoxically, a nation where hunger continues to plague the population. The USDA estimated in 2009 that 14.7 percent of the population, or 17.4 million households, were "food insecure," or "were, at times, uncertain of having, or unable to acquire, enough food for all of the household members because they had insufficient money and other resources for food." Nationally, 5.6 million households, or 4.8 percent of the U.S. population, obtained emergency food from food pantries one or more times during the year, according to 2009 government data.

The eight regional food banks that comprise the Food Bank Association of New York State distribute food to 5,000 local food pantries, emergency food kitchens,

low-income senior nutrition programs, and other hunger relief agencies. These efforts feed more than 3 million people annually, according to the Food Bank Association of New York State. Food banks typically receive food donations from grocery stores, food manufacturers, wholesale brokers and distributors, and the government, with lesser quantities of food coming directly from individual and group efforts such as local food drives.

Food bank directors said they are interested in New York farmers as sources of food for donation because the food is locally grown, farmers are perceived to be community-minded, and New York lacks the volume of food processing and manufacturing facilities that are sources of donations in other states. "We have got to go to the source to get food donations. The more money that is invested in the product (as it moves through the supply chain), the harder it is to get it donated," said Peter Ricardo, director of special nutrition projects for the Food Bank of Central New York.

The majority of food donated from New York farmers is fruit and vegetables, but also includes dairy, eggs and meat. Food bank directors said apples, onions, potatoes, and cabbage were the bulk of donated produce, along with lesser amounts of tomatoes, sweet corn, summer squash, winter squash, and other items. "Generally the produce that is donated has been harvested, but not sold. It may come right from the packing line or cold storage," said Joanne Dwyer, director of the Regional Food Bank of Northeastern New York.

The Cornell-led gleaning effort plans to launch a pilot project this spring, to expand gleaning in New York State. The project hopes to develop guides to make it easier for farmers to donate food.

Rebecca Schuelke Staehr is coordinator of the Cornell Gleaning Project. She is also a vegetable and crop farmer in New York's Finger Lakes region. Contact her at rjs58@cornell.edu.

How farmers can donate:

Farms with larger quantity donations, such as several field crates or more, may be able to arrange on-farm pickup by a food bank truck. Some food banks have field crates available for farmers to use; in other cases, food banks may have funds to reimburse farmers for packaging costs.

Farms with smaller quantity donations may need to deliver food to a food bank, or local food pantry. Some pantries have volunteers who will pick up food at the farm.

To accept donations, food banks must have the ability to distribute or store food before the perish date. Picking up food at the farm requires adequate funds.

To find your local food bank or food pantry, contact the Food Bank Association of New York State, www.food-bankassocnys.org, or (518) 433-4505.



Ariel Tavares, coordinator of the RECAP Food Pantry in Middletown, NY

Photo courtesy of Cornell Chronicle



Maria Bacigalupo, member of the 4-H group "The Awesome Achievers," harvests apples at the Big Glean in Pennings Orchard in Warwick, NY.

Photo courtesy of Cornell Chronicle

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COMMUNITY AND WORLD

Tomato Therapy

by Mason Donovan

There are so many reasons why we decide to be farmers. Traditionally it has been a profession passed down from one generation to the next. You were often expected to take on the stewardship of the family land. Others took up farming as an alternate revenue stream to the corporate world as either a first or second career. However, it is not uncommon for the farm to wind up on the negative side of revenue by the end of the year. USDA's last census showed the average net income of a small farm to be less than \$7,000 per year. So why is it, that in today's consumer driven culture, so many are choosing farming as a way of life?

The answer may be found more in the black soil than in the green backs. For such a question, I decided to approach someone connected to the land and a much higher source. Charles LaFond, owner of Blackwater Bluff Farm in Webster, NH, is a master potter and an episcopal priest who serves as the Reverend Canon for Congregational Life in the Diocese of New Hampshire. Seeking solace and reflection, he began his way towards silence in a monastery. Monastic life secreted him away from the daily grind of noise which surround most of our lives.

Although Charles expected his connection with those around him to change, it was a pleasant surprise to discover one of the

biggest changes to be his love of the land. Every major religion connects people to themselves and others by also connecting them to the earth. Charles noted how he became a "convert to nature." He was someone who lived in cities his entire life. The peace he achieved from life at the monastery's country house was a fortunate fringe benefit. As a monk, he had six prayer obligations a day, was host to a constant stream of visitors and cooked every meal for the brothers and guests. The seven days a week schedule created a monastic life that paralleled the busyness of what he left behind. Upon leaving the monastery to come to New Hampshire, his Spiritual Director said, "If you really want a contemplative life, work the land." Charles took this advice and began to love farming outside the monastery walls.

His search led him to the Carlisle family farm. It started in 1847 with 60 acres primarily as a source of family sustenance. Over the years, the land was subdivided out for family members. After several generations, the original lot sold to Charles was reduced to 2 acres with the homestead. In collaboration with his neighbors, it is now brimming with chickens, bee hives and an ever growing list of crops. The farm provides far more than table fare. As Charles describes the real reason to tend the land, "it feeds a soul hungry for uninterrupted silence."

Even those who have been farming for

generations, will tell you they feel the most at peace when they are plowing the field or planting seeds or harvesting. It is during these times away from the stand, where one can find silence even amongst the roar of a tractor engine.

When a question was recently posted on Facebook about why some take up gardening or farming, there was a commonality expressed in every answer.

Nanda wrote of how she lost her will to live, but rediscovered it in seeds. Having an active hand in life gave her a new sense of being. In another response, Allison spoke of her serious car accident which confined her to bed for two years. Her husband built a raised bed behind their apartment. She said, "It gave me something to do that surrounded me with life, beauty and a sense of purpose."

The American Horticultural Therapy Association points to Dr. Benjamin Rush, a signer of the Declaration of Independence and often noted as the "Father of American Psychiatry" who reported how "garden settings held curative effects for people with mental illness." There is no question the calming feeling one receives when they leave the cacophony of visual and audio noise of the city behind them to plant, tend or harvest a plot. It is noted as a medicinal treatment for returning veterans since World War II. VA centers across the country have or are in the midst of planning therapeutic gardens.



Solace at Blackwater Bluff Farm.

Photo by Charles LaFond

You may have seen schools and churches turning their once manicured hedges and lawns into community learning gardens. Like Blackwater Bluff Farm, the monetary return on investment is often realized as a deficit, but the feeling of fulfillment is immeasurable. Though the taste of a warm rosy red Brandywine can draw a crowd, for some it may be the therapy in growing the tomatoes which really satiates our desire to farm.

Mason Donovan owns a hay farm in Boscawen, NH and founded The Yard Project organization to protect farmland, promote sustainable organic practices and assist local farmers. Visit www.TheYardProject.com for more info. He can be reached by email at FirstYard@TheYardProject.com.

Farm Tech

Using Online Surveys and Polls to Connect with Your Clients

by Michelle Podolec

Surveys help you gauge what your customers think of your business, and give you the chance to learn more about what they want from you. Online polls can help you gather feedback quickly and easily from your customers. While not appropriate for every business or situation (sometimes paper surveys can get a better response rate), there are some great free online assessment tools available for farmers that can help grow your business.

Here at the Cornell Small Farms Program office, we often use free online surveys and poll software to gather quick feedback on the best times for meetings, exploring emerging issues, collecting audience demographics, and seeking online course feedback. You may find polls and surveys useful in many areas of your business whether you are a small farm, a non-profit, or a community cooperative.

Surveys can range from very short (one or two questions) to more-in depth (twenty minutes long or more) depending on the type of information you want to gather. Designing online polls and surveys is a learning process - each time our staff develops one of these tools we learn more about the best ways to frame and present our questions, and gain more experience in analyzing our results.

Developing a survey or poll that gets at the data you are seeking can be more complicated than it initially appears. It can be very helpful to draft up a survey or poll and then have a friend review to make sure questions are clear, concise, and you are framing the question in a way that gets to the heart of the information you really want. A few quick tips we've found helpful: keep questions simple and don't use farm jargon unless you explain it in the questions, only ask one question at a time, and use open ended questions and essay boxes to

gather more in-depth opinions. Also try mixing multiple choice, ranking, and fill in the blank questions to help break up the monotony of a long survey.

Tips for a great survey

- Name your survey or poll. Names should be short and to the point - tell your customers right in the title what you are trying to accomplish!
- The longer and more complicated your survey, the more difficult it can be to coax customers to finish the survey. Incentives (prizes, coupons, or giveaways) can help draw interest and enthusiasm.
- Be sure to include an introduction telling people WHY you need the information. You should also be sure to include your contact information including business name, phone number, and a link to your website.
- Set a goal and a time your survey will run - knowing how many individuals you would like to reach with your survey or poll can help you decide when your survey is 'done'. When you have received enough responses, be sure to close the poll or survey and review your results. Advertising your survey or poll

You are finished building your survey at last. You've reviewed your survey or poll, made sure the questions are framed in a way that will get you the information you want, added your contact information and website link. Now it's time to get that survey or poll out to your customers! Target your audience - knowing which customers you want to reach with your survey or poll can help you select the best method to reach them. Online services will create an automatic web address for you. Sharing that link can be done through signs, newsletters, emails, letters, postcards, order forms, and word of mouth.

The more you use online web polls and surveys, the more comfortable you and your customers will be with them. These great free online tools can really help you

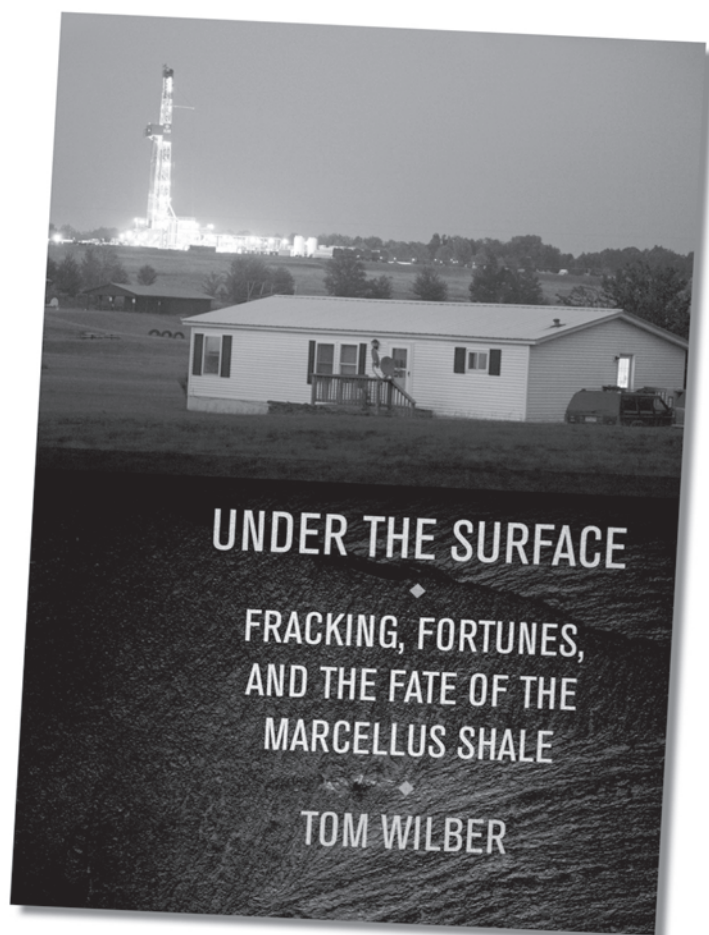
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TOM WILBER

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—DAVID MARGOLICK, CONTRIBUTING EDITOR, *VANITY FAIR*

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GRAZING

Grazing and the Good Life

By Meg Schader

This article was one of four winning entries in a writing contest sponsored by the New York State Grazing Lands Conservation Initiative (GLCI). GLCI is led by a Steering Committee of farmers and agricultural professionals to promote the wise use of private grazing lands, and is funded by the USDA-Natural Resources Conservation Service.

Our family starts the countdown to grazing season in January, because this is when we really notice the hay mow disappearing. Five years ago, we wrote “Cows Out” with a Sharpie on our milk house wall, and we note the date there every spring. Last year, 2011, we had trouble settling on a date to write down, because our cows were out and then back in again several times - Mother Nature just didn’t want to turn the corner to spring. In the past, our “Cows Out” date has landed around April 20, which is the day when the cows go out and stay out until winter.

Life is good when the cows are out. Milking and barn chores take an hour less every morning and every night, which means that we have time to tackle all of the other tasks on our list. Since the grazing season is also the time of year when we make feed for the winter, our to-do list gets longer, so we really need the extra couple of hours a day that we gain by sending our cows out to pasture.

Although we take care to keep our cows comfortable in the winter with a bedded pack in our barn, our Jersey cows just seem happier when they are out on pasture. Correspondingly, we find it easier and more pleasant to move fences than to move hay in, and manure out of the barn. Since we process all of our own milk on our farm and operate an on-farm store, having the cows out on pasture is also good marketing. Our customers love seeing a herd of happy brown cows on green grass.

When we started our dairy, we didn’t even think about whether we were going to graze

our cows or not - it was a built in assumption that we would. In the beginning, we received assistance from our Soil & Water Conservation District in planting our pastures and designing our paddock system, and our Grazing Lands Conservation Initiative grazing specialist helped educate us about how to supplement with grain and supplements. In 2010, the Natural Resource Conservation Service helped us to improve our laneway systems, which has made the walks to and from the pastures cleaner and more efficient.

Grazing cows harvest their own feed and spread their own manure. What a simple, beautiful system it is! We merely bring them in to harvest the rich, yellow milk they produce from the vitamin rich grass. During the grazing season, our cows are in the barn less than an hour a day. Since we start chores around 5 every night, this means that our family can actually finish up somewhere before 7 p.m., which definitely improves our quality of life.

Tonight, our family can make it to a 7 p.m. community concert. Later in the week I will be able to attend a land planning meeting at our town office, and next month, our son will make it to his cousin’s birthday party on time. These events help strengthen our community ties, which in turn grows the web of relationships that we rely on to support our family farm.

Grazing works for our family farm. It is healthy for our cows, pleasant for us, and it creates a beautiful landscape for our customers and neighbors to enjoy. Actually, my favorite tasks on the farm are bringing the cows into the barn in the morning, and walking them out to the pasture at night. Most of the time I do this work alone, but it’s even better when I have my husband, my son, and my dog along to help.

Meg Schader and her husband Bruce are the owners of Wake Robin Farm, a 175 acre dairy specializing in milk, yogurt and cheese based in Jordan, NY. To learn more about the farm, visit <http://www.wakerobin-farm.org>

For more information on the Grazing Lands Conservation Initiative please contact Karen Hoffman at 607-334-4632 x116 or karen.hoffman2@ny.nrcs.gov. For assis-

tance with planning or starting up a grazing system contact your local USDA-NRCS or county Soil and Water Conservation District.



The cows enjoying their pasture!

Photo by Meg Schader

NEW FARMERS**Maine's Original Duck Farm**

by Gina Simmons and Ryan Wilson

Ryan Wilson and Gina Simmons, owners of Common Wealth Farm, in Unity, Maine, were surprised with their level of first year success. Finding an instant niche market and being established as a family farm gave way to a lot of progress in a short amount of time.

Before starting Common Wealth Farm, Ryan Wilson had worked for a number of vegetable farms. Having met chefs during deliveries, he began asking what they thought was missing from Maine's agriculture, and 'duck' was the most popular response. Gina Simmons, Ryan's partner, had also been working for vegetable farmers. Their mutual enthusiasm and a vision for starting their own farming venture began to grow. Both in their twenties, they make up part of the larger community of young people returning to Maine to farm.

The Wilson family was on board and purchased the property in the fall of 2010. Ryan had graduated from Evergreen State College with a degree in Ecological Farm Design and Business Planning. His father, Charles Wilson, had just retired from thirty years as an engineer. Both at a crossroads, they realized the team they could make. Jackie, Ryan's mother, was thrilled to have the whole family together again and in a rural setting. Tim, Ryan's brother, had always dreamed of farming. Tori, Tim's twelve year old daughter, was skeptical but with hundreds of new "pets" she decided to stay.

Starting out, Ryan and Gina quickly established a relationship with the Maine Organic Farmers and Gardeners Association, also in Unity, becoming "Journey Persons" in a program that provides mentorship and help getting established. With John Barnstein of Maine-ly Poultry as a mentor, they taught themselves the tools of the trade, both raising and processing the birds. As to be expected, the pastured poultry production was developed through much trial and error.

All birds are purchased as day old chicks and arrive in the mail. They are kept in brooders until able to withstand outdoor temperatures, at two weeks in favorable weather. They are then moved to pasture

and kept in a variation of the currently popular 'chicken tractor'. These tractors are eight by sixteen feet long and are framed with rebar that has been cut, bent and welded together. The result is light-weight and easily moved by two people. Chicken wire is zip-tied around the tractor. The roof is pitched and covered with tarp, one side fastened down, the other secured with bungee cords and able to be opened for maintenance. A ten foot long PVC pipe is used for watering. It is capped on one side and elbowed on the other. About thirty holes are drilled across its length. The current pasture is sloped and the pipe is leveled on one side with adjustable straps. Hoses are adjoined and run the length of the field, each tractor needing to be hand watered. Birds are fed once a day, in the morning.

In total, the farm raised three-thousand birds in the first year; two-thousand meat ducks and the other thousand consisting of meat chickens, holiday geese and layers.

The 2011 season utilized fourteen tractors, eight for meat ducks and six for meat chickens. A four acre plot close to the house is currently accessible for tractors and they were moved twice a day, slowly making their way down the field and back up. The pasture is able to regenerate itself during its period of rest. With eighty acres, and fifty in fields, the plan is to extend the pasture used for the poultry tractors. Different solutions for handling predation problems are being discussed.

The family built a processing facility in the corner of the previously existing barn for under eight-thousand dollars. The facility is licensed to process up to twenty-thousand birds annually, without an inspector present, under exemption PL 40-492. While current production is nowhere near this figure, the facility is more than capable of handling the farm's current production and is economical when considering the three to five

dollar slaughter fee, per bird, charged by a USDA licensed butcher. Ryan and Gina processed birds three days a week and will increase to four in the coming season.

On top of processing poultry for meat, both ducks and chickens were kept as layers. Despite having many other local egg produc-

ers, the market proved to be welcoming and plans include doubling both flocks this year after the previous flocks finish their laying cycle and are culled.

In total, the farm raised three-thousand birds in the first year; two-thousand meat ducks and the other thousand consisting of meat chickens, holiday geese and layers.

"At first, no one had really heard of us and I had to call ten new restaurants a week just to get steady wholesale orders. Then, the phone calls for ducks started coming and we sold out every week for about twenty weeks straight," Ryan recalls. The market for duck exists primarily in Portland and the Midcoast, where they are delivered to restaurants committed to sourcing their food locally. Ryan and Gina attended a farmers market twice a week in Camden and are considering joining more.

For Common Wealth Farm, a first year of success means the business can grow, which means more infrastructure. For the 2012 season, projects on the 'To Do' list include: building a walk-in cooler, creating a more efficient watering system that utilizes other water sources, building movable housing for the new layers and putting up a one-hundred foot greenhouse to brood birds in....and it continues. They have applied for grants available through the Natural Resources Conservation Service. The NRCS addresses projects that help to maintain ecological balance on the working farm.

During their "off" season, Ryan and Gina spend their Saturdays at the Portland Indoor Farmers' Market with their handmade bread and bagels and eggs for sale. Running a little bakery out of the home kitchen, they produce about forty loaves and ten dozen bagels for winter market. While not close to a vacation, the winter months provide much needed time to reflect back on the first season and gear up for the second.

For more information, please contact Ryan Wilson at TheCommonWealthFarm@gmail.com (207) 568-9068.



Day old ducklings basking in the heat lamp

Photo by: Gina Simmons



Day Old Chicks:
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Turkeys, Ducks

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Sustainable Agriculture Research & Education

Using Foster Mother Hens to Raise Chicks on the "Cheap"

by Elisabeth Rosen

How do you raise chicks without investing in expensive brooder equipment? Drew Piaschyk found success with a clever ruse: he snuck several hens' eggs away and put the chicks in their place, as if the eggs had hatched overnight. The foster hens protected what they believed to be their new broods, and the Piaschyks saved a vast amount of time and effort—not to mention money, since having the hens take care of the chicks meant they didn't need to pay for brooder equipment.

With the help of a SARE grant, they carried out a controlled study to see if this trick would work on a larger scale.

Sandy Piaschyk, Drew's wife, credits her mother with the idea. "I remembered my mother telling me a story where she placed fertile turkey eggs under broody hens and the



Using foster hens to raise chicks saves the cost of brooder equipment.

Upcoming SARE Grant Deadlines

Sustainable Community Grants - Due late fall/early winter
Sustainable Community Grants are for projects that strengthen the position of sustainable agriculture as it affects community economic development. Communities and commercial farmers must benefit from these proposals, and the selection emphasis is on model projects that others can replicate. We also look for projects that are likely to bring about durable and positive institutional change and for projects that benefit more than one farm. Grants are capped at \$15,000. Learn more at: <http://nesare.org/get/sustainable-community>

Partnership Grants - Due late fall/early winter

Partnership Grants are for agricultural service providers — extension

staff, consultants, nonprofits, state departments of agriculture, and others working in the agricultural community — who want to conduct on-farm demonstrations, research, marketing, and other projects with farmers as cooperators. Partnership Grants allow agricultural service providers to explore topics in sustainable production and marketing in cooperation with client farmers. The goal is to build knowledge farmers can use, encourage the understanding and widespread use of sustainable techniques, and strengthen working partnerships between farmers and farm service providers. Projects must take place on farms or directly involve farm businesses. Reviewers look for well-designed inquiries into how agriculture can enhance the environment, improve the quality of life, or be made more profitable through good stewardship.

Welcome to the Northeast SARE Spotlight! SARE (Sustainable Agriculture Research and Education) offers grants to farmers, educators, universities and communities that are working to make agriculture more sustainable - economically, environmentally, and socially. Learn about whether a SARE grant would be a good fit for you.



Chicks learn from their foster mother to eat slugs and other pests in the garden.

hens raised the turkey poults as their own," she says. "We happened to have some hens down for the count on their own eggs and we thought, why not try to get the hens to adopt a ready-made family instead of setting up equipment?"

Both Piaschyks come from farm families. Although Drew didn't grow up on a farm, his family has been growing vegetables in the Central New York area since the first Piaschyk came here from Poland in the early 1900s. The city of Utica took over Drew's grandfather's produce farm in order to build low-income housing, making the family temporarily farm-less until thirty years ago, when Drew and Sandy started Lamb's Quarters, a 94-acre organic farm in Plymouth, NY. Unlike Drew, Sandy didn't have to come far to get here—the road they live on was named after Sandy's grandfather and her family's farm is right next door to hers.



Chicks do well with a shelter in an enclosed garden setting.



Favorite weeds include "chickweed" and "lambs-quarters".

In order to have an organic farm you need good compost, and the easiest way to make good compost is to have livestock. So the Piaschyks raise goats, sheep, chickens, geese, and guinea hens as well as fruit trees and a vegetable garden. This variety of crops requires constant multitasking. As he speaks about the broody hen project, Drew checks the sunflowers for seed. "They're just beginning to flower," he says. Once the flowers produce seeds, Drew can feed them to his livestock.

To raise chicks the standard way, you need a brooder set up in a secure place, away from heavier animals, which could trample the chicks, and vegetables, which the chicks could devour. But making sure the chicks are secure can be very expensive and time-consuming. One day, a hen decided to show up with a group of chicks on the front lawn. Without a brooder or any kind of shelter set up, Drew had to improvise. He grabbed a metal cover from a broken dishwasher and put it in an enclosed garden, where fences shielded his vegetable plantings from hungry deer and raccoons. Not only did the chicks survive—they actually did extremely well. Now, two enclosed gardens serve as home to many of the Piaschyks' baby chicks.

An added benefit of using foster hens? Pest control. Like most mothers in the animal kingdom, the hens teach their brood how to forage for food. Not only does this reduce the farmer's feed costs significantly, it also presents an opportunity to get rid of infestations. "One chick saw me turning up soil," Drew says, "and pretty soon I had three chicks following me around, learning to eat slugs and other pests their mother wasn't training them to eat." When two groups of chicks learned about the Japanese beetle infestation in the asparagus patch, Drew went out in the early morning when it was still cold and knocked the beetles onto the ground for the chicks' breakfast. The birds also seemed to enjoy weed sprouts. Their favorites were chickweed ("Maybe that's why they call it chickweed," Drew quips) and lamb's quarters.

One reason the Piaschyks' SARE project was so successful may have been that they focused on a very simple idea that was easy to implement. If you're considering applying for a SARE Farmer grant, think specific rather than large-scale. "The ideas I've seen funded are small, practical and can be applied immediately," Drew says. And whether your project is big or small, be able to explain your expected results. Once you finish the project, you'll have to do outreach, whether that means giving presentations, writing articles, or reaching out directly to other farmers.

This article discusses SARE grant FNE08-645. To view the final report, visit <http://mysare.sare.org/mySARE/ProjectReport.aspx?do=viewProj&pn=FNE08-645> For more information, contact Drew Piaschyk at lambsfarm@frontiernet.net.

Elisabeth Rosen was a summer intern with the Cornell Small Farms Program in 2011.

SARE offers sustainable agriculture grants, bulletins, books, an online events calendar and many other resources. Learn more about the Northeast SARE program by visiting www.nesare.org or by contacting Northeast SARE 655 Spear Street University of Vermont, Burlington VT 05405 Phone (802) 656-0471 Fax (802) 656-0500 E-mail: nesare@uvm.edu

Small Farm Quarterly Youth Page

Many thanks to the 4H campers who contributed to this issue.

More information about the Cornell Cooperative Extension 4-H Youth Development program can be found at:
<http://nys4h.cce.cornell.edu>

Curly Sue Grows Up, Goes to Camp

By Cara Shulman

If I had a dollar for every time someone asked me how I got my camp name, not only would I be rich, but I would never stop laughing. My name, for two months out of the year, is Curly Sue. For anyone who is familiar with the movie about two homeless scammers with hearts of gold, picture the girl who plays Curly Sue. Can you see her brown ringlets and brown eyes? That's what I look like.

When I was nine, my parents sent me off to 4-H Camp Bristol Hills for a week. Little did they know how much I would like camp. While I can't remember much from that week, I can remember bits and pieces of it, like my cabin (North Star), my exact bunk, and my counselor (Squeegie). I remember how nice everyone was and how easily I made friends, which was especially important my first year. Squeegie named me Curly Sue for reasons unknown to me, but from that summer I always introduced myself at camp as Curly Sue and the name stuck.

Camp is about tradition, the people who work there, and so much more. After 85 years since camp first began, 4-H Camp Bristol Hills is still up and running. Every season brings new renovations, new staff, and new activities, but the traditions make me look forward to camp every year.

For example, the first meal at camp is pizza, which always seems to make camp a little easier to adjust to. On the first night after we've all played a game (generally Capture the Flag), we all head up to the campfire to sing songs, perform skits, etc. Even for camp regulars, like me, the camp songs never get old. And while you can sing camp songs all year, they're never quite the same as when



Curly Sue is now a camp counselor

you sing them with a huge group of kids who are all singing slightly out of tune at the top of their lungs. It's traditional songs like "Princess Pat" or singing "Taps" every night before bed that really add to the experience.

4-H Camp Bristol Hills is located on a road that practically no one has heard of in a town that wouldn't be seen on a map, but that doesn't matter. In fact, for someone like me who lives in town, camp is the perfect getaway. Not only is camp close by, but the scenery is amazing; the sunsets are perfect Kodak moments, and the fog on the hills in the morning is eerie and mysterious. Lying in the grass just looking up at the stars is not something I get to do at home, and it is those moments at camp that I just want to savor.

Beyond my love for the traditions and the scenery is my love for the people who come to camp every year. Every year after my first year, my friend Amelia and I would go together, and later our friend Emily joined in. I remember calling each other on the phone prior to camp to make sure we would all be in the same cabin and doing the same things, a conversation that would usually turn to "do you remember?" about the previous summer. I remember our kooky traditions, inside jokes and just sitting outside the cabins on a bench and talking.

Being at camp allowed me to become independent of my parents (but not too independent), and it allowed me to grow from a little girl to a young woman. Camp is the one place where I don't have to

worry about the stresses of school and my future, I don't have to try hard to "fit in" and I don't have to worry about the drama of high school. But most of all, camp is the place where I can be myself with some of the people I love most in the world. The experiences I've had at camp will always be with me, and I know that someday my children and grandchildren will hear stories about me when I was their age.

When I was little, I dreamed of becoming a camp counselor. I have been able to live that dream in recent years. To me, it isn't about doing the outlandish things in life, it's about the memories you make.

Animals at Critter Care

By Aleena and Drianna Borowiec

In Critter Care we take care of many different animals. There are sheep, chickens, snakes, bunnies, turtles, and rats. Different from what you might have heard, rats make great pets! The other animals have different qualities about them too. Did you know that corn snakes can see up to a mile away? Or that male turtles have round shells and the females have flat shells underneath? How about chickens having two stomachs? We learn all these things in the Critter Care class. It teaches us to be responsible. We come in every day for routine feedings and we learn about what animals eat. We even get to handle them! When we hold the corn snake, we have to support his whole body or he will coil up around us. Don't be afraid, he's only curious. So when you come to 4-H Camp Bristol Hills, remember to sign up for Critter Care!



Critter Care Turtle

Composting at Camp!

By Kelsey Klaczyk and Mollie Mills

Composting is a cool idea for helping the environment! Composting is when you take used or rotting plants (fruits and vegetables) and put them in a bucket or pile. The "plants" will decompose into soil that is very good for gardens. I think it is awesome that we started a compost pile at camp because of our garden and so there won't be fruit peels all over! So, if all of us at camp start putting food and plants into the compost pile, we're one step closer to a healthier earth!

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PA: Penn State Cooperative Extension • 814-865-4028

RI: URI Cooperative Extension 401-874-2900

VT: UVM Cooperative Extension 866-622-2990



Bonding at Camp

The Story Behind Camp Names

By Keira McClelland

A tradition at 4-H Camp is for counselors to have funny nicknames while at camp. Counselors are given their nicknames based on something that happened to them when they were a Counselor-

In-Training or during Staff Training Week. I chatted with some of the counselors to find out how they got their camp name.

My cabin counselor was Cozi. Cozi got her name because she used Cortizone cream for

toothpaste. The kitchen assistant who stays in our cabin is called Smiley. She got her name because "I always smile and I love drawing smiley faces." A female counselor got her camp name "Handsome" because another counselor would always say to her, "Hey

Handsome". Muppet and Smurf are named after how they talk. Clueless told me "When I was 15 and I was walking by Gleason Lodge (camp's infirmary), I looked down, and then walked right into a tree!" She wasn't the only one that walked into a tree, Knock did also! Bench told me she almost fell off a bench in front of the whole camp! Shuga said "I wanted it to be similar to my friend Spice's name...so we are Shuga and Spice."

Our camp counselors are awesome! They make camp so much fun. I hope to become a camp counselor some day and have a really cool name.

4-H Educators Note:

4-H Camp Bristol Hills employees approximately 65 staff each summer. Young adults may start working at camp as a Kitchen Assistant (16 years of age), followed by becoming a Jr. Counselor (17 years old), Sr. Counselor (18 years old), Class Specialist (18-21 years old), and Program Director (18-21 years old). Staff are trained and guided by adult senior staff that focuses on developing employment competencies such as personal & supportive relationships, supervision & leadership, problem solving & decision making, planning & organizing, critical thinking, and communication. 4-H Camp is typically the first employment experience for over half of our staff. After an intensive one-week training program, these young adults are responsible for assigned campers while under close supervision and daily guidance from senior staff. Based on the results of end-of-the-season written surveys, the camp work experience helped develop valuable workforce skills. 97% of counselors indicated that their camp experience helped developed their communication, human relationship, and problem solving skills. 94% of counselors indicated that their leadership skills improved because of their camp experience. One camp counselor stated, "I've learned a ton about myself as a leader and a teacher. Camp helped direct me toward my future profession."

To learn more about 4-H Camp Bristol Hills visit: <http://www.4-hcampbristol-hills.org/>



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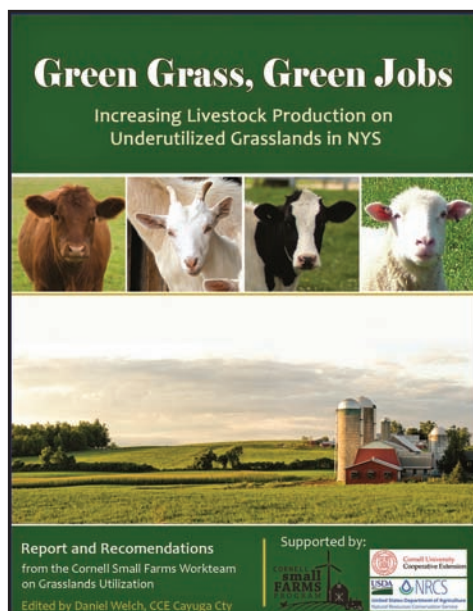
Realizing the Potential of NY Grasslands

Report recommends taking action to realize the potential of under-utilized grasslands as a farming resource that will spur rural economic development, grow the regional food supply, and enhance environmental outcomes for all citizens of New York State

By Dan Welch

There are over 3 million acres of grasslands in New York State that are not currently being used for agricultural production. This presents an opportunity for the state to encourage economic development on these lands that will lead to job creation, enhance regional and local food security, and contribute to sustainable agriculture enterprises. Beef and dairy cattle farms return \$2.40 of every \$1.00 in sales to their local communities in purchases, taxes, and payroll. In addition, promoting agriculture as a viable use for grasslands reduces development pressure and lessens the impact residential development can have on communities.

For the last several years a team of farmers, Cornell Cooperative Extension Educators, Cornell faculty, USDA Natural Resources Conservation Service staff, and staff from other non-profit agencies has been working on a report that outlines the current state of the grassland resource in New York, and provides recommendation for



encouraging the sustainable use of this resource. The product of this effort is the report; *Green Grass, Green Jobs: Increasing Livestock Production on Underutilized Grasslands in NYS*. It is hoped that this report will be a resource for extension educators in planning programs, that policy makers will consider the recommendations made by the team, and that farmers can use the information to influence institution and agencies to make changes that will support grassland utilization in New York.

While there are several options for utilizing grasslands, livestock production is the focus of this report. There is the

opportunity to integrate management intensive grazing into at least some portion of any livestock production system. A wide range of livestock operations can be supported on under-utilized grasslands in New York. Some of the potential livestock enterprises could include niche and conventional beef production and marketing, dairy cattle, sheep, goats, and exotic species. Other opportunities for grasslands include pasturing of poultry and hogs. Another use of this land could be the production of stored forages for pasture supplementation and winter feeding. New livestock production operations on these lands build on existing infrastructure and knowledge in Upstate New York.

Several barriers exist to the increases utilization of grasslands for livestock production. One of these barriers is farmers' limited access to these under-utilized grasslands and capital to develop agricultural enterprises. In some parts of the state, land has become prohibitively expensive, and in other parts competing uses such as development, conservation programs, energy crops, and minerals prevent establishment of grass-based agriculture. For those interested in starting a grazing dairy, credit may not be available due to the perception that such a dairy farm cannot be profitable. On the other hand, livestock farmers other than

dairy farmers face a lack of familiarity of economic benchmarks, which in turn cause some lenders to shy away from extending credit to these businesses. Additionally, there are specific knowledge and production challenges for each type of farm that need to be addressed through research, education, and extension.

The Grasslands Utilization Work Team recommends taking actions in research, education, extension, and policy to realize the potential of our grasslands as a farming resource that will spur rural economic development, grow the regional food supply, and enhance environmental outcomes for all citizens of New York State. As rural demographics shift, farmers need to be prepared to take advantage of land that could potentially be grazed. There is the opportunity for landowner education about grazing leases as well as the potential for other types of farming operations to integrate a grazing enterprise into their current farms.

The Grasslands Utilization Work Team would like to acknowledge the support of the Cornell Small Farms Program and the USDA Natural Resources Conservation Service in completing the report. Copies of the report are available at www.smallfarms.cornell.edu

Photo Essay

Spring Peeping

Welcome to our new photo essay feature! For 2012, we'll be bringing you seasonal images from the Whole Systems Design Research Farm in the Mad River Valley region of Vermont. The farm is a demonstration site to test out regenerative food, fuel, and shelter systems that operate on current solar energy. To learn more about the farm and Whole Systems Design, visit <http://www.wholesystemsdesign.com>



Enjoy the new life peeping up in your field or barn as another farming season takes shape! Featured in the photo are Cornish Cross chicks, one - two weeks old.

Photo by Ben Falk

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URBAN AGRICULTURE**Re-circulating Farms: Growing healthy, fresh food and a new local food culture**

By Molly Davis

Facing an average nightly low of 21 degrees, most Boston-area farmers throw their hands up in January and take a break. But with re-circulating farms — which can grow plants (hydroponics), fish (aquaculture), or a combination of both (aquaponics) — a farmer can continue generating revenue throughout the worst conditions that winter brings.

"They can be located virtually anywhere," said Marianne Cufone, Executive Director of the Re-circulating Farms Coalition. "And to me, that is one of the most notable things. They can be in an urban environment, a rural environment, a hot climate, cold climate, indoors, outdoors..."

Re-circulating farms use continuously cleaned, recycled water in place of soil to grow food in a contained system. That, Cufone says, can allow the farms to operate without chemicals or antibiotics and be located right in the communities that will eat the food. Farmers can minimize transportation costs and fuel by serving a local market, making fresh healthy food, produced in an eco-friendly manner, more affordable. And, because the farm doesn't connect to a watershed for either irrigation or run-off, the risk of releasing pollution or non-native species is virtually zero.

Growing New Revenue Streams

The founders of Sky Vegetables see some potential for major market growth. The company looks for clients with

unused rooftops, including in Boston, to build re-circulating farms that operate all year long.

"We're looking to create a zero-carbon footprint in a closed-loop ecosystem that produces local, fresh, chemical-free food in the cities," said Sky Vegetables CEO Robert Fireman.

Until this year, the roughly three year-old company has focused on research, but their farm in Amherst, MA, already supplies fresh produce to restaurants around the city. This year, the company will build its first two rooftop farms for outside clients.

The company is an ideal partner for supermarkets or restaurants looking to provide ultra-fresh, organic food to their customers. The Sky Vegetables system keeps crops warm in part by utilizing waste heat from the building's HVAC system.

"We're trying to utilize all of the effects of the sun and all of the waste products associated with a standard building," said Fireman. The farms use about a tenth of the water and a sixth of the nutrients as a conventional farm with a similar yield. The system does not use any herbicides, pesticides, or fertilizers. Operators enjoy immunity from crop failures caused by droughts, frost, floods, storms, and pests.

But, he warns, it's a lot of work.

"It will require engagement of the community, people that work within the greenhouse, to produce a lot of food in a small amount of space."

Raising awareness

Building a re-circulating system has raised the profile of Eric McClam and his father's largely traditional soil-based farm in South Carolina.

"It's been a very good marketing thing, something people are very interested in and want to come and see," said McClam.

And marketing is key for City Roots, not only because the harvest is sold partially on-site, but also because McClam strives to build community in Columbia. He has hosted hundreds of volunteers and fun-seekers at their 3-acre urban farm, and the re-circulating system helps attract the

crowd.

City Roots also hosts field trips for school children. McClam says the re-circulating farm helps to teach biology lessons. The filtration of the water through the plants and fish is modeled on the biological cycles in a natural watershed.

"It's very educational and didactic to people that come and view it," said McClam.

A Good Fit for Small Spaces

In suburban Orlando, Florida, farmer Sahib Punjabi has developed several models of miniature re-circulating farms to fit in small, underused spaces, such as storage rooms and patios. In only 18 square feet, Punjabi's "Zero Lot" Backyard Aquaponic System combines a variety of plant beds with a 55-gallon fish tank. He aims to build a totally self-sufficient system that can be deployed anywhere, from developing-world villages to U.S. neighborhoods.

"This was a far superior way to grow it locally, grow it naturally, without having to resort to harmful pesticides and fertilizers and such, because if I did, my fish would die," said Punjabi. Goldfish require less oxygen than many food fish, but still supply enough fertilizer to nourish lettuces, herbs, and vegetables. Punjabi uses a variety of bedding materials.

"The whole idea is that the plants absorb nutrients from the water so that pure water goes back to the fish tanks," said Punjabi.

A single 50-watt pump circulates the water through pipes. Valves control the inflow into the beds. Punjabi emphasizes the importance of maintaining the water chemistry, especially the pH and the nitrogen cycle.

A New Movement

The early adopters of re-circulating farm technology are attracted to the systems for a variety of reasons — and have developed a wide variety of strategies. Cufone says she'd like the Coalition to act as a unified voice for these farmers, helping to represent them in policy debates, raise awareness and support for the farms and coordinate research. Because as varied as their operations are, the farmers are all searching for a better way to feed the world.

Re-circulating farms offer a way to grow healthy, fresh, local food in an environmentally friendly way. "This is an alternative approach for growing that can help rebuild a healthy, sustainable food culture in the U.S." Cufone said.

For more information on re-circulating farms, please contact Marianne Cufone, Executive Director of the Re-circulating Farms Coalition, at (813) 785-8386 or info@re-circulatingfarms.org. Follow @recircfarms on Twitter, and "like" Re-circulatingFarms Coalition on Facebook.



Mini zipgrow tower in operation at Aquaponic Lynx in Mount Dora, FL
Photo by Aleece Landis



Colorado Aquaponics at Growhaus, Denver, CO
Photo by Tawnya Sawyer

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Sahib's Aquaponic Produce Farm in Winter Park, FL

Stewardship and Nature

Off the Ground: Conservation Program Promotes both Hay Yield and Bird Habitat

In our last two "Stewardship and Nature" columns, the National Audubon Society described the partnership they have had with the Natural Resources Conservation Service and landowners to facilitate the management of wildlife habitat to promote avian species (birds). In this article Toby Alexander explains the process used to develop an agronomic practice and financial incentive for the benefit of grassland birds and farmers in Vermont. -John Thurgood, column editor



Example of enrolled hay-alfalfa field.

You can't manage for wildlife on intensively managed agricultural land. That is what skeptics would say. But partners in Vermont concerned with conservation of declining grassland songbirds had an idea. And, they proved the skeptics wrong.

Starting in 2002, University of Vermont (UVM) research on grassland bird survival and nesting on hayfields in the Champlain Valley of Vermont began to show an interesting pattern to the researchers. True to accepted knowledge, intensively hayed fields (3 or more cuts a summer) basically provided no breeding success to species such as bobolinks and savannah sparrows. Breeding success is indicated by numbers of fledglings (young birds leaving the nest) produced per female per year. The researchers, then PhD candidate Noah Perlut and Professor Dr. Allan Strong, found a distinct pattern through their breeding timelines where the bulk of the nesting of these birds took place in Late May through early to mid July. They decided to go to

the NRCS with an idea.

Noah and Allan worked with Vermont NRCS Biologist Toby Alexander to develop a management plan that would continue to support agriculture but would also provide breeding opportunities for grassland birds in a unique and innovative way. Historically, hayland management for grassland birds has been to delay all mowing until after the breeding season. This is great for birds but provides limited potential for keeping agricultural land very productive. Since these birds are so tied to grass based agriculture in much of their range, managers need better tools to be able to work with farmers in a working landscape. The management proposed and implemented in Vermont allowed active agriculture to continue, with three cuts of hay a year, while increasing breeding success from 0 fledglings to 2.8 fledglings per female per year. This level of breeding success is nearly as high as if the field were set aside during the entire summer.

The management is relatively simple. The farmer can continue to get their

See Off the Ground page 15



Adult savannah sparrow.



Bobolink nestlings in a field enrolled in the program since 2008.

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HOME AND FAMILY**Spring Forward**

By Ron MacLean

In the Northeast, usually Spring is a renaissance after a long, cold, snowy season. This past winter, however, never really arrived. On February 2, 2012, the day Punxsutawney Phil predicted 6 more weeks of winter, there was little or no snow cover in much of the Northeast.

Spring arrives in March followed by her sisters, April and May, close behind. March is usually an extreme transitional month. Some of the Northeast's more significant storms occur in this month. The Super Storm of the Century plowed through much of the U.S. on March 12-

13, 1993. Regardless of the weather conditions, Daylight Savings Time starts on the 11th of March and Spring officially starts on the 20th. Spring Forward!

For the garden and flower aficionados in our part of the country, Spring is reflected by the blooming of forsythia, crocuses, daffodils and later red bud, lilac, flowering crab and dogwood trees. However, for those folks who "work the soil" and are anxious to get out-of-doors, springtime is an opportunity to shed some of those heavy and cumbersome warm clothes and get down a layer or two. Farmers and gardeners start itching to get out and prepare the fields or beds for planting. The

arrival of warmer temperatures and the longer, sunnier days causes a renewed energy level that has been hibernating since late autumn.

As Spring transitions from unpredictable weather in March, snow quite often disappears by the end of April. April Showers Bring May Flowers is a rhyme dating back to 1557 when Thomas Tusser created a collection of writings called A Hundred Good Points of Husbandry. The April Husbandry was the short poem: Sweet April showers, Do spring May flowers. Even long ago, folks had to endure the rain in April in order to reap the blossoming of flowers in May and crops in summer.

Many of you are familiar with, and maybe wear, those black knee-high boots that farmers have worn for decades to keep dry. Today they come in various colors and are called different names like muck boots, chore boots and yes, work boots. Some think they were created to "muck out" stalls and stanchions. I think they were really invented to help anyone working outside to be able to just get through all of the precipitation and mud they had

to deal with during the month of April every year without wet feet.

The melting snow pack in March and early April is sometimes referred to as "poor farmer's fertilizer" because snowflakes pick up nitrogen on their fall to earth and release it during the melting process. It would seem that gradual snow melt, aided by gentle, periodic showers and moderating temperatures would be most beneficial to growers. After all, the ground has to be somewhat drier to allow fields to be worked in preparation for planting. Late planting, late crops.

When all is said and done, most vegetables and crops are planted or sowed well after the melting snow pack in March, the showers in April, the warming temperatures of May, in June. I say Spring Forward!

Ron Mac Lean grew up in a small village in Central New York. He is now retired and lives in the Finger Lakes Region, where he looks forward each year to frequently enjoying fresh spring asparagus harvested by a local produce farmer.

Small Farm Quarterly is Recruiting!

We are looking for several new members to join the Small Farm Quarterly Editorial Team, and we are always looking for new writers and photographers. We are especially looking for editors and writers from outside of New York State, so that we can improve our coverage of New England and Pennsylvania small farm issues and innovators. All SFQ editors and writers are volunteers. If you're interested, please contact Violet Stone at 607-255-9227 or vws7@cornell.edu

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Off the Ground from page 14

first cut of hay in mid to late May. They then will delay the second cut 25 days longer than normal which equates to 65 full days. After delaying the second cut, they can continue to make additional cuts on their own schedule through summer and fall. By providing a little more time during the peak of the breeding season, grassland birds receive a significant improvement in breeding success. UVM and NRCS designed an incentive based practice that would set a schedule for the first two hay harvests and compensate the farmer for the loss in value of the second cut of hay.

The practice was first offered through the Environmental Quality Incentives Program (EQIP) in

2007. Since then Vermont NRCS has enrolled about 1,300 acres of hayland under this management. The management regime has been evaluated and proven to be a success on enrolled fields through continued research and monitoring by UVM. The success of this management is due to the researchers taking a practical approach and working collaboratively with the NRCS to create a practice that both supports agriculture and a declining suite of species.

If you would like to implement the Grassland Bird Management practice on your farm, please contact your local NRCS office. For a directory please see: www.nrcs.usda.gov. Due to an unforeseen set of circumstances, VT NRCS was unable to offer this practice in Vermont for 2012, but hopes to reinstate the

practice in 2013.

The study was funded in part by the NRCS Agricultural Wildlife Conservation Center with a resulting Wildlife Insight #88 titled "Management Considerations for Grassland Birds in Northeastern Haylands and Pasturelands." The findings from this study have been published in numerous peer reviewed scientific journals with a specific article on this NRCS funded management in the Journal of Wildlife Management, "A Model for Integrating Wildlife Science and Agri-environmental Policy in the Conservation of Declining Species." Finally, an article on the study and this management was published in December of 2009 in National Audubon magazine - Buying Time.

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Savannah sparrow nest with eggs.

Non-Dairy Livestock

The “Perfect” Sheep Pasture

By Ulf Kintzel

*“The perfect is the enemy of the good.”
Voltaire*

In a sheep farming operation that relies on grazing alone without feeding any grain, the pasture is of utmost importance. If the demand is such that the lambs should be finished in a time as short as possible, the pressure is high. I am in that situation. I finish my lambs between 3 and 6 months with the average being 4 to 5 months. The target weight is 80 to 90 lbs. live weight or 40 to 45 lbs. hanging weight. That requires that the lambs are getting pushed almost every day to eat as much as possible.

Several factors such as climate, soil, and amount of input (fertilizer) influence what kind of grasses and legumes should be selected. I am in upstate New York, thus I use only cool-season grass species. I have mainly



Ryegrass (left) and orchard grass (right) yield significantly different under the same low-input conditions.

Honeoye silt loam soil. Additionally, I have some Lansing silt loam and some Lima silt loam soil. These soils are all limestone derived, which means the need to lime is limited. I will consider some applications of lime in the future in certain areas of my farm but have not yet felt the need to do so. The only input I have chosen so far is the hay that I am buying, which I feed mainly in the pasture during the winter. I do not buy any commercial or any other fertilizer.

When I bought this farm about four years ago, half of it was hayfields that hadn't been reseeded or fertilized in several years. They are predominately timothy, “native” orchard grass, bluegrass, and some fescue. The clovers that are growing here are red clover, Alsike clover, and Dutch white clover. A good chunk of the land was hayfields that hadn't been used in several years and needed to be bush-hogged to rid them of weeds and brush. A 14-acre parcel was a pumpkin field at the time of purchase, and I decided to make my own test plot. First, I seeded the grass in pure stands. The grasses I planted were “Baraula” orchard grass, BG 34 perennial ryegrass, “Barolex” tall fescue, “Bartura” meadow fescue, “Ginger” bluegrass and, since I ran out of seed and the neighbor sells it, “Climax” timothy. I used the following legumes to inter-seed them with all the grass stands: Kura clover, “Alice” white clover, and “Viking” bird's-foot trefoil. In the past 4 years I have frost-seeded local red clover, “Kopu 2” white clover, and “Huia” New Zealand white clover in the existing hayfields.

Here are my experiences with the grasses and legumes I find on my farm.

GRASS

Sheep like **timothy** and do tend to graze it short-too short. In addition, it doesn't grow much after the spring flush. However, in this area it is the cheapest grass seed that is available and timothy allows itself to be frost-seeded. It is an easy and cheap filler when your budget is tight.

Bluegrass has been around for a long time and I never mind having it in my pasture. Sheep like it, it makes a dense sward, and it is persistent, even in less than ideal conditions. The downside is the lack of yield and it is prone to drought. The Ginger bluegrass I seeded does grow a little higher and more erect and yields a little more. I like to have it in a mix with other grasses, but as a pure stand it just doesn't yield enough. It is nice to have right around the barn where the pasture experiences more traffic and some abuse at times. On a side note: Bluegrass is the most common grazing grass in Germany where there is usually not much of a summer slump in growth.

The “native” **orchard grass** (since orchard grass never is native, but may have volunteered to come into the pasture I keep putting it in quotation marks; many people refer to the volunteering kind as being native) is one of the highest yielding grass species. It is also quite drought resistant. Sheep eat it and tend to not graze it too short. Whatever the sheep don't eat during the growing season can always be grazed in the fall and winter. The biggest downside of “native” orchard grass is that it heads out extremely early and immediately loses all palatability. However, once the seed stems are bush-hogged, it yields well throughout the rest of the summer and fall and stays quite palatable.

The late-heading **Baraula** is so far the clear winner at my farm. It heads out 2+ weeks later than “native” orchard grass. Even after it has headed out, it has far more palatable leaves than “native” orchard grass. It yields very well without much input and it stockpiles well. I am very pleased with it.



Orchard grass and (Huia) white clover are desirable species in a sheep pasture.

Much has been said and written about how wonderful **perennial ryegrass** can be. I am sure this holds true when it receives a good amount of fertilizer, especially nitrogen. On my farm I consider the BG 34 perennial ryegrass a failure. It never grows tall and never yields much. It is slow to recover. Sheep do like it and are likely to eat it too short in a very short time, while they leave stands of other grass alone. Thus, managing the rotational schedule becomes more difficult. I am not likely to seed ryegrass again.

The **tall fescue** that volunteered is not liked

at all by sheep. The Barolex tall fescue I seeded did not meet my expectations. While it does grow and yields a fair amount of grass, the sheep don't much care for it. The intake is so reduced that I would worry about overall intake if that were the only kind of grass the sheep would have available.

My strip of **meadow fescue** was sown where it stays in part wet longer in the spring. According to the description of the grass, meadow fescue doesn't mind wet feet. That turned out to be true. This grass is well liked by the sheep. However, it doesn't yield much and it heads out early. Although I have nothing to say against the grass, I don't see much benefit of adding this grass to a pasture mix other than wanting some diversity. I have some volunteer meadow fescue. They like that just as well.

LEGUMES

Clovers have the advantage of fixating nitrogen from the air. It is said that a percentage of clover higher than 30 percent in the pasture mix takes care of the needed nitrogen for that pasture. I prefer 50 to 70 percent clover in my pasture. Other than the ability of causing bloat, I see no downside to having lots of clover.

But what about bloating and possibly losing sheep? Since grazing has become popular, I find much advice in various publications on how to prevent bloat. Much of it seems to have derived from dairy cows and does not work for sheep. Here is what I suggest: The single most important advice is to never let the sheep go hungry before rotating them into the next pasture cell. Hungry sheep will eat fast and hastily and have lots of room in the rumen for gas to develop. Sheep that are not so hungry will eat slower and there is simply not enough room in the rumen to allow the development of enough gas to kill the sheep. Aside from that, don't offer too big a cell, as that increases the likelihood of bloat. You will still lose a sheep or two but they had to go anyway - they were prone to bloat. What won't work is feeding hay before letting them into the pasture with clover. It also won't work to let the dew dry off before letting them in. And don't try “treating” a sheep when you see some bloat developing. In your attempt to rescue the sheep, you are likely to kill it because its heart rate will be elevated. Take it from me, I killed enough sheep with bloat before I reached these conclusions. I understand I side-drifted a little, but I want you to lose the fear of clovers/legumes if you had any.

Although I have the name “White Clover” in my farm name, its red cousin is currently just as widespread on my farm. There is a lot of red clover that volunteers. The hayfields that didn't yield much **red clover** the first year it was converted into pasture showed much more red clover in subsequent years. I assume that the increased amount of daylight that now reached the ground helped germinate the existing seeds. Red clover does not lose much palatability as it matures, it doesn't get trampled down easily, and it does stockpile quite well and long, especially if there is some snow cover. And did I mention that sheep love to eat it?

It is said that one of red clover's disadvantages is its lack of persistence. In a grazing system like mine there will always be plenty of seed heads that can develop and the clover can reseed itself. Will this be enough



Tall fescue yields well but is not much liked.

to keep plenty of red clover around? I think so, although I don't think that this reseeding process will amount to as thick a stand that I achieved after frost-seeding a couple of fields. In fact, red clover was an excellent economical choice to instantly beef up low yielding fields.

Many publications advise to not graze red clover while sheep are being bred. Red clover contains an estrogen-like substance. Studies suggest that this phytoestrogen lowers the conception rate. I have pastured lots of red clover during breeding season and have found no negative effect, or the effect is insignificant. In East Germany, where I come from, we pastured sheep frequently for months on pure stands of red clover. I recall a field trial that found no significant effects of red clover on the conception rate of sheep.

The **white clover** that volunteers at my farm is the low growing and low yielding kind, often referred to as Dutch white clover. However, it is a welcome volunteer. Alice, Ladino, Kopu 2, and Huia New Zealand white clovers are much higher yielding. So far, my experience with Ladino white clover was a bad one back in the 90s. An excellent stand vanished after two years.

I tried Alice white clover with much greater success. Alice seems to be very aggressive and is very competitive. In 2009 I frost-seeded Kopu 2 and separately Huia New Zealand white clover on many acres at about 2 pounds per acre. White clover establishes far slower than red clover and has no significant impact until its second year. Now I can see how well a stand was established with such little seed. Of course, white clover is not as high yielding as red clover. However, white clover has several advantages that other clovers or legumes don't have. Firstly, it doesn't lignify when the temperatures get above 90 degrees. Secondly, its energy versus protein content is balanced. Furthermore, white clover can be very persistent. Lastly, it does not lose palatability no matter how mature the stand is. In short, it is great to have white clover in the pasture with no downside to it....well, unless you fear the afore-mentioned bloat.

I also frost-seeded Ladino white clover in a newly acquired 20-acre parcel. I chose that one despite my previous bad experience simply to try yet another variety of white clover. Since it is the first year of its establishment, the jury is still out on this one.

I had some stands of **Alsike clover** developing. Alsike clover is in size somewhere in between Dutch white clover and red clover. Sheep like it. The big advantage of Alsike clover is that it grows well on slightly acidic soils. In fact, it grows on our farm in the few spots where it stays wet long in the spring.

See Sheep Pasture Page 19

LOCAL FOODS AND MARKETING

Is Your Honey Green? New Apiary Certification Program for Natural Beekeepers

By Dr. Buddy Marterre and Alice Varon

We all know honey bee health is threatened by pesticides, monoculture crops, in-hive chemical treatments, pests and diseases, and colony collapse disorder, among other things. One result has been a rise in natural beekeeping, regarded by many as the surest way to support the health of honey bees.

Beekeepers may wonder, is there a way to convey the value of your natural methods and gain a premium for your honey? Is organic certification an option? Until recently, the answer to these questions was "no" for most beekeepers.

We, the authors of this paper (Buddy and Alice), were very frustrated by this situation. A few years ago we joined forces - and with the help of expert beekeepers from across the country - drafted standards for 'Certified Naturally Grown's' apiary certification program.

The primary purpose of CNG's apiary program is to encourage beekeeping practices that will support the health and welfare of honey bees in America. The program does this by: 1) providing detailed guidance on best practices; 2) strengthening the natural beekeeping community through local networks of mutually-supportive natural beekeepers; and 3) creating a financial incentive for natural beekeeping through certification.

Some participating beekeepers don't

need the financial incentive and are just looking to be part of a local community of beekeepers. For those who do have a financial incentive, apiary certification has a lot to offer. It helps market your natural honey by offering promotional materials, attractive sticker-labels, a profile of your apiary on the CNG website, and the prestige of affiliating with a well-respected national program.



The CNG apiary standards offer guidance on how to manage your colonies without exposure to synthetic chemical treatments. They not only define what is required and prohibited to remain certified, but also give recommendations on best practices. They are strict but doable. A comprehensive list of allowed and prohibited substances is included in the certification guidelines, available on the website and also published as a booklet: Handbook for Natural Beekeeping, available at www.naturallygrown.org/store.

For those moving away from synthetic treatments, a transition table lays out the time frame and steps needed to achieve full certification. CNG's apiary certification is tailored for beekeepers with between 3 and 300 hives - ideal for hobbyists and sideliners.

Details on how to get certified are on the CNG website www.naturallygrown.org. In keeping with CNG's grassroots model, you'll find a little twist: before applying, you'll need to identify at least two other members of your "local network." These

could be from a formal network like a county beekeepers association or from an informal network of natural beekeepers in your area.

Completing the application should take 15-30 minutes. You'll be contacted by CNG within one to three weeks of submitting your application. If it is accepted, the following steps will complete your certification:

1. Sign and return a one-page declaration. This indicates you understand the standards and won't market as CNG any non-certified hive products.
2. Send a financial contribution. CNG recommends contributions of \$75 - \$200 but it's up to each member to determine the exact amount.
3. Arrange your apiary inspections. Two inspections per season are required and should be carried out by beekeepers that you know.
4. Inspect another CNG apiary (if there is one in your area). This is the work requirement, and it can be a great benefit, as it provides an on-site opportunity for learning.

Once you are fully certified, you will receive a certificate in the mail. You may use the Certified Naturally Grown name and logo, and purchase labels and other promotional materials. You'll have an apiary profile on the CNG website, which you can customize with descriptive text and photos.

ronmental challenges, it can be inspiring to join with others who choose to use natural methods to heal and strengthen the honey bee population.

For more information on the Certified Naturally Grown program, visit www.naturallygrown.org.

Dr. Buddy Marterre is an Eastern Apicultural Society (EAS) Master Beekeeper, North Carolina State Beekeepers Association Master Beekeeper, Past Vice President and current Membership Secretary NCSBA. He has taught bee school to over 450 students since 2004.

Alice Varon is Executive Director of Certified Naturally Grown. She started keeping bees in 2010 and is a member of the Ulster County Beekeepers Association. Contact her at alice@naturallygrown.org.



Beekeepers enrolled in the Certified Naturally Grown program

Photo by Alice Varon

But it might be that the great value of the CNG apiary program, and the reason many beekeepers have chosen to participate, lies in the learning opportunities and sense of camaraderie that it fosters and strengthens among natural beekeepers. In the face of daunting envi-

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LOCAL FOODS AND MARKETING

Faces of our Food System: J. Kings

Get to know a local food distributor in our 2012 feature series

By Becca Jablonski

This article is the second in a series highlighting distributors of New York State farm-grown products. For our second spotlight, I spoke to Joel Panagakos, the Executive Vice President for Produce at J. Kings, located in Holtsville, New York, on Long Island. J. Kings has been in business since 1974. They have over 400 employees, and a 125,000+ square foot warehouse. I wanted to feature J. Kings because they have the desire and ability to support all kinds of NYS growers. From purchasing small-scale locally-grown products to sell at their weekly farmers' market, to distributing products throughout the New York and LI Metro area school system, they can work with farmers as they scale-up, and provide appropriately sized outlets from one level of production to the next.

Q: How long has J. Kings been working with farmers?

A: Since 1989 - that's the date that we started the produce division within the company. In the company I ran before I started at J. Kings, I had developed relationships with a variety of Long Island growers. It was customary in the summer to purchase local corn, tomatoes, etc. and I brought this practice with me to J. Kings. What started off as small purchases really blossomed as time went on. Originally, most of the purchases were for sales to food service customers, and not for retail. But recently, retail sales have really increased - particularly with Stop and Shop supermarkets. Stop and Shop begins their locally-grown program in April with asparagus and ends in November with cauliflower and broccoli. There are about 50 Stop and Shop stores participating, mostly on Long Island and in Queens.

Q: How much of the produce that you sell is grown by NYS farmers?

A: In season, products such as green

peppers, squash, cucumbers, tomatoes, and lettuce, are sourced primarily from the east coast. The only time that we don't get product from the east coast is when there is a weather event. The local products coming from Long Island are really our main source of those products. About 70-80% of the products I mentioned come from Long Island during the summer months.

In addition, we work with apple growers in the Hudson Valley and the Western part of the state. We also purchase squash, onions, potatoes, and cabbage from Western NYS. We can get NYS apples from Sept-June (growers have made huge advances in terms of their ability to store products). We sell NYS apples to 85-90 schools in the Long Island area, as well in the Connecticut and West Chester school districts. We can actually get potatoes from Long Island through Feb. The schools are really demanding these locally-grown products.

Q: How many growers do you work with?

A: We work with 22 independent Long Island farmers. We pick up product from them 7 days/week in season and we deliver the product the day after we pick it up. It is all based on purchase orders. We ask growers a week in advance for their best guess of the quantity that they will have available. We do all pick ups and back hauls, and store everything at our warehouse. As I mentioned, we also have relationships with growers in the Hudson Valley (particularly apple growers) and in Western New York too.

Q: Are all the producers you purchase from GAP (Good Ag Practices) certified?

A: Yes. We are also one of the owners of a company called Proact (America's leading food service distribution system of fresh produce, a cooperative owned by 38 companies) and there is a "greener fields" initiative through that company to help producers become nationally certified.

We started working with about 5 of our producers to help them go through Proact's certification process. The growers are taking online classes, and then the auditor comes and checks them out. The certification really helps to elevate these producers to another level. These producers can sell

anywhere once they go through this level of certification.

Q: Have you seen an increased demand for locally-grown products in recent years?

A: The demand has been increasing dramatically for the last 5-6 years. It is on the front burner of everyone's thought process. In my opinion, it is what will save the produce industry in NYS.

Q: How have you responded to this demand?

A: Well, luckily, we had these relationships with farmers established. There are limitations based on the acreage in production. The farmers can lease more land and try to plan accordingly. We hold a meeting with farmers right after the holiday season (Christmas/New Years) and we give them predictions of what we need for the summer. So we work together in the planning. For example, if we didn't have enough green peppers of a certain size last year, we work with a grower to make sure they can meet our customer's specifications and demands. Our customers have become much more specific about they want (for example, size, color, packaging), so we can work with growers to ensure these needs can be met at affordable prices.

Q: What are the challenges you face working with NYS farmers?

A: If we talk about the Long Island farmers, the land is precious here and very expensive. It is also more difficult to put together a work force here. The costs of farming are just higher than farming in more rural areas. Customers do expect to pay more for the product than they would out of NJ, and luckily as transportation costs increase for West Coast product, we can keep costs fairly consistent between the Western US and LI grown products. But land costs and labor really remain a challenge on Long Island.

Q: When I visited this summer, I noticed the farmers' market in your parking lot. When did you start the farmers' market and how successful has it been?

A: We started the farmers' market about 4-5 years ago with the intention of using it as a showcase for our chefs about what would be available for their weekend menus. We thought a handful of

chefs would show up and take a look at the products. What we found is that yes, some chefs came, but so did regular customers. So after the first few weeks, we got our act together and got a register. It has grown steadily each year and we keep it open to the public. I should mention that J. Kings runs the market. We purchase all product from producers in advance, so it isn't farmers who are physically at the market. But this gives us a nice opportunity to help small producers find additional markets so they can expand to the next level. For example, we work with a producer who makes fantastic goat cheese. We purchase her product and sell it retail at the farmers' market. A few chefs tried it, and though the price is high, they are now using it in their restaurants. This has enabled her to expand production.

Q: Are you looking for additional growers?

A: We have multiple companies in addition to the distribution company - for example, we have a manufacturing company that does slicing and dicing of fruits and vegetables, we also have a meat company that processes meat, and there is also a company called Green Apple Foods that provides a one stop shop for smaller retailers interested in purchasing locally-grown products. So, we are always interested in working with more growers. Even if they aren't the right fit for J. Kings distribution, they might be able to provide product for us to sell at our farmers' market or through one of our subsidiaries.

Q: If farmers are interested in participating in the farmers' market who should they contact?

A: If there are farmers' interested in being a source of supply for the farmers' market, they should contact me via email and I will connect them to the right person/department. My email address is jpanagakos@jkings.com

Becca Jablonski is a PhD student at Cornell University conducting food systems research. She may be contacted at rb223@cornell.edu Thanks to the following funders for their support of local food distribution research: the Cornell Center for a Sustainable Future, NESARE, and the Cornell Small Farms Program.



Farmers' Market outside of J. Kings warehouse in Holtsville, NY.

Photo by J. King

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LOCAL FOODS AND MARKETING

Pricing Your Meat Cuts

by Brian Moyer

So, you're thinking about raising livestock for direct-to-consumer sales. You've figured out what kind of livestock you want to raise, what kind of infrastructure you will need, soil tested your pastures, the works. One question remains; how much should you charge your customers?

It doesn't matter if you are selling halves, quarters or single cuts, you will first need to know your cost of production. What are your costs of raising that animal from day one until the day of slaughter? In any business endeavor, keeping good records is essential to knowing if you are going to be profitable or not. Once you know your cost of production, there are some tools you can use to help you determine what price you may want to attach to your fine, farm fresh product.

Mike Debach of the Leona Meat Plant in Troy, Pennsylvania, has a nifty process you can use that will help you figure out your costs after processing so you can determine your retail price. For this example, understand that the cost of production will vary depending on the breed of the animal and production methods (i.e., grain-fed, grass-fed). According to Dr. John Comerford from Penn State's Department of Dairy and Animal Science, the percentage used to determine the "carcass weight" varies depending on what kind of animal it is (beef, hog, lamb), what breed the animal is, and the method of production. So, for this example, let's say we have a grass-fed, Angus steer that dresses out to a hanging carcass weight that is 58 percent of its live weight and your cost to get that animal to slaughter weight is \$1.35 per pound of live weight.

Determining the cost of your animal:

1. Start with your per pound cost of the live animal (as mentioned before, your cost to raise that animal).
2. Divide this amount by 58% to get your "hanging cost." (That animal is now a "carcass" after it is slaughtered. This determines your new cost per pound at "car-

cass weight.")

3. Add in your processing fees, trucking, etc., to the "hanging cost."

4. Divide the total by 65% to get your "cut-out" cost (breaking the carcass down into individual cuts of meat).

5. Divide your cut-out cost by the percentage mark-up you desire to reach the "retail value" price you will ultimately charge.

Here's an example:

- Cost of the live animal = \$1.35 per pound
- \$1.35 divided by 58% = \$2.33
- \$2.33 plus \$0.65 (per pound processing fee) = \$2.98
- \$2.98 divided by 65% = \$4.58
- This is the final cost of your animal becoming single cuts of meat
- \$4.58 divided by 75% = \$6.11
- A sale price of \$6.11 per pound would give you a 25% return on your product.

As you can see, in every step of the process there is a reduction to your final yield of finished product. So, your cost per pound will go up with every step from live animal to cut and packaged product. The above example will give you a rough estimate which can help you to remain profitable. Keep in mind, it is a "rough" estimate. A lot of variables can change these percentages. For example, how much fat was on the animal? What kind of cuts are you requesting? Are you getting bone-in or boneless cuts? If you want boneless cuts, this will reduce the total pounds of product returned to you from your butcher.

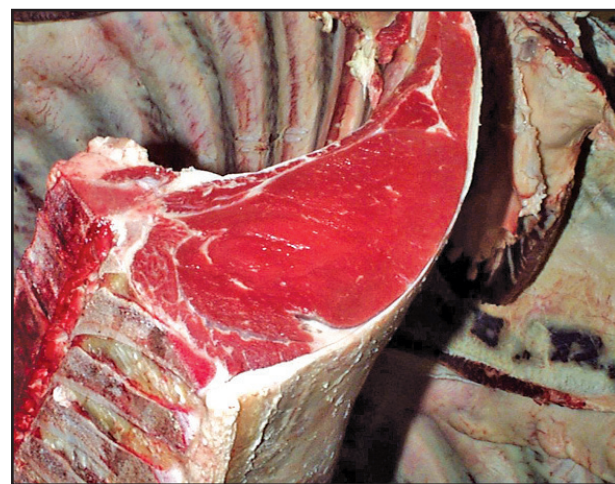
What kind of animal you are processing will also make a difference in the percentage of product you ultimately receive. Dr. Christopher Raines, of Penn State's Department of Dairy and Animal Science, has a handy sheet that describes the average percentage of yield in the butchering process for pork, beef and lamb. You can download Dr. Raines' document at www.das.psu.edu/research-extension/meat

Dr. Raines' document says when converting an animal

into a carcass, the average percentage of yield for pork is around 70 percent, beef 60 percent and lamb 50 percent. Turning that carcass into individual cuts of meat; the average yield for bone-in cuts is 75-80 percent of carcass weight for pork, 65-70 percent for beef, and 70-75 percent for lamb. Dr. Raines points out that aging and further processing can decrease your final product weight. If your butcher is hanging (aging) the carcass for two weeks, there is moisture loss due to evaporation. If you are curing hams and bacon from your pig, applying a heat process to your meat cuts may also reduce your final yield.

Using these tools, you should be able to make a rough estimate on the amount of product you will have for sale, what your costs are, and what you will need to charge your customers to remain profitable.

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Hanging cuts of meat waiting at a slaughterhouse for pick-up.

Photo by Brian Moyer

Sheep Pasture from Page 16

The biggest downside is its lack of persistence. However, looking at seed catalogues, I noticed it is very cheap. I can see that it may be beneficial to frost-seed Alsike clover when the budget is tight.

Planting **Kura clover** was a \$300 lesson. I have no stand of Kura clover after seeding it 3 1/2 years ago - only a handful of plants, just enough to know how Kura clover looks. It sure is pretty. Given its price and the difficulty to establish it, compared to the price and how easily white and red clovers can be established, I doubt I will give Kura clover another try.

Bird's-foot trefoil is a none-bloating legume. Sheep like it in measures. It doesn't yield very much in comparison to clovers. Other than being none-bloating and nitrogenfixating, it has the advantage that its tanning contents inhibit the growth of intestinal worms such as the deadly barber pole worm. This is my only reason for seeding it. I had interseeded trefoil in my 14-acre test plot. It took two to three years to establish the stand. Now it is well established. Meanwhile, I had a ten-acre parcel seeded with a no-till drill and frosts seeded another twenty acres. This too will be discussed in a follow up article once the stands have been established.

There was a fair amount of **alfalfa** present when I converted the hayfields at my farm into pasture. I assumed that the alfalfa would not take the grazing long and it indeed didn't. I consider alfalfa a harvesting forage rather than a pasturing forage. I do still have some

alfalfa that persisted a while longer and the sheep eat it right away when entering fresh pasture.

I also have some sweet **clover** in the pasture. Sheep like the immature plants as well. Again a little side note for the curious minds: Sweet clover is called Stone Clover (Steinklee) in German due to its ability to grow in areas that seem to have typical "weeds" that always will be there, such as narrow-leaved plantain and dandelion. Sheep don't consider them weeds but find them delicious instead. Which leads me to something important: While some forages are clearly more advantageous than others, one should not forget that sheep, just like us, love variety. I suspect that the total intake is higher when variety is offered versus a pure stand of a particular forage. However, I have no proof for this. In addition, various plants offer ingredients that others don't. Leaves from trees or from plants with taproots have a higher content of zinc. Bird's-foot trefoil has a higher content of tanning agents. Narrow-leaved, or English, plantain is known to have antibiotics in it. Variety also seems to offer a broader spectrum of ingredients that may help prevent diseases and deficiencies.

These "weeds" as well as the "native" or volunteer grasses and clovers are welcomed at my farm. They cost me nothing and the mere fact that they volunteer states how persistent they are. In my opinion, it is an illusion to think you can get rid of them. It will be costly to try and likely to be unsuccessful. It is in my opinion also a mistake trying to get the "best" species of grass there is unless you are willing to create the high-input conditions



The tanning agent of bird's-foot trefoil (yellow flower) inhibits reproduction of stomach worms.

that this species may need. The cost is high and the added benefit may be in no relation to the added expense. Keep in mind, I am talking exclusively about sheep pasture, not dairy pasture. I'd choose what establishes easily, yields a lot, and is liked by the sheep.

As far as weeds are concerned that the sheep don't like, I have given up in my quest of wanting to eliminate them. That can drive you crazy. Instead, I have noticed that strong stands of grass, especially orchard grass, and in addition bush-hogging the pasture after the grass developed seed stems (mainly to rejuvenate the stand), have such an impact on undesirable weeds like Canada and bull thistle that their stands become much weaker over time and thus manageable.

I am often asked, "What is the best pasture mix for sheep?" I think that a late-heading orchard grass and a persistent variety of

white clover such as Alice, Kopu 2, or Huia New Zealand white clover should be the two dominant species in the mix. One could add some bluegrass as an additional grass species and red clover and bird's-foot trefoil as additional legumes to the mix.

Generally speaking, in most cases I prefer improving existing stands by frost-seeding rather than plowing them up and reseeding them. It is far more cost and time effective. The thought of plowing something up and establishing the perfect sheep pasture is tempting. However, rarely does it work out in real life the way I thought it out in my head. Having that said, I did exactly that on a 14-acre rented parcel that had no hope of improving and was also of very rough terrain. I had it plowed and then reseeded it with my very own mixture that I consider to be "perfect." How much my wishes and reality overlap remains to be seen once the stand is established and will be material for an article yet to be written.

Ulf Kintzel owns and manages White Clover Sheep Farm (www.whitecloversheepfarm.com) in Rushville, NY where he breeds grass-fed White Dorper sheep. He offers breeding stock and freezer lambs. He can be reached at 585-554-3313 or by e-mail at ulf@whitecloversheepfarm.com.

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NEW FARMERS

And the Survey Says! Beginning Farmer Critical Needs

By Wes Hannah

With nearly one-quarter of American farmers expected to retire in the next two decades — indeed, the average age of a farmer in the U.S. hovers around fifty-seven — the need for an effective plan to encourage beginning farmers has never been more pressing. As with any entrepreneurship, farming has a number of major barriers to overcome: access to land and capital, access to healthcare, and the need for successful markets and business strategies. These obstacles, however, are magnified in the field of agriculture — access to land (and credit to purchase or lease land) is of the highest priority, healthcare becomes especially important because of farming's high injury rates, and the capital required can be prohibitively expensive and is needed up front.

Enter the National Young Farmers' Coalition (NYFC). The difficulties that young farmers face, juxtaposed with the accelerating need for a new generation of farmers, spurred the creation of NYFC, a non-profit with the goal of organizing and advocating on behalf of young and beginning farmers. For the past two years, NYFC, headquartered in upstate New York, has been building a grassroots base across the country. With that support, it has networked with state coalitions of young farmers, lobbied politicians for their backing for more supportive agricultural bills, and organized technical skill-shares and sharing of innovative solutions to on-farm problems.

Having encountered a lack of a complete analysis of the needs and obstacles of young farmers, NYFC worked for most of the past year on a massive survey of young and beginning farmers — the first survey of its kind and the first to accurately pinpoint obstacles faced by those entering the field. With over one thousand young farmers surveyed, the report represents views of everyone, from apprentices to farm owners, ranging across 38 states. With this data, NYFC produced a seminal report, entitled, "Building a Future with Farmers: Challenges Faced by Young, American Farmers and a National Strategy to Help Them Succeed."

Survey Results

Focusing first on the positive, the survey found a number of programs to be invaluable in young farmers' development. Apprenticeships were the highest ranked program, followed by local partnerships and then closely by CSAs. Also high on the list were land-linking programs (which help to pair aspiring farmers with land-holders), non-profit training and education, and college-level agricultural education. Apprenticeships, whether through the World-Wide Opportunities on Organic Farms (WWOOF) pro-



The National Young Farmer Coalition organizes skill shares such as this "farm hack" event held to share new engineering ideas.

Photo courtesy NYFC

gram or through seasonal hiring, are the way that a large percentage of young farmers first get their hands dirty and find their interest piqued. Those farmer-apprentice relationships often continue as personal mentorships when the beginners move on to their own projects. Local partnerships, such as "Buy Local" campaigns and direct financial assistance, as well as CSA relationships, are especially useful, particularly since a large number of young farmers are entering the field with an interest in non-commodities production and thus need that local support in developing a market.

More sobering are the results of the survey showing beginning farmers' largest challenges. The most-cited challenge, with nearly three-quarters of survey respondents selecting it as highly important, is lack of capital. Following that — and intertwined with it — is access to land. Further down the list are access to healthcare, access to credit, and the need for business education.

Access to capital is a problem that goes beyond trying to buy land. In meat and dairy production especially, cost of equipment and processing facilities can be an insurmountable barrier. When a beginner does finally come to the point where they want to purchase their own property and invest in permanent infrastructure, loan programs are not set up to adequately meet the demand. Commonly raised issues with government programs included: an inability to get small operating loans; overly strict experience requirements for beginners; and loan limits on direct farm ownership loans. Perhaps because of these problems, 73 percent of those surveyed said they had to depend on outside incomes in order to keep their farms going — obviously not a sustainable system for the future of American agriculture.

Since most of the survey respondents did not come from farming backgrounds (and in fact only ten percent were working on the farms on which they grew up), land access is hugely important. Between the year 2000 and 2010, the price of an acre of farmland doubled (according to the USDA's National Agriculture Statistics Service) due to increasing development and the ethanol production boom in the Midwest. In Northeastern states, the aver-

age price is actually five to ten times higher than the national average.

Working Toward a Better Tomorrow

With these results in mind, NYFC is hard at work organizing for improvements in our laws to help nourish beginning farmers. The organization has been pushing on the federal level for a number of changes, many of which are included in the Beginning Farmer and Rancher Opportunity Act (BFROA). In terms of education, the report shows a need for expanding trainings and education through the Beginning Farmer and Rancher Development Program and through continuing funding for the National Sustainable Agriculture Information Service (ATTRA). Improving access to land and credit means building on the Environmental Quality Incentives Program (EQIP), altering FSA requirements and creating a micro-loan program more accessible to small-scale producers, and offering tax credits and other incentive programs to keep farmland affordable as it transitions to a younger generation.

At the same time, states can improve apprenticeship programs while making sure that they protect young workers and respect labor laws. States can also build tax incentive programs for encouraging landowners to lease to beginning farmers, can consider improved health care systems, and establish student loan forgiveness programs for full-time farmers (as is seen in other critical professions such as doctors, teachers, and government employees).

Finally, individuals and communities can take this survey to heart and work to support beginning farmers. Joining CSAs and farmers markets, as well as pushing schools and other institutions to source food locally, all will help to develop local agriculture and help beginners. Even just renting available land to beginning farmers can become a win-win situation for the farmer and the landowner.

Lastly, the easiest and most direct way to help create a positive future of American farming is to join the National Young Farmers' Coalition. This non-profit is active in building that future and will continue to blossom with your support. Visit www.youngfarmers.org to read the report and find out how to plug in!

Wesley Hannah is an Organizer with the National Young Farmers Coalition and a farmer at Second Wind Farm, a 40 member organic CSA in Gardiner, NY. He may be reached at wes@youngfarmers.org

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Mary Ellen and Austin Chadd, members of the NYFC, harvest 'Sugar Dumpling' squash at Green Spark Farm.

Photo by Megan Swann