Sprouted Barley Fodder – A Revolution in Animal Feed?

By Joe Pedretti

Record high grain prices and the drought of 2012 are driving up interest in alternative feeds. Recently that interest focuses on sprouting barley for fodder production. A number of companies have developed systems for automated or semi-automated sprouted barley production. Some of these systems have recently been installed (or are being installed) on organic dairy farms in the Midwest. One of these farms, Mervin Johnson’s in Barron County, had a pasture walk in May, which staff from MOSES attended to learn more about sprouted barley as a feed ration.

Sprouted fodder is not a new idea. There are references to sprouting small grains for fodder dating back at least to the 1600s. What is new is the technology and engineering that makes it economically competitive with other feeding options. Light, moisture and consistent heat are critical for sprouted fodder to work. Attempts have been made using greenhouses to produce the sprouts, but have proven difficult and expensive for controlling humidity and heat. Greenhouses are just not consistent enough for reliable fodder production.

Experiments with fully automated hydroponic systems using artificial light were more stable and production more reliable. However, the lighting, which was mostly high pressure sodium or metal halide, generated a lot of excess heat and was very expensive, making this system not economically viable.

What has revolutionized sprouted barley fodder as a viable feed alternative is high efficiency fluorescent and LED lighting and more affordable climate control systems. LED lighting in particular is very energy efficient with little excess heat generated. Although LED is more expensive to buy upfront, the long-term operating expenses are greatly reduced. LEDs also last much longer than any other option, and do not lose output over time.

Many of the advances made in sprouted barley fodder have come from Australia—several of the systems used here are based on their designs. To Sprouted Barley on page 16
NEWS FROM MOSES

I enjoy working with and living around farmers because they tend toward eternal optimism, and have a general reluctance to complain. This weather year is definitely testing those qualities. At a meeting I attended this week with about 30 Wis., Minn., and Iowa farmers and organic advocates, in response to the question “how much rain has your area received in the past 3 days?” my answer was the lowest—only about 2.5 inches, as compared to 8 or 9 or those reporting from northern states. Well, I guess I’m not counting the 2 folks from Colorado, where they’re dealing with severe drought and fires...

Our claim of the resiliency of organic systems is truly being put to test this year. If we could just get the corn in the ground and the hay out of the field I think that claim would still hold up.

Perhaps you noticed in picking up this issue of the Organic Broadcaster that it feels a little heavier than usual—we are thrilled to announce the paper’s growth from 20 to 24 pages. With a lot to share in each issue, we were pleased to discover that postage would not increase with the addition of 4 pages, so we decided to make the leap. I hope you enjoy the expanded content.

The Organic Specialist team has had fun bringing answers to common questions they get via the MOSES “Organic Answer Line” though the new “Ask a MOSES Specialist” column. If you have a question certainly call us at 888-551-4769. You’ll get an answer from one of our specialists, but perhaps we’ll also share their advice in print so everyone can benefit from the answer.

We can’t talk about learning without mentioning the great lineup of organic field days MOSES has in store this season. Check out the sidebar on page 15 and the calendar on page 24 to explore all of your options. We consistently hear that exploring best practices through an on-farm field day is one of the best ways to learn new things.

Enjoy your summer, Jody Padgham, Organic Broadcaster Editor

Leaving a Legacy: How You Can Continue to Plant and Harvest

At some point, we all realize that we will not be walking this good green earth forever. Some of us may be lucky to get a wake-up call that reminds us that it is a good idea to leave a plan.

One young MOSES supporter recently shared her “wake-up call”: A friend’s spouse died suddenly leaving no will, and no written instructions at all. The result confusion made a time of sorrow and shock even worse for the wife and children. This got our supporter thinking about her own young family. She realized that they had no will, no plan, and that not much discussion had been put forward on the topic.

Does this sound like you? Although this is not an easy conversation for families to have, you will feel better after doing it.

It is always good to consult a competent advisor when you are working through important details such as who will care for your children should both parents pass at the same time. After that important decision, the next step in planning for your passing is what to do with your estate. You do not have to be a Rockefeller to need a plan. You probably own a house, a farm and cars. Perhaps you have retirement plans and stocks. Properly planned giving can create tax savings that result in a larger estate being passed on to your heirs.

For farmers who want to create a lasting organic and sustainable farming legacy, one option is to make a bequest to MOSES. MOSES is gradually adding more planned giving options and information to our website. An easy place to start is to add simple bequest language for MOSES to your will. You can choose to leave a specific sum, or you can choose to leave a residual amount after all your heirs have received their bequest from you. You can even choose to leave MOSES a contiguous bequest, which would only come to the organization in the unlikely case that none of the people named in your will will survive you.

A simple bequest will use language like this: “I hereby give, devise, and bequeath to the Midwest Organic and Sustainable Education Service, a 501(c)(3) nonprofit, the sum of ____ dollars. It is understood that my gift will be deposited into the general fund of Midwest Organic and Sustainable Education Service to be used as its Board of Directors deems appropriate.”

If you do decide to include MOSES in your plans, be sure to check out our web pages (www.mosesorganic.org/donate/NaystoGive.html) to find more detail on options, or just give me a call. We would love to hear from you as you are working through this process so we can thank you for your good work right now.

Luisa Gerasimo, MOSES Development Director, luisa@mosesorganic.org

Keep in touch:
MOSES educates, inspires and empowers organic and sustainable farmers—and cares for the environment. Please help us save trees and use your donation $ for programs rather than mailing costs.

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(includes a link to the online version of the bimonthly Organic Broadcaster)

Periodic notifications of Organic Field Days and other events happening in your area

Information about the annual MOSES Organic Farming Conference
If you’d like to change what you get by email from us, email info@mosesorganic.org or call us at 715-778-5775.
Can Organic be Perfect?

By Harriet Behar

At a meeting I recently attended a consumer representative stated she wanted “organic to be perfect.” This statement brought many questions to my mind. Would my perception of perfect be the same as hers? Are organic farmers, ranchers, processors, brokers, retailers etc. striving for “perfection” in all they do? Does this mean there are unrealistic consumer expectations of producers which create a rift between organic producers and the customers they serve?

The organic community has worked diligently to build trust in the organic label. We have promoted organic agriculture as a way to provide healthy food while continually building up soils and enhancing natural resources. Organic advocates point to studies that show higher levels of antioxidants and other nutrients in organic foods as they are grown in balanced, vibrant living soils and ecosystems. We perform on organic farms through the use of cover crops and diverse rotations that include perennial crops.

Organic agriculture can be thanked for saving many a family farm and bringing young people and nontraditional farmers to the land, supported by the economic benefits that organic can bring. Rural revitalization can be a better job of sharing not only the feel-good side of organics, but also the hard work and difficulties inherent in farming.

How Clear is the Picture?

It is easy to see how, through our own optimism about organic agriculture, we have perhaps built an image that is unrealistic. I remember giving out samples of organic cheese at a consumer event where numerous people said “oh, look, healthy organic cheese; that means there is no cholesterol in it, right?” I probably should not have been surprised that they assumed that since organic dairy is so wonderful, it probably would not contain that evil cholesterol!

However, I had to correct them, sharing that organic cheese has just as much cholesterol as non-organic. I also informed them that the animals were fed organic feeds tailored to maintain their optimum health, that antibiotics were forbidden, and their living conditions were mandated to provide for natural behaviors and lessening of stress. These consumers now had the information they needed to decide if these conditions provided them the extra value they were seeking.

Food producers must do a better job of sharing not only the feel-good side of organics, but also the hard work and difficulties inherent in farming.

Since farming is the profession of less than 1% of the American population, it is no wonder that most people do not understand the compromises farmers need to make every day. Should that tree line be removed to open up the land for a few more rows of crops, even though it reduces wildlife habitat? Should the beef cattle be allowed to drink from the stream, even though there will be some erosion at that spot? Should that field be tilled or cultivated one more time to lessen the weed pressure, even though we know that it uses fossil fuels, destroys organic matter and has a negative effect on soil structure?

There are even questions about pasteurizing and homogenizing milk; do these processes lessen the nutritional value and make the organic milk less perfect?

Is Perfect the Goal?

As organic producers we strive to continually improve our operations, not only to make them more profitable, but also to make them more sustainable from both an environmental and an economic standpoint. But are we looking for “perfection?” I am not sure that any farmer could say their operation, or the food they produce is “perfect.” Kathleen Merrigan, former USDA Deputy Secretary of Agriculture, warned the National Organic Standards Board before a recent meeting to “not let the perfect be the enemy of the good.” This could be seen as encouragement to compromise principles and move the agenda forward. Or, it could be acknowledgment that we will never reach perfection, especially in the complex world of food production from farm to table.

For some, perfection would be a weed-free field, and for others, it would be a field that is growing native plants that have never been disturbed.

The strength of the organic movement has been based in a strong partnership between consumers and producers. The growth of organic production is based on more farmers responding to growing market demand by becoming certified organic. Organic producers and organic consumers need each other. However, over the past few years, I have seen a growing rift between consumer groups and organic producers over what type of production systems and materials should be used under the USDA organic label.

Certified organic production differs from non-organic in that it restricts the use of most synthetic materials, even though they might be useful in a farmer or processor “toolbox.” Organic is about finding the “middle ground.”

To Inside Organics on page 23

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Historically, the family has been the primary institution for providing training, experience and resources to the next generation of dairy farmers. Dairy farming is a lifestyle as well as a profession that has long been passed down from parents to children. Aspiring dairy farmers not born on a farm have little chance of attaining the skills, knowledge, cattle, equipment and land needed to achieve their dreams. Even for those with related work experience, without managerial skills, investment capital or a farm to inherit, the barriers to ownership are formidable.

At the same time, dairy producers without a willing heir often are forced to sell off their cows and land upon retirement. Because new farmers are not entering the profession at a rate to offset the loss of retiring producers, fewer small and mid-sized farms remain to meet industry needs, and so large confinement operations have expanded.

A New Solution
It doesn’t have to be this way. Dairy Grazing Apprenticeship (DGA) is an innovative program based in Wisconsin that aims to diversify and strengthen the dairy industry by creating a new generation of independent and sustainable dairy farmers who can help meet industry needs, restore vital natural resources and repopulate rural communities. Following the well-established model for other skilled professions, this formal Apprenticeship in “managed grazing” dairy production combines on-the-job training and mentoring under a Master Dairy Grazier with paid related instruction. Apprentices earn while they learn, becoming Dairy Grazing Apprentices, Journey Dairy Graziers, and finally Master Dairy Graziers themselves on a pathway to independent farm ownership that draws on existing support structure, and places experienced farmers at the center of the educational process.

Established in 2010 by GrassWorks, Inc., a Wisconsin producer organization, and the Bureau of Apprenticeship Standards, Wisconsin Department of Workforce Development (BAS-WDWD), with support from USDA National Institute of Food and Agriculture’s Beginning Farmers and Rancher Development Program (BFRDP), DGA is the first accredited, legally recognized Apprenticeship for farming in the nation.

“Dairy Grazing Apprenticeship is a program created by and for farmers,” said Joseph Tomandl, III, DGA Program Director and third generation dairy farmer. “In Wisconsin, farmers have been experimenting for a while with new educational models, including learning clusters, mentorships, employee training and farm transition. Apprenticeship not only incorporates the best of these efforts but also provides a level of standardization and professionalism that we really need right now.”

While experienced farmers who participate in DGA are at different stages in their careers, they share a commitment to helping the next generation get started. Tomandl himself is a Master Dairy Grazier and has gone through the program with his employee and Apprentice, Clem Miller. As an investment, Tomandl purchased a second farm near his home farm in Medford, Wis., which Miller currently manages with the option to transition into ownership.

Retiring dairy producers and Master Dairy Graziers, Glen and Mary Harder of Rib Lake, Wis., were able to transition out of ownership over a period of three years while their Apprentice, Brandon Probst, developed the managerial skills and equity needed to take over the farm. Through Apprenticeship, Master Dairy Graziers Greg and Wendy Galbraith, who run a grass-based dairy near Wausau, Wis., provided Apprentices Gabrielle Rojas with a solid educational foundation, management experience and equity in cattle that she used to leverage the financing of her own farm.

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The Galbraiths view their participation in the DGA as a rewarding responsibility. “It was nice to have help from Gabby, but we didn’t just see her Apprenticeship as a means of acquiring labor,” Greg said. “We had a responsibility to teach her. ‘We are happy to have the opportunity to help shape a new generation of dairy farmers who are able to buy their own farm and continue the tradition of family-owned dairies,’ Wendy added.

“The teaching structure of the program is very effective,” said Master Dairy Grazier, Kay Craig. “As producers, we can be more focused on getting the work done than on the reasons behind our decisions. Having benchmarks laid out ahead of time makes us more conscious of the knowledge and skills we use to run the farm and gives us a blueprint for mentoring an Apprentice.”

In addition to on-the-job training, DGA requires 288 hours of paid related instruction that includes formal courses and other educational opportunities. Apprentices who have already completed comparable coursework may receive credit hours toward DGA graduation requirements.

Formal Program Structure
Farmers interested in mentoring a beginning farmer or helping an employee take the next step toward ownership may enroll in the Dairy Grazing Apprenticeship program through the Wisconsin Dairy Business Resources (WDWR), with support from USDA National Institute for Food and Agriculture’s Beginning Farmers and Rancher Development Program (BFRDP). DGA is an accredited, legally recognized Apprenticeship for farming in the nation.

Dairy Grazing Apprenticeship: Employment and Training for the Next Generation
By Bridget O’Meara

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To Apprenticeship on page 19
Soy-free Poultry Ration Research
Summarized by Jody Padgham

With the development of faster growing, high nutrient-demanding animal breeds, the high protein content and low cost of soybeans have made them an important ingredient in many modern feeds. However, for the past several years producers have been approached by consumers requesting meat that has been produced using soy-free rations.

Poultry producers find this request especially challenging, as roasted soymeal is the standard protein used by the poultry industry, typically making up 30-40% of the weight of the ration. At 36-38% protein, contributing 1,000-1,600 Kcals/lb of calories, high in fat (16-20%), relatively available and low cost, soybeans are difficult to replace. Alternatives being explored include peas, sunflower meal, camelina meal, and fish and crab meal—but each has its limitations. Although market demand is driving exploration into soy-free poultry rations, the economic and production implications of this switch have been relatively unknown.

In response to the recent demand, research has been undertaken through the certified organic Penn State Dickinson College Farm in Boiling Springs, Pa., coordinated by Jeff Mattocks, of the Fertrell Company, to compare results of feeding soy and soy-free rations to grass-fed broilers.

In the summer of 2012, three different breeds of naturally fed broilers (K-22 Red Broilers, Cornish cross and Bard Silver cockerels) were grown in three different types of pasture pens on three farms. Each farm raised only a single breed, split into two groups, treated exactly the same except one group was fed a soy ration and the other a soy-free ration.

Ration Formulas:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Soy</th>
<th>Soy-Free</th>
</tr>
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<tbody>
<tr>
<td>Corn Grain Shell</td>
<td>465</td>
<td>465</td>
</tr>
<tr>
<td>Crab Meal</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Fish Meal, 64%</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>Poultry Nutr. Balancer</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Wheat</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td>1,500</td>
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Each group contained 40 to 50 birds, raised in pens on pasture. Data was collected at each farm on the amount of feed consumed and weight gains of the birds.

Results: Results show that the birds eating the soy diet grew significantly faster and larger than those in the soy-free group, even though the soy-free group ate more food per bird at two of the locations. Thus it can be concluded that those fed a soy diet were more efficient in their utilization of the feed. Since the soy-free ration cost 6.9 cents per pound more than the soy ration, the average cost of production for the soy-free birds was $0.90, and $0.74, and $0.60 per pound carcass weight more on each of the respective farms.

Building on Prior Research
This 2012 research is an expansion and follow-up on research done at Dickinson College Farm in 2010. That research had birds on the Dickinson College farm only and used only K-22 red Broiler chickens fed in two groups using the soy and soy-free rations listed above. Results were similar to those shown in 2012, with birds fed a soy-based feed growing faster and larger than those fed a soy-free feed.

The decrease in feed consumed per body weight lends credence to the latter theory that the feed isn’t directly the cause of a larger bird. Given that growth continues to accelerate but the amount of feed consumed with regards to body weight decreases, it seems that birds are more heavily relying on grazing for their growth and body maintenance. Regardless, the data suggests that distributing the soy-based feed produces, on average, a larger bird. Furthermore, given the bird quality observations, it appears that the birds fed the soy-based feed were overall more robust and healthy. It should also be noted that the ratios of dressed weight to live weight were remarkably similar in each population. (“No Soy Ration Research,” Alex Smith, in Feeding Pasture-Raised Poultry by Jeff Mattocks, Fertrell Company, 2013)

For more information, see the publication Feeding Pasture-Raised Poultry by Jeff Mattocks, available from MOSES.
Question: I am having my organic corn (or soybeans or small grains or hay) custom harvested. What should I do to protect the organic integrity of my crop?

Answer: by Organic Specialist Harryr Behar

Harvesting of many organic crops is routinely done by custom operators who are not organic. These operators will need to follow specific protocols to prevent commingling of the organic crop with any non-organic crops or prohibited substances still present in the equipment.

When using a combine to harvest grains, soybeans or corn, the machine must be cleaned thoroughly between any non-organic crop and the organic crop. If the combine operator is working with another organic operator before harvesting your crop, you may not need to have the combine cleaned. You will need documentation that the last crop run through the combine was organic, and not a buffer strip, a transitional crop, or non-organic crop the other organic producer may have grown.

Cleaning a combine is labor-intensive and still may not remove all traces of a non-organic crop. Running the combine with all of the doors open is one way to shake out kernels and dust. Blowing out with compressed air and/or a shop vac is also an option. After either of these is done, you also must run the combine through a swath of your organic field, separating the first 30-60 feet or more of the crop that has been harvested. This harvest must be stored, used and sold as conventional. Keep a receipt or other documentation to show your organic inspector that this combine “purge” was either fed to your own non-organic livestock or sold as conventional. The distance you harvest for your organic field, separating the first 30-60 feet or more of the crop that has been harvested. This harvest must be stored, used and sold as conventional. 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If the previous non-organic crop was Genetically Modified (GMO), even a trace of non-organic crop dust in your organic crop could result in a positive GMO test and rejection of your organic load if and when it is tested by the buyer. An ounce of prevention is definitely worth a pound of cure in this case.

If someone is custom harvesting your hay or swathing your small grains, make sure the equipment arrives at your organic field clean. The cutting and windrowing equipment is easy to inspect. If it is traveling any distance over the road it has most likely been shaken enough to remove any non-organic hay or straw. This is true for large round balers, as they are mostly self-cleaning. However, it is still your responsibility as the organic producer to verify and document that there is no residue of non-organic crop in or on the equipment before it is used to harvest your organic hay or straw. If a custom operator first harvests your own conventional hay, a buffer zone, or transitional hay, you will need to clean the equipment before using it on your organic crop.

Small- and large-square balers are more problematic since they typically retain a partial bale or two. You will need to run at least three small-square bales or one large bale of your own crop through the machine as a “purge,” and document that these were stored and sold or used as non-organic. Many large square balers have some sort of preservative that is injected into the large bale. The preservative container should be emptied of any prohibited substances before the baler is used to harvest your organic crop; note this in your records. If the product is a bacteria or other naturally occurring substance you should verify with your certification agency that it would be allowed on your organic bales. Ask your custom operator what type of preservatives might be used in the equipment, and check it with your certifier at least a week before the operator shows up to bale your hay.

Rented storage areas as well as any transportation vehicles also must be verified clean and free of previous crop residues or prohibited substances before being used for organic crops. Document that you verified they were clean before you used them. This documentation can be part of your field activity log or calendar, or you can use the various forms your certification agency may provide.

Question: Can I use compost from my county’s composting program on my organic farm?

Answer: by Organic Specialist Joe Pedretti

Municipal compost is becoming more common as communities switch to composting yard and kitchen waste instead of sending it to a landfill. The National Organic Standards separates compost in two groups: one that might contain fecal matter from animals or humans, and one that does not. Within each group, the compost must meet specific criteria to qualify for use on organic farms.

Compost that might contain manure must meet the composition, temperature and turning specifications in the National Organic Standards:

(i) Established an initial C:N ratio of between 25:1 and 40:1; and
(ii) Maintained a temperature of between 131 °F and 170 °F for 3 days using an in-vessel or static aerated pile system; or
(iii) Maintained a temperature of between 131 °F and 170 °F for 15 days using a windrow composting system, during which period, the materials must be turned a minimum of 5 times.

The county/city must provide the documentation to show these standards were met before you can use a material as compost. If they cannot prove they have met these standards, it may be possible to still use it, but it will not be considered compost, it will be considered raw manure, and will have different handling requirements:

1. Raw animal manure, which must be composted unless it is:
   (i) Applied to land used for a crop not intended for human consumption;
   (ii) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or
   (iii) Incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles

Composted and un-composted plant materials without manure have no application restrictions, but the composting center must verify that the compost contains only 100% plant materials. If there is a possibility that it contains pet waste (animal manure) then it must be handled as raw manure.

Whether or not it contains animal manure, you still must make sure compost contains no prohibited materials:

- Recycled building materials/lumber (due to paints, varnishes and glues)
- Human waste
- Plastics and other un-compostable synthetics

Check with the composting facility to see if they have the necessary documentation. If other organic farmers have been using their product, it is quite likely they have this paperwork on hand. Also check with your certifying agency, which can do a product review if it has not already reviewed this compost for other farmers. Ultimately, your certifier makes the final call on whether a product is allowed or not. All new inputs should always be verified and added to your crop input list before use.
MOSES Rural Women’s Project: Resources and Connections for Women Who Grow

By Lisa Kivirist

As the summer brings on the bountiful farm harvest, the MOSES Rural Women’s Project offers a range of flavorful “ingredients” to support the growing number of women farmers. The award-winning MOSES project, launched in 2009, is one of few grassroots organizations running a year-round program dedicated to female farmers.

Women-owned Farms on the Rise

According to the last USDA Census of Agriculture, women are one of the only groups of new farmers currently growing in number, with an increase of nearly 30% from the previous census. The Economic Research Service, the primary source of economic research and analysis from the USDA, recently issued a report looking at data on women farmers from 1978 through 2007. While women have contributed to farming and food production throughout American history, national-level statistics to track these numbers started increasing in 1978 when the Census of Agriculture started asking for the gender of the principal farm operator. So, while we only have a small snapshot of the full impact and credit of women farmers, it is important, especially in relation to recent trends.

The ERS report defines “women-operated farms” as those whose principal operator, the person most responsible for all the day-to-day operations on the farm, is a woman. The report looked at all women farmers collectively (not specific to organic operations).

Highlights of the ERS Report

• The majority of women-operated farms today are very small, with annual sales of less than $10,000. These small-scale farm operations are where most of the growth of women-operated farms is occurring, increasing by three-fourths from 1978 to 2007. This means that a small fraction of female farmers earn the majority of all female farmer income: Only five percent of women-operated farms (15,400 farms) had all female farmer income: Only five percent of attendees have not yet started their operations. 2013 In Her Boots workshops include: Monday Aug. 4: Decorah, Iowa. (Hosted by Barb Kraus at Canoe Creek Produce) Thursday Aug. 8: Kenyon, Minn. (Hosted by Mairi Doerr at Dancing Winds Farm) Monday Aug. 12: Brodhead, Wis. (Hosted by Dela Ends at Scotch Hill Farm)

• Soil Sisters: South Central Wisconsin Women in Sustainable Agriculture Farm Tour Day After a successful launch last year, the Soil Sisters farm tour will continue in the Green County, Wis. area on Sunday, Sept. 8, showcasing an inspiring cross-section of women-owned farms committed to sustainable and organic agriculture. From eggplants to emus, sheep to solar energy, Bed & Breakfasts to beef, these seven farms offer a unique diversity of farm experiences in one afternoon. The tour is free and open to the public. New this year: various farms will be offering on-farm intensive workshops on Saturday, Sept. 7 prior to the tour. Details at www.soilsisterswi.org.

• Local Wisconsin Women in Sustainable Agriculture Networks The Rural Women’s Project supports opportunities for women committed to sustainable agriculture to gather and develop strong local connections. The project has supported two such networks in Wisconsin: South Central and West Central. See www.mosesorganic.org/womensproject_Networks.html.

• Plate to Politics: Advancing Women’s Leadership in Sustainable Agriculture and Food Systems Development The Rural Women’s Project works in strong partnership with the Women, Food & Agriculture Network (WFAN) to support women in sustainable agriculture who are taking on leadership roles. Our “Plate to Politics” Women’s Leadership Webinar Series runs through the Midwest, with topics ranging from building alliances to running for office. See www.plate-topolitics.org to register or view past webinars.

• Women Caring for the Land: Land Conservation Training for Women Free workshops in partnership with WFAN provide conservation training for women, and connect women with local resources, program and networks. For a listing of free workshops throughout the Midwest visit www.womenscar-

ningfortheland.org.

Women-focused Events and Resources

The MOSES Rural Women’s Project champions this growing movement of women farmers, with particular focus on supporting small, diversified operations. See the Rural Women’s Project webpage for details on all of the following, as well as for additional resources: www.mosesorganic.org/womensproject.

• In Her Boots: Sustainable Agriculture for Women, By Women Now in their third year, these unique on-farm, daylong workshops for women farmers champion a peer-networking model. Held on various women-owned farms, Boots workshops cover a range of topics, such as farming as a single woman and starting a farm mid-life. The Boots workshops particularly attract new and beginning women farmers; over 60 percent of attendees have not yet started their operations.

• Cultivating Our Food, Farms and Future: 4th National Conference for Women in Sustainable Agriculture (Nov. 6 - 8, 2013; Des Moines, Iowa) MOSES is excited to be a partner in the only national gathering dedicated to women in sustainable agriculture, held this year for the first time in the Midwest. The conference will cover a range of agriculture, farm and organizing issues along with inspiring keynotes and ample time for networking. Registration will open later this summer, with farmer scholarships available. More information at www.wfan.org.

Any questions regarding the Rural Women’s Project—or new ideas to share—please contact me: lisa@innserendipity.com. I look forward to crossing paths with you this year!

Lisa Kivirist is the Coordinator of the MOSES Rural Women’s Project.

Attendees at a 2012 Boots field day enjoy learning together. Webinar: Resources, Opportunities & Inspiration The “Resources/Links” section of the Rural Women’s Project website offers a collection of materials useful to anyone interested in farming: www.mosesorganic.org/womensproject_resources.html. This page includes an hour-long webinar titled “Planting Fresh Seeds Webinar: Resources, Opportunities & Inspiration for Women Farmers and ECOPreneurs,” a fact sheet on the growth of women in agriculture, links to numerous women-run farms, a listing of grants and resources for women in agriculture, and list of other helpful resources and organizations.

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Got Kefir? ‘Best Kept Secret’ for Healthy Organic Calves

By Jody Padgham

One of the most important keys to success in organic dairy production is the rearing of healthy calves. This can be especially challenging for a farmer who has relied on antibiotics to treat health issues. A successful organic system will be based on maintaining calf health and preventing diseases and other challenges from occurring.

A very successful organic calf rearing system was showcased at a recent pasture walk hosted by the Northwest Wisconsin Graziers Network at the Mervin Johnsons farm in Barron County, Wis. Organic for 10 years, the Johnsons graze 75 mixed-breed cows, including Holstein, Jersey, Brown Swiss, Normande and Fleckvieh, on 130 acres.

Mervin and his son, Phillip, are pleased with their calf-rearing system of feeding whole-milk kefir combined with management of calves from ages 3 days through 3 months in group pens on grass.

Kefir Offers Intestinal Support

Diana Johnson explained that the family was first introduced to kefir as a household food product about 10 years ago. Kefir is a ferment(ed milk drink believed to originate in the Caucasus Mountains of central Europe and Asia. It is made with “kefir grains,” which look like a soft head of cauliflower, but are a live mass of bacteria and yeasts. The kefir milk has a sour taste, somewhat like yogurt, and contains many beneficial micro-organisms that enhance the health of the digestive system.

“We were enjoying kefir at home, and I decided to try it on the calves,” Mervin said. He’s been impressed with the thriftiness of calves that he has seen since. “I think kefir is the best-kept secret out there.” Several other farmers attending the pasture walk backed him up on this statement. “We used to lose a lot of calves to sickness,” said one attendee. “We haven’t lost a calf in the few years we’ve been feeding kefir.”

Dr. Guy Jodarski, staff veterinarian at Organic Valley, added that he has seen a lot of success with calves fed kefir. “I especially like to recommend kefir to farmers just getting into organic, because this is where we see a lot of trouble with calves.” One of the farmers present chimed in with his story of being in the first year of organic production and really struggling with keeping 2-week to 2-month old calves alive. “I started feeding kefir, and now my 3-month calves are strong, weighing twice what they did at that age before. Kefir has really been a miracle for my calves.”

Kefir is made at the Johnsons by mixing fresh raw milk in 5-gallon buckets with kefir grain “culture” or “mother.” Ideally the live kefir culture comes from a farmer or household that has some to spare, but dried kefir grains can be purchased via the Internet or from most health food stores. One cup of (hydrated) culture is enough for one gallon of milk if cultured for 24 hours. Once added to milk the culture will grow. Since it is reused to create new batches, anyone actively culturing will generally have extra to share.

Since the Johnsons feed calves twice a day, they add twice as much culture and maintain it at a warm temperature to speed up the process. A controlled room they use for barley sprout production is perfect for keeping the buckets at 70 degrees F to allow the culture to ferment. After 12 hours, the kefir milk is mixed, poured through a large colander into a bucket, and the kefir grains are saved and added to another five gallons of milk for the next batch.

“This is the only milk we feed calves,” Mervin said. Although the Johnsons generally leave the calves on their moms for 2 or 3 days, if for some reason they don’t do this, they will make kefir of the colostrum and feed that to the newborns. The kefir is mixed with a little warm water to bring the temperature up before feeding. They bulk feed into feeders with multiple nipples, with one gallon kefir equivalent to one gallon of milk. Mervin and Phillip continue this routine until the calves are 3 months old.

When asked if the kefir causes scours, Mervin laughed. “We use the kefir to treat scours,” he said. In fact, he now uses kefir in the dairy barn to treat illnesses. “We had a cow each of the past few years with odd, DA-like symptoms (displaced abomasum). I fed each of them a quart of kefir (via tube) several times and within 2 days they were each completely back to normal.” Whenever he has a cow that doesn’t “look quite right” Mervin gives her a gallon of kefir and she perks up in a matter of hours.

Calf Groups on Grass

Another key to the Johnsons’ success with calves is a moveable pen system on grass. When calves are 2 to 3 days old they are taken off their moms and put out on the pasture into a 20 by 20-foot pen with up to 9 others about the same age. Using a bulk feeder with multiple nipples, the calves are fed kefir and allowed to eat pasture. The pen is moved with a small jeep (or ATV) one to three times per day, depending on how many are in the pen, their ages and the condition of the pasture. Since the Johnsons try to have all the farm’s calves born in the five warmest months, a majority are reared through this pasture-based system.

Johnson have tried a couple of different pen designs, one made of welded steel, and one made of lighter weight gates.

To Kefir on page 9

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Farm Bill Fatigue

By Harriet Behar

All of the pens are covered at least half way with shade cloths from FarmTech. "Shade is important, especially for the really young calves" Phillip claimed. "On really hot days they'll spend all of their time in the shade." The pens have wheels on one side and skids on the opposite side to make it easier to pull.

The Johnsons and Dr. Jodarski see several benefits to having the calves out on pasture so early. First, they get used to eating grass, and have no transition time to becoming successful adult grazers. The group pen allows them to become socialized to the other calves, again making an easier transition to the adult group dynamics. Obviously the nutrition from the grass is beneficial to the young animals. Dr. Jodarski pointed out the value of young calves being able to selectively graze on diverse pasture for plants that have natural deworming characteristics. He explained that by moving pens before the grass gets below four inches, and not running over the same ground more than once or twice a season, any potential parasite problems will be avoided.

It is understandable if you are experiencing "Farm Bill Fatigue."

For the second time in two years the U.S. House of Representatives has failed to pass their version of a Farm Bill. In 2012, the House leadership failed to bring the bipartisan House Agriculture Committee's farm bill to the floor for a vote by the full House, and now in 2013 the full House rejected the House agriculture committee's bill and amendments by a vote of 234 to 195. Approximately a quarter of the Republicans in the House voted against the 2013 bill, joining most of the Democrats. What appears to have driven this defeat are proposed changes to the SNAP, Supplemental Nutrition Assistance, or "food stamp" program--cuts of $20 billion over 10 years, and new requirements such as drug testing and having a job or being in job training as a prerequisite to participation. Democrats refused to agree to cuts this deep, while Republicans did not think the cuts were deep enough.

When looking at programs that promote a strong and growing organic agricultural movement in the United States, the House Agriculture Committee bill fell short of the Senate's final version of the farm bill. Amendments to the House agriculture bill providing funding to retain organic price reports and the organic agriculture census, as well as funding aiding the National Organic Program to improve data collection and dissemination, was not allowed on the floor. The justification was the lack of spending cuts to other organic programs to fund these two programs.

There was no funding in the House bill for organic certification cost share, although it did fund the Organic Research and Extension Initiative (OREI) at a slightly higher rate than the Senate bill. Provisions that provided a fair playing field for organic farmers seeking crop insurance or participation in the Environmental Quality Incentives Program (EQIP) were not even heard on the House floor.

On the other hand, the Senate's bipartisan final Farm Bill included many reforms to farm programs, including the removal of direct payments. It included crop insurance for crop and livestock producers as well as cutting the food stamp program, but at a smaller level than the more conservative members of the House wanted to see. It also retained many of the programs that have been beneficial and effective for organic and sustainable farmers over the past 5 years.

So, where do we go from here? The House leadership could tack the Senate's version of the farm bill onto another bill, and see if it could pass that way. Or, the House agriculture committee could work on modifying their bill to gain more votes and reintroduce it. These two scenarios are unlikely, but in this Congress, it seems anything can happen.

The most likely and problematic scenario is an extension of the previous farm bill, which we are operating under right now. Many of the visionary programs from the 2008 farm bill were not included in this extension. These "orphanned programs" promoted organic agriculture, supported opportunities for beginning and nontraditional farmers, offered reforms to farm programs that provide huge subsidies to large farmers, or those who do not farm at all, and enhanced the economic development of rural areas.

MOSES and our partners will be working to include organic programs in either a farm bill extension bill or any new bill that might be working its way through Congress this summer. Thanks to everyone who made a call or sent an email to your member of Congress concerning the recent farm bill activity. It did make a difference. We might be calling on your behalf to do this again.

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Food safety isn’t just a legal responsibility, or an ethical obligation to our customers. It’s also an obligation to the rest of the local foods community. In 2006, over 50 billion servings of fresh bagged salad greens were sold in America. That September and October, an outbreak of Escherichia coli O157:H7 associated with baby spinach sold in bags killed five people, and sickened a little over 200. Despite the overwhelming safety of the spinach supply, fresh spinach sales still haven’t risen back to pre-2006 levels. If we ever have a significant outbreak associated with a farmers’ market or a farm-to-school program, we can count on the media to make such a big deal out of it that the small farm and local food movement could be set back by decades.

Fortunately, regulators and auditors recognize that food safety is all about risk reduction. While certified organic farmers are used to a set of rules where things are either mandat ed or disallowed—you must rotate crops, you may not use chemical herbicides—in the world of food safety, we have a lot more flexibility in much of what we do. Even the FDA’s proposed Produce Safety Rule tries to acknowledge that there are many different paths to clean food.

Where Contamination Happens

When you hear about somebody with the “stom ach flu”—vomiting and diarrhea—it’s almost al ways a form of food poisoning. Food poisoning is almost always the result of some sort of fecal contamination. In other words, if you’ve got the stomach flu, chances are that somehow you ate poop. And that poop had Salmonella, or Listeria, or Campylobacter, or any number of other human pathogenic bacteria in it.

The good news is that preventing microbiologi cal contamination in fresh produce is pretty simple, and comes down to just a few things: first, keep the poop off the food; second, keep the poop from spreading to other food; and third, assume that the food has poop on it, and keep that poop off. Of course, workers should wash their hands after using the toilet. It’s not so much that the act of using the bathroom somehow automat ically contaminates your hands, but that lots of people use the bathroom, and you have to assume that they aren’t as clean and as care ful as you. Plus, it’s a good idea to periodically get your hands clean in order to reduce overall bacterial load.

Workers who have been in contact with farm animals, or who have worked with animal waste, must wash their hands when they are done—even before working in the office or driv ing a farm vehicle. An employee with fecal mat ter on her hands who touches a keyboard or holds a steering wheel is contaminating those surfaces; the next worker who comes along is likely to end up with contaminated hands.

Running water is important to remove contamina tion from your hands, and to keep your hands from being re-contaminated. The water doesn’t need to be under pressure, it just needs to flow over and away from your hands, to carr y away the bad stuff that you are washing off. The basin you use for washing your hands should be dedicated to hand washing— the act of washing your hands in it contaminates it. And potable water is a must. It doesn’t do any good to wash your hands with contaminated water.

Soap is an absolute requirement for getting the nasties off of your hands. In the same way that muddy hands spread dirt much more readily than dry but dirty hands, wet hands can spread bacteria more easily than dry hands. Sanitizers are not an acceptable substitute for soap on the farm, because clay particles and organic matter dramatically reduce their effec tiveness.

For the same reason that using soap matters, drying your hands is a critical step. That means drying with a towel that isn’t contami nated—not the back of your jeans. Using a single-use towel keeps somebody else’s sloppy hand-washing from undermining your careful scrubbing. A single-use towel doesn’t have to be disposable—you could use cloth towels that are used once and laundered between each use. Once you’ve washed your hands, the used wa ter and the things it touches are considered to be contaminated, so you must keep it from running into the field. In a packing house, that probably means a septic system; in the field, that means a separate container for waste wa ter.

The University of Minnesota has published plans for an inexpensive field hand-washing station at http://goo.gl/YILQV (see photo).

This is the first in a series of articles about food safety written by Chris Blanchard, an organic farmer, educator, and consultant. Chris’ consulting and education work focuses on providing systems and tools to farmers and food businesses to help them succeed in farming, business, and life. chris@flyingrutabagoworks.com, www.flyingrutabagoworks.com
Crops and livestock have historically been integrated in farming systems. However, in the last 50 years there has been a trend towards specialization of single crops, diversified vegetables or livestock. In many cases, this specialization has also developed into consolidation of commodity production.

For example, in many areas we see vegetable production focused in one county, and dairy or other livestock production in another. This consolidation creates a reliance on commercial fertilizer in the vegetable county for fertility, and a concentration of manure nutrients in the livestock counties. In the livestock areas the largest source of nutrients that end up in the soil may actually be from imported grain purchased to feed dairy cows and young stock. If the nutrients going into livestock operations are coming from outside the area, it can potentially lead to excesses that cause over-fertility, environmental concerns and non-point source pollution.

Recently there has been increased discussion of diversification and re-integration of crop and livestock operations. Two scales of integration are often discussed: (1) within-farm integration, where a crop or dairy operation diversifies, and adds another enterprise and (2) among-farm integration, or “coupled” farms, where two or more operations share land, manure nutrients, forage and grain crops grown in rotations. These coupled operations allow individual specialization, but facilitate sharing of nutrient and land resources, hopefully benefitting both operations.

Benefits of Integrating Livestock and Vegetable Operations

When evaluating the benefits of integrated systems it is obvious that organic vegetable producers would benefit from the improved flow of nutrients from manure produced by a livestock enterprise. This is especially true when one considers areas that are deficient in soil phosphorus. Feeding forages and grains through ruminants will improve phosphorus availability.

Nitrogen from manure is also fairly rapidly available to plants during the growing season. This, of course, is dependent on the type of manure and bedding content. Poultry manure (cage layer) will contain very little carbon and have high nitrogen availability, while beef, sheep or horse manure with high amounts of carbonaceous material such as sawdust or shavings may “tie up” nitrogen when applied to the soil.

More specifically, what are the benefits of adding livestock to vegetable operations?

1) A source of nutrients that can be used for direct application and/or composting. By combining livestock and vegetable production, the whole farm nutrient balance of imports and exports becomes more even.

2) Along with nutrients, manure and compost applications tend to improve soil organic matter, biological activity and potential disease suppression. This improved soil health will manifest itself quickly and include improved soil nutrient cycling, improved soil structure, better water holding capacity in droughty soils and improved drainage in heavy soils.

3) Livestock operations improve the potential for profit in lands that are in a “soil” rotation. Sod crops help to build soil structure (grass roots) and soil drainage (legumes/alfalfa). Sod crops high in legume content will also provide a source of nitrogen when those fields are returned to row crop production.

4) Livestock provide a use for crop residue and waste or culled vegetable crops. This can help reduce disease while providing a “cheap” source of feed for livestock. Cows turned into a field of pumpkins in November utilize great feed and help vegetable producers clean up a field!

5) Grain crops used by vegetable operators as cover crops can fit well into livestock rotations. Winter grain crops provide fall nutrient catch, weed control in both fall and spring, and can be undersown with clover or other legumes to provide nitrogen in subsequent rotations and a soil crop establishment with minimum tillage.

6) Adding livestock products to the marketing mix can help improve cash flow in the winter and add a new aspect to CSA operations.

7) While not always discussed, successful “coupled” animal/vegetable operations can also help to build community with a farm region. Coupled operations also have the option of sharing machinery resources and labor during busy periods.

Livestock Waste Can be an Issue

While there are many positives to integrating livestock and vegetable operations, there are also some risks and issues. Most involve the use and handling of livestock wastes and effluent from feeding operations.

Organic operations have specific guidelines for the use of manure and manure composts. Un-composted manure is permitted under organic rules if it is applied 120 days prior to harvest of crops where the edible portion has direct contact with the soil or soil particles, or at least 90 days prior for crops where the edible portion does not have direct contact with the soil or soil particles. Livestock manure may be used on crops that are not for human consumption without waiting periods before harvest. Manure tea and liquid manure have the same restrictions. Composting eliminates these “waiting” periods, but involves time and temperature monitoring for pathogen reduction.

Additionally, new USDA guidelines for GAP (Good Agricultural Practices) discourage the use of manure or adjacency with livestock operations. With many markets now demanding GAP certification, many vegetable producers may be hesitant to integrate livestock and vegetables. While GAP guidelines discourage integration, they do not eliminate the potential. GAP certification and the audit process is based on a point system. Retaining manure and animals into your vegetable operation means that you lose points in one section; in order for your operation to pass the audit, it must be “tighter” in other food safety management.

Below are links to information regarding food safety and the use on manure in vegetable operations, as well as information about GAP audits and the certification process.

Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables: http://1.usa.gov/1216LQL

Food Safety Begins on the Farm: http://hdl.handle.net/1813/2209

National GAPS Educational Materials at Cornell: www.gaps.cornell.edu/educationalmaterials.html

USDA Good Agricultural Practices & Good Handling Practices Audit Verification Check-list: www.ams.usda.gov/AMSv1.0/getfile?DocName=STELPRDC001326

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Livestock add fertility to a crop rotation.
NEW FARMER CORNER

The National Young Farmers’ Coalition

By Lindsay Rebhan

The New Farmer Corner highlights issues of particular interest to those new to farming, no matter what age. If you have an idea for an article, contact Lindsay at neworganicstewards@gmail.com. See the New Organic Stewards webpage www.neworganicstewards.org.

Beginning and/or young farmers in the Midwest can not only look to the New Organic Stewards and local nonprofits for activities and resources, but will also gain from being involved in national new and/or young farmers’ groups.

The National Young Farmers’ Coalition (NYFC) is a national network of young farmers, ranchers, and supporters fighting to create opportunities for young people in sustainable agriculture in the United States. Today’s beginning farmers struggle with daunting barriers to entry, including access to land and credit, lack of health insurance coverage, and often tens of thousands of dollars in student loan debt. NYFC is uniting young farmers across the country to tackle these barriers through resource sharing, organizing to solve local challenges through chapter groups, and advocating together for farm policy that reflects the farm future we need.

Lindsey Lusher Shute, farmer, founder and leader of The National Young Farmers’ Coalition, gave a TED talk earlier this year called ‘Building a Future with Farmers.’ In 15 minutes it gives a concise insight into how the U.S. has moved away from family farming, and how the next generation of sustainable farmers are critical for a healthy future for our food, farms and communities. Lindsey speaks to the positive health, economic and environmental benefits sustainable diversified organic farmers produce and calls for a million new farmers in the U.S. You can find it at http://tedxtalks.ted.com/video/Building-a-Future-with-Farmers

You might have met Sophie Ackoff, NYFC’s Membership and Development Coordinator, at this past year’s MOSES Conference. Sophie recommends that new farmers explore the NYFC website, www.youngfarmers.org, filled with resources for young and beginning farmers. “Be sure to check out our ‘Resources’ section for directories on training opportunities, land and job opportunities, information on federal programs and how to contact USDA, your extension, and more,” she explains. NYFC’s blog (youngfarmers.org/blog) will keep you informed on all the facets of the young farmer movement and what’s happening in Washington D.C.

Sophie is excited about a new feature, the Farmer Forum: “We’re creating a national conversation among America’s young farmers and we want you to join! Do you have questions on tools, seeds and breeds, farm life, land, jobs, policy, etc.? Join the conversation at the NYFC Farmer Forum - youngfarmers.org/forum.”

She also encourages new and beginning farmers to sign up for NYFC’s e-mail newsletters to stay informed and take action. Announcements include when experts join the Farmer Forum and when Google Hangouts on important topics are hosted. The first hangout on apprenticeship legacies is currently up on the website and on Google+.

In 2011, NYFC wrote a report on the current realities of beginning farmers, based on a survey of over 1000 young farmers nationwide. Access to capital, land and health care were the top challenges facing the beginning farmers. In the survey, apprenticeships, local partnerships and CSA models were among the top strategies that helped beginning farmers. Sophie reports that “Access to credit is one of the major obstacles farmers face. Current commercial and federal loans do not meet the needs of beginning, small and diversified farmers. An amendment we’re advocating for in the Farm Bill authorizes a new simplified microloan category within the Farm Service Agency’s direct operating loan program, to make small farm loans up to $35,000 with specific terms for beginning and military veteran farmers. Call your congressman today to support the Casey-Harkin-Johanns SA-986 amendment!”

NYFC believes permanent land access is essential to the long-term health of farm businesses, and is working to ensure affordable land for all young farmers. An example strategy of this is The Farm and Ranchlands Protection Program (FRPP), which provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses. Sophie explains “We’re advocating that the FRPP prioritize funding to conservation easements that ensure affordability in their terms. We’re also working to ensure the Conservation Reserve Program Transition Option to Beginning or Socially Disadvantaged Farmers receives funding so conservation lands can stay in the hands of farmers.”

NYFC has been hard at work to pass a Farm Bill that supports the next generation of American farmers. They co-wrote with the National Sustainable Agriculture Coalition the Beginning Farmer and Rancher Opportunity Act (BFROA) whose provisions, if included in the Farm Bill, would protect beginning farmer training programs, increase access to credit, and ensure conserved land is affordable to farmers. The BFROA was introduced into the House and Senate with bi-partisan support. NYFC’s call for support resulted in 17 co-sponsors of the bill. During the bill mark-up in May the House and Senate Ag committees debated several amendments from the Act, but none have yet passed.

Farm bill debates moved quickly this June. The Senate version of the Farm Bill passed, but the House version (which would have fully funded the Beginning Farmer and Rancher Transition Option to Beginning or Socially Disadvantaged Farmers) was not included.

By Lindsay Rebhan

The National Young Farmers’ Coalition

NYFC members met at the 2013 Connecticut Northeast Organic Farming Association Conference.
Young Farmers... from page 12

Development Program] failed to pass with a vote of 195-234 on Friday, June 20th. Although the future of the Farm Bill is uncertain (with the possibility of another extension), we will continue to have young farmer meetings with key Representatives to cultivate young farmer champions in the House and Senate. Check out Wes Hannah's blog post about the Farm Bill on NYFC's blog (youngfarmers.org/blog) and call your Senator and Representative today to support a farm bill that supports beginning farmers!

The NYFC Board is an active and dedicated group.

As NYFC's Membership and Development Coordinator, Sophie Ackoff highlights the importance of local community building to support and grow more farmers. NYFC is a coalition of local chapters building community and winning local change in regions across the U.S. Sophie notes, "Our goal is ambitious: to create multiple young farmer chapters in every state of the U.S. so that all young farmers have access to a supportive community of their peers." Chapter members come together to share meals, opportunities and strategies for overcoming obstacles in markets, supply chains, and land access. From Oregon to Kansas to New York, NYFC has 13 official chapters and a dozen more in development. Check out the "Organize" section of youngfarmers.org to get in touch. Email organizing@youngfarmers.org to get a copy of the NYFC organizing handbook that explains chapter organizing in depth.

Sophie concludes "To grow our coalition in the Midwest, we need you! We're happy to help you host a first meeting or mixer, and give you all the tools you need to create a successful young farmer group in your area!!"

Lindsay Rebhan works with Renewing the Countryside in partnership with MOSES on the New Organic Stewards project.

New Farmer Spotlight:
Hannah Breckbill, Humble Hands Harvest

By Lindsay Rebhan

Hannah Breckbill of Humble Hands Harvest is proving that where there's a will there's a way. This is Hannah's first season of production for her farm, located in Elgin, Minn. According to Hannah, "There are still a lot of unknowns, but I am devoting myself full-time to this enterprise." She is growing two acres of vegetables on land rented from Hidden Stream Farm.

Hidden Stream Farm is a meat operation, producing cattle, pigs, broilers, and sheep, with well-developed marketing channels. For the past few years, the farmers have been buying local produce to distribute along with their meat to restaurants, groceries, and food-service places in Rochester, Minn. and the Twin Cities. They advertised through the Land Stewardship Project for someone to rent land from them and sell vegetables to them for distribution through their markets. Hannah explained, "I was in a place when I saw their advertisement that I was ready to move into farming on my own, and I didn't mind moving to Minnesota to do it!"

Hannah graduated from college with a degree in math in 2009, and promptly started a farm internship-managing a CSA in Texas. After a year a connection at Seed Savers Exchange brought her to Decorah, Iowa where she spent 2-1/2 seasons employed on vegetable farms with various scales and markets. Hannah highly recommends employment on vegetable farms for any aspiring farmer. "Organic-minded folks are so eager to teach and advise aspiring farmers," she said. "After committing to this new business, I received so much help in the form of labor, material aid, and advice—I absolutely couldn't do it without the community I've built around farming."

Humble Hands Harvest has an arrangement with Hidden Stream Farm that gives access to one of their 2-acre paddocks, large equipment if needed (she used their big tractor to do the original tillage and seeding of some cover crops in 2012), and use of the cooler in addition to the market opportunities.

Looking at the 2013 season, Hannah explained, "The season has barely started, so it's still not guaranteed, but the plan is that I won't have to spend any time marketing my produce. I send one weekly e-mail stating what I have available—that's a huge time-saver and one of the things that will allow me to grow 2 acres of vegetables fairly intensively."

"In terms of future plans: this spring I've been thinking hard about land ownership. I am not ready to take that step on my own because I have next to nothing in the way of capital. However, I'd really like to work on a more perennial system than rented land allows—planting trees, for example, and making long-term improvements to water systems. I also know that I would rather not live alone, and that I would rather live on the land that I'm farming. This means that I'm on the lookout for fellow farmers, or land-based entrepreneurs, with whom I could build a community. For now, though, I'm excited to have a few years experimenting with Humble Hands Harvest, honing my growing skills, building connections in the area, and hopefully earning enough money to pay myself for my work!"

You can connect with and follow Humble Hands Harvest on Facebook. Hannah was also recently featured in the article, Breaking the Grass Ceiling: On U.S. farms, women are taking the reins. (http://grist.org/food/breaking-the-grass-ceiling-on-u-s-farms-women-are-taking-the-reins/)

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MOSES Fact Sheet: Organic and Sustainable Pest Control

The following is a selection from the MOSES fact sheet “Organic and Sustainable Pest Control.” MOSES offers over 30 fact sheets on a diversity of topics. To see the full selection, visit www.mosesorganic.org/productioninfo_factsheets.html.

Plant Health—A Powerful Tool

Healthy crops are the organic producer’s best defense against pests. Research shows that soil fertility and the nutrient composition of the plant are related to pest and disease occurrence. Insects and diseases are nature’s clean-up crew; stressed plants are more susceptible to pests and disease. Disease and pest outbreaks are often symptoms of an underlying problem. Rather than treating the symptoms, the cause of the outbreak must be addressed. Problems will continue if a farmer simply chases the pest or disease with new and different “cides.”

Insects are attracted to plants mainly based on chemical “odors” from the plant. Unhealthy, stressed or diseased plants produce different odors and signals than healthy ones. These “stress” odors result from the differing nutrient concentrations within the plant. Conventional fertilizers can, at times, lead to an imbalance in nutrition, because these fertilizers are easily absorbed by the plant in excess. This can lead to a metabolic bottleneck where excess simple sugars and free amino acids (simple non-protein nitrogen compounds) accumulate in the plant. These accumulated compounds (and their associated odors) are highly attractive to many crops pests because they are easily digestible.

Excess nitrogen fertilization is correlated with increased aphid populations, and research shows that European Corn-Borer prefers to lay its eggs on plants fertilized with soluble synthetic nitrogen fertilizers, as opposed to those fertilized with organic materials. Simple plant sugars are important building blocks of many plant compounds and high sugar content is only a problem when the plant is unable to convert the sugars because of a nutrient imbalance. A diversity of organic inputs will provide the entire spectrum of nutrients necessary for healthy crops in the correct amounts. Properly fertilized crops can maximize photosynthesis and sugar production, while making all the secondary compounds that are necessary to minimize pest problems.

Some Treatments are Allowed

Even with the best management, some pest and disease problems are inevitable. Organic farmers are limited to natural products, and a few synthetics allowed under the National Organic Standards (NOS). Organic growers should consult the NOS to view this list. The Organic Materials Review Institute also lists approved, restricted and prohibited products. This list can be found online at www.omri.org. It should be noted that companies manufacturing the products on the OMRI list submit their products voluntarily, so just because a product is not on the list does not mean it is not approved. Organic growers should always consult their certifier BEFORE applying a new product. A certifier can complete a review of a new product if needed.

Some approved products are relatively expensive and therefore are most often used in high value crops. Examples of organic insecticides include:

- Pyrethrum (pyrethrins), naturally occurring in some species of Chrysanthemum. Pyrethrum is effective as a broad-spectrum insecticide and is sold as a powder and mixed with oil—sold commercially as Pyganic®. Do not confuse pyrethrum or pyrethrin (natural and allowed) with permethrin (synthetic and prohibited). Pyrethrum is frequently mixed with piperonyl butoxide, which is prohibited. Always check the label.
- Neem oil (extracted from a tree common in Africa and India).
- Spinosad is derived from bacteria and kills insects when eaten and is effective against beetles.
- Diatomaceous earth is inexpensive and can work on crawling pests such as insect larva and caterpillars. It kills insects by physical contact.
- Bacillus thuringiensis, or Bt, is a bacterium that kills caterpillars and some insect larvae such as Colorado potato beetle.
- Sulfur and copper are allowed for use as fungicide. Sulfur is often mixed with lime to increase effectiveness.

Some synthetics allowed under the National Organic Standards include:

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Biological Controls

Biological controls can reduce or eliminate pest problems. An example is the release of beneficial insects which prey upon or parasitise crop pests. Beneficial predatory/parasitic insects include aphid midges, lady beetles, lacewings and Trichogramma wasps, which are parasites of several insect pests. Other insects are available. Beneficial insects must be replenished at certain intervals, but offer good control in many situations. Farmers can buy predators and parasitises, but to keep them must provide habitat and a source of food for them and/or their larvae. Natural areas and pollinator strips help encourage these insects to stay. Arbo-Organics and Planet Natural are two of several companies that sell beneficial insects. There are also nematodes, viruses and bacteria that may be used as biological controls. Be aware that most organically approved pesticides will kill beneficial insects along with pests. Use them with discretion and maintain unsprayed natural areas where the beneficial in sects can remain protected.

Conclusion

Farmers will never be completely free from pest problems. Even when crops are healthy and diverse, pests and diseases will occur when conditions are optimal. If farmers use some simple techniques; providing natural vegetation for beneficial insect habitat, expanding crop rotations, growing a diversity of crops, and providing balanced fertility through organic sources, pest problems can be prevented or minimized. After the initial transition period, and after incorporating these pest management techniques, many organic growers report reduced pest control costs while maintaining comparable yields. Organic agriculture is about balance and a whole-farm approach to food product.
It seems there are no “normal” weather patterns anymore. This year’s cold and wet spring has offered a different set of challenges than last year’s early spring and subsequent drought. Riding the weather roller coaster and producing good crops using time-honored organic farming methods is a true sign of a successful farmer. MOSES invites you to observe and learn from some of the best at an organic farm field day at the Johnson Farm near Madison, South Dakota, on July 25, 2013. Charlie Johnson was the recipient of the 2013 MOSES Organic Farmer of the Year award.

Charlie, his brother, and a cousin manage 2,800 acres, using a “strong and secure” rotation of 3 years of alfalfa and 3 years of row crops. Growing a diversity of row crops without chemicals takes work, but with a good plan and rotation, can be accomplished consistently every year.

The Johnsons strongly believe in green manures. They plant an early crop of oats in the spring to till in before soybeans in rotation, and plant rye in the fall to till in before the following year’s corn crop. The continual incorporation of green manures, even during row crop years, builds organic matter and stimulates soil biology. This gives the soil a “chocolate cake” texture: crumbly, porous and fertile. Even with last year’s drought the excellent soil tilth on the Johnson Farm resulted in the best oat crop they have ever had, planted as the nurse crop to start their alfalfa rotation.

The green manure oats were planted this year on May 18 and tilled in the last week of May, with the thick green oat mat incorporated using a field cultivator dragging a harrow. The field was planted to soybeans a few days later. Growing a diversity of row crops without chemicals takes work, but with a good plan and rotation, can be accomplished consistently every year.

The Johnsons use an Einbock tine weeder just before the corn emerges to deal with early small weeds.owning four cultivators and four rotary hoes, they can cover a lot of acres—important since the first cutting of alfalfa is typically ready at the same time the row crops need attention. Juggling priorities is an important part of the planning process, and will be discussed by the Johnson family members at the field day.

A new equipment shop is being built this summer, which field day attendees will have a chance to see during our tour. Keeping equipment field-ready is important, since timing is everything in organic weed control. We will also discuss the beef cattle herd, and how diversification provides a variety of fertility and economic benefits.

Attendees to the field day will meet at St. Peter’s Lutheran Church at 8:30 a.m. for a few short presentations by the organizations sponsoring this event: Northern Plains Sustainable Agriculture Society, Dakota Rural Action and MOSES. Representatives from the Natural Resources Conservation Service will also be present to discuss their programs and the Johnsons participation in the Conservation Stewardship Program (CSP). The group will then board a tour bus and visit a number of the Johnsons’ organic fields as well as the home farm. Charlie will have photos to share of the growing green manure crops from earlier in the season.

At noon, the bus will return to the church for a midday meal and discussion of organic commodity crop marketing with National Farmers Organization representatives. The meal is free if you register with MOSES by July 19, otherwise the cost of the meal is $15 per person at the door. Registration is strongly encouraged. Visit the MOSES website www.mosesorganic.org/FieldDayRowCrops.html or contact the MOSES office at 715-778-5775 for more information or to register.


Nominees must be certified organic and farm in the Midwest.

Find the nomination form at www.mosesorganic.org, or call 715-778-5775 to request a form by email or mail.

Nominations are due by Sept. 15, 2013.

Charlie Johnson, 2013 MOSES Organic Farmer of the Year

The weather was right for planting on June 4th.
Sprouted Barley... from page 1

During Australia’s severe droughts, barely fodder provides valuable nutrition when fresh pasture is not available. Here in the U.S., the sprouted barley fodder is often brought into the ration to replace protein previously supplied by dry grain. Of course, it is also beneficial in the non-pasture season to bring fresh forage to the animals.

Nutritional Benefits

The main benefit of sprouted fodder in comparison to feeding grain is “improved protein, starch and sugar” (CROPP Cooperative’s “Sprouted Dairy Fodder” Technical Bulletin #10 by Dr. Sylvia Abel-Caines). Nearly all of the starch present in the grain is converted to sugar by sprouting, which is better utilized by the rumen than the dry grain. This reduces acidosis problems, as the rumen pH stays more stable without the constant input of starch.

“Mineral and vitamin levels in hydroponically-sprouted barley are significantly increased over those in grain; in addition, they are absorbed more efficiently due to the lack of enzyme inhibitors in sprouted grain. Sprouts provide a good supply of vitamins A, E, C and B complex. The vitamin content of some seeds can increase by up to 20 times their original value within several days of sprouting.” (Sprouted Barley Fodder” Technical Bulletin)

Jim Kern of Fodder Feeds pointed out that “when a cow eats fresh sprouted fodder, it is eating digestive enzymes that are not present in dry hay or in grain. It is highly digestible and nutritious.”

There is very little dry matter in sprouted barley fodder (17%). Thus, a farmer feeding it must also provide dry hay, but the hay does not have to be of highest quality.

Why Barley and Not Other Small Grains?

Barley is the most nutritious of the small grains, stores well and is easy to grow. Feed Your Farm, one of the companies supplying sprouting systems, has experimented extensively with wheat and oats, but has found that barley sprouts the best, grows the fastest and is most cost-effective of all the grains tried.

Choosing the right light, and the right amount of light, is very important to the success of a sprouted barley system. Optimal production requires 18 hours of light and 6 hours of dark. Low-light levels and shorter day lengths will slow the process and reduce production. Fluorescent and LED lighting are the most cost-effective options. Fodder Feeds, one of the new companies building systems in the Midwest, relies strictly on LED lighting, which while more expensive upfront, is the most energy efficient and can generate the specific frequencies needed for optimal plant growth. “You don’t need full-spectrum lighting in sprouting systems,” said Jim Kern from Fodder Feeds. “LEDs can produce only the frequencies needed to sprout the plants.”

Racking the sprouting system vertically is the most efficient use of space. Nearly all the systems being sold are racked and then set up with sprouting trays to hold the seed. In fully automated systems, water emitters either spray or flood the trays on a regular basis. The trays must have a drainage system. Seeds need to be kept moist, but they cannot sit in water, or mold and bacteria will become problems.

To Sprouted Barley on page 17

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How the Process Works

The barley seed must be very clean and have a high germination rate. Dirty seed will have mold problems and require a lot of labor time in cleaning both seed and equipment. Low germination rates will decrease the efficiency of the system.

Clean grain must be soaked 8 to 12 hours. Hydrogen peroxide or bleach is sometimes used in the soaking water to kill mold spores (allowed in organic systems) and the soak water is sometimes aerated.

After soaking, the grain is drained and spread onto trays. Temperatures should be kept between 60 and 75 degrees F, with 70 degrees ideal. The grain must be kept moist to sprout. Manual systems are sprayed down every 4-8 hours, and automated systems either spray or flood irrigate on a timed system. Seventy percent humidity is the target in the growing room.
The sprouted barley is harvested between six and eight days of growth. Nutrition will be lost but weight gained by days seven and eight. At harvest, the barley shoots will be about six inches tall with a two inch mat of interwoven roots. The sprouted grain is harvested by removing the tray or sliding the mat off the tray in one long sheet. The mats can be cut to the appropriate size and fed to cattle. By starting new grain every day, the system can constantly provide fresh fodder.

Motivated by the very high cost of organic feed, the Johnsons looked at alternatives. Intrigued by sprouted barley fodder, they worked with organic dairy farmer Andrew Dykstra of Washington State who has been using sprouted barley fodder on his own organic farm and is now a sales representative with Feed Your Farm, to design a system for them.

Although the system is designed to produce 1500 pounds per day, in reality they have been getting 1200 to 1300 pounds. Mervin thinks this may be due to the variety of barley they were able to purchase locally. Prior to using sprouted fodder, Mervin was feeding 10 lbs of grain per cow. Now he feeds no grain but instead feeds 20 pounds of barley fodder per cow and dry hay. He is currently getting 6 pounds of sprouts from one pound of barley seed. Mervin is feeding less hay per day and purchasing less grain with the new system, so it does appear to be saving money, but he says he needs one more year to determine if the system will pay itself off. Mervin is happy so far with the milk production and his cows’ health.

Sprouted barley does take more labor, however. Every day Mervin and his family spend 10 minutes harvesting fodder, 40 minutes washing trays, 20 minutes cleaning the room, 50 minutes tending the wood stove they use to heat the room. The racks of the Feed Your Farm system hold 7 days of barley sprouts at the Johnson Farm. (Photo by Jody Padgham)

Andrew Dykstra has been feeding his 240 cow herd 17 lbs of sprouts per day instead of the 15 lbs of grain he was feeding last year. He reported an increase in his milk check and a reduction in feed costs since switching to sprouted barley fodder. In a recent newsletter for NODPA, he cited an overall 64% reduction in concentrate expenses since switching to sprouts. He does add that farmers will see about a 20% increase in electricity use due to fans, lights and heating. The Johnsons reported that switching from electric to wood heat has worked well and helped to cut the electric bill for their system.

Fodder Feeds has also done some economic analysis. At conventional pricing, it costs between $8 and $10 per day to feed a Holstein cow on a standard grain/forage diet. Jim Kern reported that it costs about $0.80 to produce 1 Animal Unit, or 20 pounds, of fodder (conventional prices) using a fodder feed system. This includes the grain at 15 dollars a bushel, sunflower seeds, and electricity. This will make up 70% of the animal’s feed intake and all of the nutrition. A lactating dairy cow needs 2 animal units to produce milk, plus fiber such as straw.

Other companies estimate the cost at $60 to $100 per ton of sprouts. Even at organic prices for barley, there is a potential reduction in feed costs. Fodder Feeds has 100 systems up and running with many new systems under construction, including an Organic Valley producer in Minnesota who is putting in a fully automated system in 2013. With this rapid expansion, more economic data will be available in the near future.

Educational Resources:

Graze Magazine article, January 2013 www.grazeonline.com/fodderinterest
“Sprouted Barley Fodder” Dr. Silvia Abel-Caines www.wodpa.org/newsletters/2013/WODPA_Winter_2013_VIEWING[6].pdf
Lancaster Farming: www.lancasterfarming.com/-Dairymen-Developing-Fundness-for-Sprouted-Fodder/
Sprooted Fodder Systems:
Fodder Feeds: fodderfeeds.com/Home.htm
Feed Your Farm: www.feedyourfarm.com 860-661-4302
Fodder Tech: www foddertech.com 855-977-7688
Fodder Solutions: www.foddersolutions.net 530-615-1533
FarmTek: www.farmtek.com/supply/supplies/cat1a;ft_fodder_systems.html
Joe Pedretti (joe@mosesorganic.org) is the MOSES Organic Education Specialist.

The racks of the Feed Your Farm system hold 7 days of barley sprouts at the Johnson Farm. (Photo by Jody Padgham)
Who Owns Organic?
Organic Processing Industry Structure

Created by Phil Howard, Associate Professor at Michigan State University

May 2013

Find this graphic in color, with links to more information at www.msu.edu/~howardp/organicindustry.html

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Apprenticeship... from page 4

Livestock Farmers (WSDBF) at UW-Madison and at distance learning sites throughout Wis-
consin.
• Classes in dairy/pasture production and management offered online and in seminar format through the Wisconsin Technical Col-
lege System.
B) Elective hours, which may include:
• Pasture walks, field days and spring work-
shops.
• The annual GrassWorks Grazing Confer-
ence, the MOSES Organic Farming Confer-
ence and other farming conferences.
• Educational events coordinated by support
groups in the state.

Related instruction also incorporates peer dis-
cussion groups, a Holistic Management semi-
nar and professional development training
through BAS-WDWD. In their second year,
Apprentices develop a business plan and put
together a management team comprised of lo-
cal professionals who will be crucial to their
decision making process. Both Masters and
Apprentices receive financial planning servic-
es from Cadwallader Consulting, LLC, which
is working with the program to develop alter-
native models of equity building, investment
and farm transfer. Because of the comprehen-
sive training and support that the program
provides its participants, DGA is an approved
vendor for Farm Services Agency’s Financial
Management Training Program.

Grazing an Important Component
“Managed grazing itself is one of the best pre-
dictors of success for start-up dairy farms,”
according to DGA Financial Consultant, Tom
Cadwallader. “New farmers are entering the
profession at a time when the industry and the
country face some real economic and ecologi-
ical challenges—a well-managed grazing farm
is extremely efficient, which will help these
farms remain profitable.”

Managed grazing is a sustainable farming
method in which cattle are rotated through
paddocks of high quality grasses and legumes
that are allowed to rest and re-grow. Farms
that utilize managed grazing systems require
less fossil fuel and fewer off-farm inputs. They
also build soil and water resources, protect
critical wildlife habitat, and produce value-
added milk for consumers and industry. Ap-
prenticeship in “managed grazing” dairy not
only gives entry-level farmers the best chance
for profitability and success, but also positions
them to sell their products for a premium un-
der an organic or grass-fed label.

While success in managed grazing is a com-
mon denominator, the 28 farms that have been
approved so far as educational sites by DGA
represent a wide diversity of dairy operations
in the Midwest. Master Dairy Grazier farms
range in size from 40 cows to 500 cows; nearly
half are currently certified organic or in transi-
tion to organic certification; many are seasonal
operations; several have diversified operations
that include on-farm processing and/or a retail
store and a couple use robotic milkers.

“This is a program that recognizes diversity in
our industry as a strength, not a liability,” To-
mandl said. “We are not interested in taking a
cookie-cutter approach here. Every farmer has
a unique operation and a personal history that
deserves respect and consideration. Our job is
to link these experienced farmers, who have so
much to offer, with people who really want to
farm and then provide the structure they all
need to achieve their farming goals.”

Effective Matches are Key
Key to positive outcomes of this process is the match
itself. To facilitate more viable matches, DGA has invested significant
time and resources into developing a new online
application and database system, which is available
through their website. Approved Masters can log
into the system to search for potential Apprentices
seeking placement by area (such as “Southeast WI” or “Central WI” or “Anywhere”) or by key
word (such as “Organic” or “Herdsman”). They can
browse search results and simply click on a promis-
ing candidate to view the entire profile. Ap-
prentice candidates are able to log back into
the site to view and edit their profile to keep it
current. This type of cloud-based technology
improves outcomes and increases program ca-
pacity, which will result in more new farmers
and more new grazing farms.

Indeed, DGA is well poised to expand through-
out Wisconsin—and possibly beyond. The U.S.
Department of Labor’s Office of Apprentice-
ship has officially determined “Dairy Grazer”
to be an “Apprenticeable Occupation” and DGA
has become the first federally recognized Ap-
prenticeship for farming in the nation, one that
could be reproduced in other states.

Dairy Grazing Apprenticeship is accepting
applications for Master Dairy Graziers and
Dairy Grazing Apprentices. At this time, Mas-
ter Dairy Grazer applicants must reside in
Wisconsin or a neighboring state (several farm
sites have already been approved in Minneso-
ta). Apprentice applicants willing to move for
placement are welcome from anywhere in the
nation. To find out more or apply online visit
www.dairygrazingapprenticeship.org.

Bridget O’Meara is the Communications Coor-
dinator for Dairy Grazing Apprenticeship.

Dairy Grazing Apprentice, Andrew Votis (right), who also has a
Bachelors Degree in Environmental Science, checks pastures
with Master Dairy Grazier, Jim Schreiner, and his son.
Long-term Iowa State Research Shows Organic Benefits

Results from the Long-Term Agroecological Research (LTAR) Experiment at Iowa State University have been summarized in a recent report. The study, published in Crop Management in April, showed organic plots had up to 40 percent more biologically active soil organic matter. Organic soils also had lower acidity and higher amounts of carbon, nitrogen, potassium, phosphorous, and calcium. www.leopold.iastate.edu/news/05-23-2013/soil-building-benefits-organic-practices

Bhutan First Organic Country

Bhutan plans to become the first country in the world to turn its agriculture completely organic, banning the sales of pesticides and herbicides and relying on its own animals and farm waste for fertilizers. www.guardian.co.uk/global-development/poverty-matters/2013/feb/11/bhutan-news/05-23-2013/soil-building-benefits-organic-practices

Agriculture Secretary Unveils Organic Agriculture Vision

U.S. Agriculture Secretary Tom Vilsack announced a number of changes and new initiatives to support the continued growth of organic agriculture, including increased crop insurance coverage options for organic producers. The USDA will be providing new guidance and direction on organic production to all USDA agencies. www.usda.gov/wps/portal/usda/usdahome?contentid=2013/05/0096.xml

Ngouajio Becomes NPL for Organic Programs

Mathieu Ngouajio joins NIFA as a national program leader working with organic programs in the Institute for Food Production and Sustainability's Division of Plant Production. His expertise and research experience is in developing robust, resilient, and profitable cropping systems. Ngouajio can be reached at 202-401-4895 and mngouajio@nifa.usda.gov.

7th Organic Seed Growers Conference Proposals Requested

Organic Seed Alliance invites presenter propos- als for the 7th Organic Seed Growers Conference, to be held Jan. 30-Feb. 1, 2014 in Corvallis, Ore. www.seedalliance.org

USDA to Look at GE Crops More Closely

USAID announced in May that it will take a closer look at new genetically engineered (GE) crops before allowing them on the market. The approval of Dow's 2,4-D-resistant corn and soy, as well as Monsanto's dicamba-resistant soy and cotton, will be put on hold until Environmental Impact Statements are completed. The decision to conduct a more thorough investigation comes after public outcry from hundreds of thousands of concerned individuals—including farmers. More at www.panna.org

GMO Wheat Found

May 29, Unapproved genetically engineered wheat has been discovered in an Oregon field. Plants were grown in the state in test plots in 2001, and never approved for commercial sale. It is unclear as to where the new crop has come from. Read more at www.orgonlive.com.

Court Sides with Monsanto on Patent Protection

In mid-May the U.S. Supreme Court ruled on the much anticipated Monsanto v. Bowman case, addressing whether the corporation's patent protection extends past the initial sale and use of their RoundUp-Ready seeds. Unfortunately the justices landed on the side of Monsanto. www.natlawreview.com

Success With GMO Labeling Laws

In early June both Connecticut and Maine made history by passing GMO labeling bills requiring that genetically-modified organisms (GMOs) be properly labeled. The Conn. bill has an interesting twist--a compromise required a provision be attached to the bill requiring that at least four other states in the Northeast pass their own GMO labeling laws before Connecticut's can be enacted. One of these states must physically touch the border of Connecticut, and the aggregate population of all the states combined must be at least 20 million. Learn more at www.natur news.com/040815_GMO_labeling_Connecticut- cut_food_transparency.html#x22ZXFbALgP.

Annual Survey Shows 31% Bee Losses

The annual survey for the 2012/2013 winter funded by USDA showed losses of honey bee colonies nationwide of 31.1% from all causes.

One difference from previous years was that more colonies dwindled away, rather than suffering from the onset of Colony Collapse Disorder. www.ars.usda.gov/is/br/beelosses/index.htm.

Who Owns Organic

Sustainable food expert Phil Howard, associate professor at Michigan State University, has updated his organic industry structure chart, which shows the top 100 food processors in North America. www.msu.edu/~howard/organic-industry.html

Online Transplant Tool Available

A new online tool provides information to growers in the Upper Midwest about the methods and equipment available for transplant production. Funded by the Leopold Center for Sustainable Agriculture and developed by Chris Blanchard, organic farmer and consultant at Flying Run Tabaga Works, the tool includes profiles of six vegetable farms in Minn., Wis. and Iowa, as well as photos galleries of infrastructure, equipment and crops. A one-page matrix summarizes the costs, skill level, benefits and drawbacks of various options for transplant equipment. The Transplant Production Decision Tool is on the Leopold Center website at www.leopold.iastate.edu/cool_tools/transplant-production-decision-tool.

Report on Women in Agriculture

A new ERS report summarizes women farmer national data. Overall, male farmers are declining while female farmer numbers have tripled in the last 3 decades. www.ers.usda.gov/publications/eib-economic-information-bulletin/eib111/report-summary.aspx#.UYjYoV0sygo.

Crop Insurance Wizard for 2014 Crop Year

The National Center for Appropriate Technology (NCAT) has announced the update of its Web-based whole-farm-revenue crop insurance assessment tool, known as the Adjusted Gross Revenue (AGR)-Lite Wizard, for the 2014 crop year. The AGR-Lite Wizard helps producers determine if they are likely to be eligible for AGR-Lite insurance, estimates premium costs, and estimates what payments producers would receive if eligible losses were sustained. www.agrilitewizard.com

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Producer Profiles in Organic Dairy, published by the eOrganic Dairy Team, is a series of farm case studies which track financials as farms transitioned to certified organic production. Three farm case studies are provided; they can be found at: www.extension.org/pages/59468.

Records Needed for Organic Poultry Certification, This article provides an introduction to poultry recordkeeping requirements for compliance with National Organic Program rules. Find the article at http://www.extension.org/pages/67936.

Using Cover Crops in Organic Systems: Resources and Research from SARE by Andy Zimmerman, SARE. This article provides information on some of the many free online resources on cover crops available from the Sustainable Agriculture Research and Education (SARE) program, which has funded hundreds of research and education projects related to cover crops since 1988. Find the article at www.extension.org/pages/67876.

Online Grazing Publication Available On Pasture, an online publication that translates research and experience into on-farm grazing practices is now available. http://onpasture.com

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For Sale: Red Dragon Flamer w/backpack $125; Furrow Marker, 3 pt hitch mt $220; Honda 3000 Watt Generator, perfect $650; Chicken Coop Deluxe, on steel wheels $600; JD Hydraulic Cylinder green $100; 6' x 8' Green House $325. Call Cathy 563-543-0574.


For Sale: Surplus insulated glass – perfect for greenhouses, solar homes, sunrooms or ag buildings. Also hardwood butcher block 30"X100"X1-1/8" for sustainable countertops or bar tops. Oak, ash, cherry, maple, mahogany from $129. www.kissourglass.com or 715-639-3762 before 9 p.m. Joe Bacon. Arctic Glass since 1979!

Workshop: Biochar/Composting workshop July 13, 9 a.m. to 4 p.m. Rissman Organic Farm 9497 W Lightsville Road, Leadville, Illinois. Call or email Joel/Adela 815-938-3042 or rissman4@hotmail.com.

For Sale: ORGANIC FISH FERTILIZER 15-1-1, 100% dry water soluble, 5-7 times more nutritious than liquid fish. Will not clog drip irrigation. 1 lb or 55 lb packaging, can be shipped UPS. Frommelt Ag Service, Greeley, IA, 583-920-3674.

For Sale: Master Grazier and Apprentice applications.

For Sale: Sustainable Living Near the BWCAW! Small town homestead for sale at edge of Boundary Waters Canoe Area Wilderness – Ely end. Well-insulated, two BR, one bath, 1955 rambler on a 60 X 180 foot lot. Fenced back yard has 200 feet of raised beds, drip irrigation, 10 X 22 greenhouse, chicken coop with 12 bird capacity, and a woodshed. Inside has hardwood floors, Heartstone “Heritage” woodstove on main floor, and Vermont Castings “Encore” in the basement. Huge wood room downstairs with study, work room, and partial bathroom. Ricing beds, white fish/tubul-lee netting, and public access all nearby. $62,500. Call Steve 360-918-8397 or 320-734-4597.

MISCELLANEOUS

For Sale: SUSTAINABLE LIVING NEAR THE BWCAW! Small town homestead for sale at edge of Boundary Waters Canoe Area Wilderness – Ely end. Well-insulated, two BR, one bath, 1955 rambler on a 60 X 180 foot lot. Fenced back yard has 200 feet of raised beds, drip irrigation, 10 X 22 greenhouse, chicken coop with 12 bird capacity, and a woodshed. Inside has hardwood floors, Heartstone “Heritage” woodstove on main floor, and Vermont Castings “Encore” in the basement. Huge wood room downstairs with study, work room, and partial bathroom. Ricing beds, white fish/tubul-lee netting, and public access all nearby. $62,500. Call Steve 360-918-8397 or 320-734-4597.

FORAGES

For Sale: NC large round or square bales alfalfa/grass mix certified organic with test results. Central Iowa. Call Mark Tjelmeland, 515-338-0151, tfjfarm@twstatelecom.net

GRAINS:

For Sale: Organic shellied corn, organic new crop wrapped hay, big bales, can deliver. Call 608-574-2160.

LIVESTOCK


For Sale: Blue-faced Leicester/Icelandic sheep and lambs. 100% grass fed on certified organic pastures. Coal $75-200 each depending on age and quantity purchased. Call 715-379-7284.

EQUIPMENT


For Sale: Red Dragon Flamer w/backpack $125; Furrow Marker, 3 pt hitch mt $220; Honda 3000 Watt Generator, perfect $650; Chicken Coop Deluxe, on steel wheels $600; JD Hydraulic Cylinder green $100; 6' x 8' Green House $325. Call Cathy 563-543-0574.


Classified Ad Placement Instructions

Reach 10,000+ organic-minded readers by placing a classified ad in this newspaper. Place up to 25 words for $12; up to 15 more words may be added for an additional $6.

All classified ads come with a free listing in the Online Organic Classifieds at www.mosesorganic.org.

Ads can be submitted online at mosesorganic.org/broadcaster_adrates.html. Or, complete this form and mail with your ad to: MOSES, PO Box 339, Spring Valley, WI 54767.

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allowing synthetics only when there are no natural alternatives, or those synthetics essential to a specific type of production. There are many compromises on the National List of approved substances. However, the synthetics on the National List are the least toxic alternatives and compatible with organic production systems.

For instance, when looking at the National List we see synthetics such as petroleum-based oils that are allowed for spraying on fruit trees in the spring to smother insects; a variety of synthetic drugs to promote organic animal health; and many processing aids and ingredients to produce the wide variety of foods from baked goods to juices and fermented products. Do these synthetics make organic foods less perfect, or can we justify their use to have organic apple juice, yogurt, and muffins?

**Bridging the Gap**

More and more, consumers and farmers are speaking a different language when talking about the topic of organic agriculture. A lack of understanding of the complexities and difficulties inherent in the uncertain profession of farming can lead the consumer to think only the feel-good side of organics, but also the hard work and difficulties inherent in farming. This will build a stronger partnership with customers. There must be more open discussion and a willingness to learn from both sides. This will develop a foundation for continued growth and trust of the organic label in the marketplace. It is only through communication that we can build compassion for each other’s position and develop a very, very good system of agriculture that all of us realize will never be perfect.

Harriet Behar (harriet@mosesorganic.org) is a MOSES Organic Specialist.
CALENDAR OF EVENTS

July 1, WEI’s 2013 Organic Farm School - “Meet The Farmers Panel”, Minneapolis, Minn. Discussion with local farmers. Visit www.w-e-i.org or call 651-583-0705 for more information.

July 8, WEI’s 2013 Organic Farm School - “Seed Saving With the Seed Technician Magician,” Minneapolis, Minn. With Hendrick Cook (Seed Savers Exchange, Iowa). Visit www.w-e-i.org or call 651-583-0705 for more information.

July 9, Row Crops and Prairie Bus Tour, Lewiston, Minn. Tour of Southern Minnesota featuring research conducted by Iowa State University as part of the Science-based Trials of Row Crops integrated with Pratice (STRP) project. The Land Stewardship Project to showcase the impacts perennial plants can have on the erosion-prone, kast-defined landscape of the Driftless Region. Visit http://landstewardshipproject.org or call 507-523-3386 for more information.

July 12, Wis. Farm Technology Days, Dallas, Wis. Visit the MOSES booth!

July 12, Goat Milk Processing Workshop, East Troy, Wis. A hands-on workshop where participants will help prepare goat milk goods, including goat milk ice cream, from start to finish. Visit http://michaelfields.org/whole-farm-workshop-schedule/ or call 622-642-3303 for more information and to register.

July 13, Festival of Farms, Montrose and Watertown, Minn. See a diverse array of sustainable farming techniques including vegetables, trees, turkeys, chickens, cattle and more. Three tour times at three of the farms allow you to pick and choose which you want to visit at 11 a.m., 1 p.m. and 3 p.m. Visit www.sffn.org for more information.

July 13, Grain Place Foods Farm Tour & Summer Seminar: Marquette, Neb. An annual event. The Grain Place (the Vetter family farm) and Grain Place Foods hosts the Farm Tour & Summer Seminar for anyone interested in organic farming, the organic food industry, and sustainable agriculture in general. Tour the farm and plant, learn and share ideas about various organic growing and processing practices. Visit www.grainplacefoods.com or call 402-854-3195 for more information.

July 15, WEI’s 2013 Organic Farm School - “Fish and Greens: Introduction to Aquaponics,” Minneapolis, Minn. With Anneke Lindberg-Lindgren (Women’s Environmental Institute) and Chad Herbert (Urban Farm Project). Visit www.w-e-i.org or call 651-583-0705 for more information.

July 15, Vegetable Seed Saving Workshop, Ostensible Farm, Arkansaw, Wis. Detailed hands-on class teaching how to grow, harvest, process and save vegetable seeds. Visit www.michaelfields.org or call 608-723-3450 for more information.


July 25, MOSES Field Day - Organic Row Crops, Johnson Farm, Madison, SD Charlie Johnson, MOSES Farmer of the Year, hosts a tour of his farm with 2,800 acres of corn, soybeans, oats and alfalfa explaining how the farm’s simple, yet successful systems for crop rotations and cultivation have created clean fields and good yields for many years. Partners: Dakota Rural Action and Northern Plains Sustainable Agriculture Society. Visit http://www.mosesorganic.org/FieldDays.html or call 715-778-5775 for more information.

July 26, Social Media Workshop, Michael Fields Agricultural Institute, East Troy, Wis. This workshop will provide the guiding principles needed for building sustainable connections through social media, regardless of the tools used. It will include an overview of the most popular tools currently available, an introduction to the guiding principles of social media marketing, easy steps that farmers take to enhance interactions, and examples of effective posts. Visit http://michaelfields.org/whole-farm-workshop-schedule/ or call 622-642-3303 for more information and to register.

Aug. 4, In Her Boots: Sustainable Agriculture for Women by Women, Canoe Creek Produce, Decorah, Iowa. Discussion on farm diversification, beginning farmer challenges and resources, and farmstay start-ups with a panel of experienced farmers plus representatives of FoodCorps and MOSES. Visit www.mosesorganic.org/FieldDayDecorscr.html or call 715-778-5775 for more information.


Aug. 8, In Her Boots: Sustainable Agriculture for Women by Women, Dancing Winds Farms, Kenyon, Minn. A panel of farmers discusses diversification through farmstay, farming as a single woman, starting farms mid-life, beginning farmer land access & financing, cheesemaking, raising goats, and more! Visit www.mosesorganic.org/FieldDayBeekevkhit.html or call 715-778-5775 for more information.


Aug. 13, WCROC Organic Dairy Day, Morris, Minn. Featuring Cindy Daley, Chico State University Organic Dairy Professor and Jon Bansen, an organic dairy farmer from Oregon. Also field tour stops focusing on supplementing of grazing cows, grazing summer annuals, and demonstrations of the CowVac and Bruce Walk-thru fly traps. Visit http://wcroc.cnrs.umn.edu for more information.

Aug. 14, MOSES Dairy Field Day, Dennis & Ruth Buck Farm, Goodhue County, Minn. Gatter ideas to make your dairy more profitable. Speakers include veterinarians and feed experts, plus a panel of experienced organic dairy farmers. Tour the farm’s new free stall barn and corn/pest mix. Lunch will be provided. Visit www.mosesorganic.org/FieldDayDairy.html or call 715-778-5775 for more information.

Aug. 18, In Her Boots: Sustainable Agriculture for Women by Women, Scotch Hill Farm, Brodhead, Wis. Learn from women who run successful CSA operations through the Fair Share Coalition. Topics include starting a CSA, balancing farm and family pressures, and creating value-added products from the farm. Visit www.mosesorganic.org/FieldDayBrodhead.html or call 715-778-5775 for more information.

Aug. 21, Flame Weeding Workshop. Univ. of Neb., Concord, Neb. Results from 6-7 years of research conducted by the teams of Dr. Steven Knezevic (Weed Science) and Dr. George Gogos (Mechanical Engineering). For more information and registration contact Wendy Winstead, Ph: 402-584-3837, wwinstead2@unl.edu.

Aug. 23-25, RestorationAg 101: Keyline Farm Design - Perennial Food and Forage, Iowa City, Iowa. Jon Mark Sheppard, a farmer and designer of world-class reputation and author of Restoration Agriculture at VersaLand Farm near Iowa City, where you’ll be on-site of a developing perennial farmed implementing Keyline design, multi-species grazing, fruit and nut crops, vegetable alleycropping, and using electric tractor power. Visit www.versaland.com for more information.


Save the Dates! Nov. 15-16 (La Crosse, Wis.) or Dec. 6-7 (East Troy, Wis.) with a follow up meeting on Jan 10 (Prairie du Sac, Wis.) Fearless Farm Finances: Farm Financial Management Demystified. This three-day course will help you develop a comfort and understanding of the basics of farm financial management. Participants will receive a copy of the popular MOSES book Fearless Farm Finances. Choose the date and location best for you. Offered by MOSES; Michael Fields Agricultural Institute, University of Wis. Extension and Badgerland Financial. More information soon at www.mosesorganic.org.


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