By Jen Burton, DVM, and Guy Jodarski, DVM

The recent outbreak of highly pathogenic avian influenza (HPAI) affected conventional confinement poultry farms to a much greater degree than organic operations. Because organic methods leverage synergies between soil management, forage quality, nutrition and animal health, organically managed animals are primed to resist invasion by disease-causing pathogens—but that doesn’t mean we can be complacent in the face of serious illnesses like HPAI. As veterinarians serving organic livestock farmers, we have experienced severe disease outbreaks on several farms. Poultry, dairy and beef cattle, small ruminants, and swine can and have become ill on farms under organic management. The origin of these events often traces back to a breach in biosecurity practices.

Prevention of infectious disease is a matter of keeping the host’s immune system ahead of environmental challenges. Organic methods do a great deal to provide advantage to the host. To get the most out of organic management efforts, though, livestock farmers should examine current practices regarding biosecurity and consider the risks inherent in the way they manage their operations. Many procedures and practices for preventing the introduction and spread of disease to groups of animals are inexpensive and follow a common-sense approach. Biosecurity is not something to dread, nor does it have to be complex or require a common-sense approach. Biosecurity is not some theory to be right-minded farmers and farmers who are committed to outreach by example and practices that honor and improve the land, and are certified organic producers who have established a successful farming system with innovative

As with any management strategy, biosecurity actions make sense when the benefits outweigh the costs. Sensible biosecurity addresses legitimate risk. Two questions should come to mind when assessing risk: how likely is the undesirable outcome, and how bad would it be if it happened? We tend to put our efforts into preventing diseases that are both very common and very bad. Frequently underestimated, however, are those diseases that are either widespread or potentially ruinous, but not both. This includes moderate diseases, common enough that one may begin to accept their negative impacts as normal or expected, even though significant losses accumulate over time. It also includes diseases that are devastating, but so rare they “probably won’t happen to me.” Sadly, management changes may come too late to prevent disaster once a devastating disease is recognized in your region. It is in these areas—common-moderate and rare-ruinous disease—that we see the most room for significant improvement.

If you are monitoring animal health and productivity, you are more likely to notice changes that could be related to these types of disease. Thoughtful management at key points in the movement of animals and people can greatly reduce the losses and risks, and prevent you from becoming a risk to others.

By Eric Hatling

Organic Farmers of Year model excellent land stewardship

Thirteen deserving farmers/farm families have earned the MOSES Organic Farmer of the Year award since it was first presented in 2003. Nominations are due Sept. 15 for the 2016 title, which will be presented Feb. 25 at the 2016 MOSES Organic Farming Conference.

Recipients of this prestigious award are certified organic producers who have established a successful farming system with innovative practices that both improve the land, and who are committed to outreach by example and education. The current year’s winners Greg and Mary Reynolds of Riverbend Farm in Delano, Minn., fulfill all these criteria in spades.

Greg and Mary operate an organic vegetable and small grains farm and have worked hard to improve the biodiversity and fertility on their 30 acres. They market their vegetables through a handful of wholesale accounts in the Twin Cities including restaurants, food co-ops, nursing homes and hospitals, and also sell through a CSA. Though they have been using organic practices practically “forever,” they have been certified since 1994. Recently, Greg’s interest has been in growing and selecting seeds that demonstrate hardiness and resiliency to varied weather conditions.

“Our seeds must be able to thrive in both cold and wet and hot and dry—this is the polar opposite of what genetic engineering is breeding for,” Greg said. “They breed to encourage one specific trait, while we need more general adaptability. We can no longer plan on stable growing conditions.”

Over 13 years, MOSES has recognized vegetable and market farmers Linda Halley and Richard De Wilde, Harmony Valley Farm, Viroqua, Wis.; Martin and Atina Diffley, Gardens of Eagan, Farmington, Minn.; John, Jane and Janaki Fisher-Merritt, Food Farm, Wrenshall, Minn.; and David, Ginger, Theresa and Dan Podoll, Prairie Road Organic Farm and Seed, Fullerton, North Dakota.

We’ve recognized dairy farmers Dave and Florence Minar, Cedar Summit Farm, New Prague, Minn.; and Francis and Susan Thicke, Radiance Dairy, Fairfield, Iowa. Small grains and row crop farmers Carmen and Sally Fernholz, A-Frame Farm, Madison, Minn., and Charlie Johnson, Johnson Farms, Madison, South Dakota also earned the honor.

MOSES has recognized livestock and crops farmers Stan Schutte, Triple S Farm, Stewardson, Ill.; Tom and Irene Frantzen, Frantzen Farms, New Hampton, Iowa; Gary, Rosie and Nicholas Zimmer, Otter Creek Farm, Avoca, and the Vetter Family, Grain Place Foods, Marquette, Neb.

To Biosecurity on page 6

Mary and Greg Reynolds accept the Organic Farmers of the Year award at the 2015 MOSES Conference. Photo by Laurie Schneider

Nominations accepted now through Sept. 15

Organic Farmers of Year model excellent land stewardship

By Eric Hatling

Thirteen deserving farmers/farm families have earned the MOSES Organic Farmer of the Year award since it was first presented in 2003. Nominations are due Sept. 15 for the 2016 title, which will be presented Feb. 25 at the 2016 MOSES Organic Farming Conference.

Recipients of this prestigious award are certified organic producers who have established a successful farming system with innovative practices that both improve the land, and who are committed to outreach by example and education. The current year’s winners Greg and Mary Reynolds of Riverbend Farm in Delano, Minn., fulfill all these criteria in spades.

Greg and Mary operate an organic vegetable and small grains farm and have worked hard to improve the biodiversity and fertility on their 30 acres. They market their vegetables through a handful of wholesale accounts in the Twin Cities including restaurants, food co-ops, nursing homes and hospitals, and also sell through a CSA. Though they have been using organic practices practically “forever,” they have been certified since 1994. Recently, Greg’s interest has been in growing and selecting seeds that demonstrate hardiness and resiliency to varied weather conditions.

“Our seeds must be able to thrive in both cold and wet and hot and dry—this is the polar opposite of what genetic engineering is breeding for,” Greg said. “They breed to encourage one specific trait, while we need more general adaptability. We can no longer plan on stable growing conditions.”

Over 13 years, MOSES has recognized vegetable and market farmers Linda Halley and Richard De Wilde, Harmony Valley Farm, Viroqua, Wis.; Martin and Atina Diffley, Gardens of Eagan, Farmington, Minn.; John, Jane and Janaki Fisher-Merritt, Food Farm, Wrenshall, Minn.; and David, Ginger, Theresa and Dan Podoll, Prairie Road Organic Farm and Seed, Fullerton, North Dakota.

We’ve recognized dairy farmers Dave and Florence Minar, Cedar Summit Farm, New Prague, Minn.; and Francis and Susan Thicke, Radiance Dairy, Fairfield, Iowa. Small grains and row crop farmers Carmen and Sally Fernholz, A-Frame Farm, Madison, Minn., and Charlie Johnson, Johnson Farms, Madison, South Dakota also earned the honor.

MOSES has recognized livestock and crops farmers Stan Schutte, Triple S Farm, Stewardson, Ill.; Tom and Irene Frantzen, Frantzen Farms, New Hampton, Iowa; Gary, Rosie and Nicholas Zimmer, Otter Creek Farm, Avoca, and the Vetter Family, Grain Place Foods, Marquette, Neb.

To Biosecurity on page 6

Mary and Greg Reynolds accept the Organic Farmers of the Year award at the 2015 MOSES Conference. Photo by Laurie Schneider

Nominations accepted now through Sept. 15

Organic Farmers of Year model excellent land stewardship

By Eric Hatling
Notes from the Executive Director’s Desk

Farmers learn best from other farmers—that’s one of MOSES’s core operating values. Summer field days are a great opportunity for farmer-to-farmer learning, and MOSES has a great lineup! The turnout at the field day last month at Harold Wilken’s farm in northeastern Illinois was amazing! There were more than 140 farmers—mostly non-organic—on hand to hear how organic works on a large-scale grain farm. Moving more farmers over to the organic side of the fence is central to the work we’re doing. Harold did a fantastic job explaining organic management to these curious farmers.

Cover crops are a good gateway to organic. Two of our field days will focus on cover crops: one at MOSES Senior Organic Specialist Harriet Behar’s farm on July 21, and the other July 31 at Standard Process near Palmyra, Wis. Harriet and Christine Mason (Standard Process) are National Wildlife Federation “Cover Crop Champions!” Our In Her Boots workshop July 31 at Christensen Farm near Browntown, Wis. also will feature tips for using cover crops to improve soil fertility.

We’re excited to showcase all these great farms—especially that of our 2015 Organic Farmers of the Year, Greg and Mary Reynolds. Greg and Mary welcome us to their farm near Delano, Minn. Sept. 15. Our field day schedule is on page 7. I hope you can make it to one or more of these inspiring events.

MOSES is proud to partner on additional field days with other groups, including Practical Farmers of Iowa. See the Community Calendar on our website—under Events at mosesorganic.org—for details about the many field days happening all over the Midwest.

To run our summer field days and our farmer-focused services, such as the Organic Answer Line, we rely on the support of people like you. A huge THANKS to all of you who support MOSES. You really do make a difference to our work. It’s such a boost to all of us in the office to see the donations come in from our spring appeal. If you haven’t had a chance yet to make your donation, please take a moment while you’re reading this newspaper. Our secure online portal makes it simple to do: mosesorganic.org/donate.

A love of good food and healthy farming is what connects us all. Lisa Kvintist’s story on page 7 about growing the organic movement over potlucks is a testimonial to the power of sharing a meal—and how farmers learn best from each other.

We’ve added two more farmers to our staff to help facilitate that farmer-to-farmer learning. Lauren Langworthy is the new Office and Events Manager, and Jennifer Nelson is the new Organic Specialist. Read about them on page 17. And, please join with me in welcoming Lauren and Jennifer.

Wishing everyone a summer that’s not too wet, not too dry, but just right.

-- Faye Jones, MOSES Executive Director

MOSES Staff:
Faye Jones, Executive Director | faye@mosesorganic.org
Audrey Alwell, Communications Director | audrey@mosesorganic.org
Harriet Behar, Senior Organic Specialist | harriet@mosesorganic.org
Sarah Broadfoot, Registration Coordinator | sarahb@mosesorganic.org
Eric Hatling, Business Relations Coordinator | eric@mosesorganic.org
Lisa Kvintist, Rural Women’s Project Coordinator | lisa@innersendipity.com
Lauren Langworthy, Office & Events Manager | lauren@mosesorganic.org
Jennifer Nelson, Organic Specialist | jennifer@mosesorganic.org
Cathy Olyphant, Administrative Assistant | cathy@mosesorganic.org
Jody Padgham, Financial Director | jody@mosesorganic.org
Carly Stephenson, Communications Coordinator | carly@mosesorganic.org

Board of Directors:
David Abazs, Treasurer
Round River Farm, Minn.
Mike Bollinger | River Root Farm, Iowa
Sylvia Burgos Toftness, Vice President
Bull Brook Keep, Wis.
Dave Campbell | Lily Lake Organic Farm, IL
Darlene Coehoorn | Viewpoint Organic Acres, Wis.
Carmen Fenholz, President
A-Frame Farm, Minn.
Melinda Hemmelgarn, Secretary
Food South, LLC, Mo.
Nick Olson | Prairie Diner Farm, Minn.
Carla Wright | Savanna Hill Farm, Wis.

MOSES educates, inspires, empowers farmers to thrive in a sustainable, organic system of agriculture.

Buying and Selling Organic Grains
F.W. Cobs Company Inc. - The trusted name in the Organic Feed Industry.

Elevators
Council Bluffs, IA - Grove City, MN - St. Ansgr, IA - Loreburn, SK
St. Albans, VT (HQ)

F.W. COBS COMPANY
888.531.4888
www.fwcobs.com

Organic Broker 2015 | 2

Organic Broadcaster - July | August 2015

ORGANIC BROADCASTER 715-778-5775 • mosesorganic.org

Board of Directors:
David Abazs, Treasurer
Round River Farm, Minn.
Mike Bollinger | River Root Farm, Iowa
Sylvia Burgos Toftness, Vice President
Bull Brook Keep, Wis.
Dave Campbell | Lily Lake Organic Farm, IL
Darlene Coehoorn | Viewpoint Organic Acres, Wis.
Carmen Fenholz, President
A-Frame Farm, Minn.
Melinda Hemmelgarn, Secretary
Food South, LLC, Mo.
Nick Olson | Prairie Diner Farm, Minn.
Carla Wright | Savanna Hill Farm, Wis.

MOSES Staff:
Faye Jones, Executive Director | faye@mosesorganic.org
Audrey Alwell, Communications Director | audrey@mosesorganic.org
Harriet Behar, Senior Organic Specialist | harriet@mosesorganic.org
Sarah Broadfoot, Registration Coordinator | sarahb@mosesorganic.org
Eric Hatling, Business Relations Coordinator | eric@mosesorganic.org
Lisa Kvintist, Rural Women’s Project Coordinator | lisa@innersendipity.com
Lauren Langworthy, Office & Events Manager | lauren@mosesorganic.org
Jennifer Nelson, Organic Specialist | jennifer@mosesorganic.org
Cathy Olyphant, Administrative Assistant | cathy@mosesorganic.org
Jody Padgham, Financial Director | jody@mosesorganic.org
Carly Stephenson, Communications Coordinator | carly@mosesorganic.org

Board of Directors:
David Abazs, Treasurer
Round River Farm, Minn.
Mike Bollinger | River Root Farm, Iowa
Sylvia Burgos Toftness, Vice President
Bull Brook Keep, Wis.
Dave Campbell | Lily Lake Organic Farm, IL
Darlene Coehoorn | Viewpoint Organic Acres, Wis.
Carmen Fenholz, President
A-Frame Farm, Minn.
Melinda Hemmelgarn, Secretary
Food South, LLC, Mo.
Nick Olson | Prairie Diner Farm, Minn.
Carla Wright | Savanna Hill Farm, Wis.

MOSES educates, inspires, empowers farmers to thrive in a sustainable, organic system of agriculture.

Buying and Selling Organic Grains
F.W. Cobs Company Inc. - The trusted name in the Organic Feed Industry.

Elevators
Council Bluffs, IA - Grove City, MN - St. Ansgr, IA - Loreburn, SK
St. Albans, VT (HQ)

F.W. COBS COMPANY
888.531.4888
www.fwcobs.com
Organic certification needed to reclaim ‘organic’ label

By Harriet Behar

Being a certified organic farmer or certified organic operator of any type is an achievement that reflects a producer’s commitment to a healthy planet and is one that deserves its excellent reputation in the marketplace. The strict yet practical standards that are followed, and the exceptional traceability of activities, inputs and ingredients, results in a high quality finished product that is sought after in the marketplace at a premium price. However, while we find farmers and consumers still attracted to organic practices and products, organic certification does not carry the same attraction that it once had. It is time to re-energize the certified organic brand and recognize the superior stewardship and accountability of producers who go through this rigorous process to use the organic label.

For many years the organic community has stated that organic is the gold standard of agricultural production. Our attention to protecting and enhancing the natural resources of the land we steward, coupled with the avoidance of applying toxic materials to our land and the crops we produce is the foundation of what we do as certified organic farmers. As an organic inspector in the 1990s and 2000s, I would visit many types of organic farms in the Upper Midwest and see the organic certificate proudly displayed in a place of honor on the wall with the wedding pictures and other family photos.

However, in the past few years, I have seen less enthusiasm among those who are certified organic, even to the point of some seeing it as a necessary evil whose only value is that it offers access to the organic marketplace—some even appear to be subsumed in their participation in the certification system. Many noncertified farmers state that they are “beyond organic” or “better than organic,” confusing consumers and lessening the value of the organic certificate for those who are certified.

Even some longtime advocates and allies of organic agriculture are stating that the organic certificate no longer has the same meaning, due to concerns relating to governmental oversight of the organic standards and the lessening of transparency in decision making. I have at times called for changes to the National Organic Program’s implementation of the Organic Food Production Act and the regulations, but I still have a deep belief that our certification system and the rules under which all organic farmers and handlers must operate in order to carry the organic seal could have been very weak, with little to no differentiation between organic and non-organic products, or minimal to no accountability that organic operators were meeting the standards. Or there could have been exceptionally elite or impractical rules that only a very few could accomplish by spending a lot of dollars or by implementing complicated management tools.

Our system of organic certification, with the accompanying organic certification cost share is accessible to any farmer or operator who is willing to follow the foundational principles of organic management, and maintain basic production and sales records to prove their activities. These records also help farmers improve their operations by maintaining historical records they can use when making current and future management decisions. The continual improvement and experimental nature of organic farming encourage organic farmers to be the heart and hands of a system that seeks out solutions that actually improve our ecosystems—from the soil below our feet to the crops, livestock, humans and wildlife that rely on a complex and interrelated use of natural resources for their sustenance. Soil, water, air, plants, wildlife, insects, reptiles, bacteria, etc. are all important to a biodiverse ecosystem. It is the certified organic label and its governmental enforcement capabilities that ensure the promotion of healthy and respectful interactions within an agricultural production system.

Those who “follow organic practices” but choose not to join the community of certified organic operations have many reasons, and feel somewhat cheated they cannot use “organic” to describe their activities and finished products. I have no doubt that many meet the organic regulation in their fields, although perhaps not all of the documentation requirements. However, it is the viability and accountability of certified organic production that provides consumers with the confidence they seek when purchasing something with the organic label. Maintain detailed records helps the farmer develop healthy crop rotations and track production problems, and tweak the farm system over time to deal with these issues. Having more “eyes”—those of the organic inspector and certifying agent—can be useful in finding areas that need improvement and dealing with problems from a systems-based approach, not just substituting an organically approved product in place of a non-organically approved one.

Improving the certification system to lessen the “hassle factor” is a focus of the NOP’s Sound and Sensible initiative; I can say that, as a certified organic producer, I have recently experienced a more producer-friendly inspection and certification renewal.

The relationship between certifier and operator is essential to keeping up with changing organic regulations and clarification of existing ones, from systems to allowed inputs. The verification that branded inputs do not contain non disclose problematic and toxic materials can only be done by an organic certification agency or an entity such as OMRI (Organic Materials Review Institute). These government-accredited businesses can enter into confidentiality agreements with manufacturers, so the company releases the full list of ingredients and the certifier can then verify compliance to the organic law. Those who are not certified organic are relying on incomplete information when making input or ingredient choices.

Agricultural inputs do not have the same ingredient label disclosure laws that human food does; it is surprising how many toxic materials can be included, for instance, under the “inert” designation on pesticides. Even human food...
Hail insurance provides protection, peace of mind
By Matt Oppriecht

In a season marked by unusual weather, crop hail insurance protects farmers’ investment and offers peace of mind. A crop hail insurance policy provides coverage by the acre and allows farmers to insure up to 100 percent of the value of their crops against hail, fire, wind and vandalism, as well as providing coverage as grain is transported to its first place of storage. In other words, it covers more than just hail and more than your multi-peril crop insurance policy.

Most farmers don’t realize that hail coverage is inexpensive and very customizable, allowing them to choose exactly the coverage per acre they would like for each individual crop. Unlike multi-peril crop insurance, which annually has a March 15 sign-up deadline, most crop hail coverage can be secured online up to just a few hours before a storm hits. This helps give farmers peace of mind as they watch the storm roll in.

Rather than waiting for severe weather, though, most farmers purchase hail insurance from mid-April to mid-June, prior to crop emergence. However, crops can be insured any time up to the specified harvest date. Crop hail premiums are set per acre and due October 1, with a cash rate discount for premiums if paid by August 1.

I prefer to review the different hail insurance options with farmers in my area during the early spring months. This provides additional peace of mind knowing that their investment is protected prior to the hectic planting season. Plus, there is no premium difference if the product is purchased in March or in July.

A hail policy with no deductible pays losses at the first percent of loss, though crop hail insurance can be purchased with zero to 10 percent deductibles. This differs from a multi-peril policy which has at least a 15 percent deductible. An added feature of hail policies will provide replant coverage if you have an early hail storm at the time of emergence. Additional endorsements can also be elected for many hail policies to protect against things like wind damage, green snap storm damage at 10 percent loss on 20 acres damaging the crop. The crop adjuster, an unbiased third party, assesses the damage at 10 percent loss on 20 acres of the crop. Loss percentages can vary per acre and for multiple events.

For those farmers who already have multi-peril crop insurance, a companion hail plan protects the uncovered portion of crops covered by multi-peril or crop revenue coverage. Hail insurance also protects against spotty hail damage that may not reduce yield or revenue enough to trigger a multi-peril crop insurance loss. Hail policies and multi-peril policies can also both be paid out—so if you get 100 percent loss, you can get 100 percent payout on your hail policy and up to 85 percent payout on your multi-peril policy. Losses are usually paid within 30 days of final adjustment.

If adverse weather events have been historically common in your area, or if damaging storms have been getting a little too close for comfort, you may want to discuss a hail insurance policy with a knowledgeable crop insurance specialist near you.

Matt Oppriecht is a Senior Crop Insurance Specialist at Badgerland Financial, a member-owned Farm Credit System institution in southern Wisconsin.

Crop Insurance Scenarios
These are real-life examples to illustrate how hail insurance can work. Rates may vary based on county, yield, provider and more factors. Sometimes organic farmers want higher coverage than company limits—since coverage is relative to the premium, sometimes these additional limits need to be requested and approved.

Multi-peril policy, premium example:
La Crosse County Corn
Farmer chooses to insure his corn at 75% revenue protection and has 60 acres of corn. $14.73/acre premium x 60 acres = $884 premium
Assuming 85 APH (Actual Production History) and 75% revenue protection with a spring price of $7.81/bushel for organic corn, farmer would be covered for $498/acre.

Hail insurance policy, premium example:
Hail insurance is a private product, not subsidized by government and can vary by county.
La Crosse County Corn
$(1/acre per $100 of coverage)
If a farmer wants $1,000 per acre coverage, premium is $10/acre.
Farmer chooses to insure for $10/acre and has 60 acres of corn.
$10/acre premium x 60 acres = $600 premium

Hail loss insurance payment example:
Insured has a hail storm come through, damaging the crop. The crop adjuster, an unbiased third party, assesses the damage at 10 percent loss on 20 acres of the crop. Loss percentages can vary per acre and for multiple events.
10% loss x $1,000 coverage/acre = $100 loss/acre
$100 loss x 20 acres damaged = $2,000 hail insurance payment

Organic Specialists
Cashton Farm Supply, Ltd.
300 State Hwy 27, Cashton, WI 54619

- Feed Products
- Protein and Grain
- Poultry Rations
- Starter – Grower – Layer
- Livestock Vitamins & Minerals
- Poultry Pre-mixes
- Natural Fertilizer
- Lawn – Garden – Greenhouse and Crop Protection

All Products are Approved for Organic Use

CUSTOM BLENDS — INGREDIENTS BLENDED AND LABELED TO YOUR SPECIAL NEEDS

CFS Specialties, Inc.
800-822-8671 FAX 808-654-5696
E-mail: organic@cfspecial.com
www.cfspecial.com

Others know ag lending.
WE KNOW IT BETTER.

When it comes to lenders, you have options. But if you value more than an interest rate, the choice is easy. To us it’s about more than financing. It’s about providing you with industry-specific solutions and expertise to meet your goals, not ours.

If you haven’t already, get to know Badgerland Financial. Let us prove why we’re the better option.

(877) 789-9058 badgerlandfinancial.com

©2015 Badgerland Financial AGC. NMLS ID 458065.
“My neighbor sprayed some sort of pesticide today. I could smell it, and got a little dizzy and had a dry mouth. My crops in the adjoining field were just coming up, so I am not sure if they were damaged. The neighbor is not willing to tell me what he sprayed. What can I do, and will this affect my organic certification?”

Answer by Harriet Behar

If you can smell the pesticide, it has drifted to your farm. If you are not feeling well, immediately see your family doctor or go to the emergency room. Pesticide exposure should not be taken lightly.

The second thing you should do is contact your state’s pesticide enforcement agency—it’s usually within your state’s department of agriculture. Call the agency as soon as possible, ideally within 48 hours of the incident. The agency will send out an investigator to verify the drift incident, usually by the next day unless it is a weekend. Because it is difficult to find pesticide residue on soil or crops after a few days, you can help the investigator verify drift if you can locate a hard surface (such as a vehicle) where droplets of drift are collecting. Then protect that surface from rain until the investigator arrives.

All licensed applicators are supposed to keep written records of what and when they spray. When you contact your state’s pesticide enforcement agency, staff will contact your neighbor to find out what was sprayed, and they can then let you know what it was. They will also review if the pesticide was applied correctly, such as when wind speed was not excessive. To my knowledge, all states have some rules governing drift, and most states consider it a violation of the law if pesticides cross a property line without the permission of that landowner.

If the agency finds that the product drifted, and/or the applicator sprayed when conditions weren’t right, and/or he did not document his activities, and/or he was supposed to be licensed to apply the product and he wasn’t, there is a pretty good chance the applicator will be fined. The amount of fines varies widely. These fines go to the state. If you want monetary compensation, you will need to discuss this with the farm operator, their insurance agency or, depending on the circumstances, other responsible parties including the custom applicator or landowner. If these negotiations are not acceptable, you may need to take legal action.

If you became sick or your crops were damaged, and you hope to get monetary compensation for crop loss or medical bills, it is very important to have an objective third party verify the drift incident. Doctors don’t usually attribute illnesses to pesticide exposure. However, if you have proof that you had a negative health incident right after exposure, it is easier to claim you have a problem than if you did not go to the doctor at the time of your exposure.

Certification agencies vary in how they deal with pesticide drift. Some may only decertify that year’s crop within the drifted area, requiring a 25-30 foot buffer zone from the end of the drift to the crop you can continue to sell as organic. The drift investigator may help you establish where the edge of the drift incident is in your field. If the drift was highly concentrated, the organic certifier may decertify that land for two or three years.

Many producers do not want the incident to create hard feelings with their neighbors. To avoid drift incidents, talk to your neighbors early in the season to explain the organic status of your land and the economic loss you will incur if prohibited substances drift over the property line. Most farmers will respect another farmer’s farming system. Drift is especially problematic on vegetable farmers will respect another farmer’s farming system. To avoid drift incidents, talk to your neighbors early in the season to explain the organic status of your land and the economic loss you will incur if prohibited substances drift over the property line. Most farmers will respect another farmer’s farming system. Drift is especially problematic on vegetable

When incidents are not reported, it appears that many landowners have leased out their land to a farmer and that farmer may hire someone else to spray. Figuring out who is responsible for that activity early in the season can save you valuable time if and when you wish to discuss a drift incident with the person who did the application. The landowner may not know who is doing the spraying, nor what is being sprayed. The farmer renting the land might not even know exactly what the applicator is using until presented with the bill.

When drift occurs, it is important to report the incident to the state so their statistics on pesticide drift incidents and possible negative human health effects reflect what is happening in the real world. When incidents are not reported, it appears that there are no problems, and unfortunately, we all know that is not true.

Your organic documentation is invaluable if you are requesting monetary compensation for your loss of organic premium or if you could not sell your crop for a variety of reasons. Most insurance companies do not seem to know that there is a rigorous third-party review within the organic certification process. The fact that your yield and sales records are verified yearly by an objective third party, who is approved by the USDA to perform this work, adds credibility to the dollar amount you may be requesting. Since some organic crops have very large differences between the organic and non-organic price, you will probably need some pushback from the responsible party or the insurance agency when you first present your request for compensation.

For example, some specialty organic potatoes could be sold for $8 per pound, and conventional potatoes at times sell for 10 cents per pound. Be prepared to have many conversations and letters with the responsible party or insurance company. You will probably need to compromise on your requested compensation, but do not give up! Other organic farmers before you have received compensation. You can get a reasonable settlement if you stick to the facts and remain steadfast even when they do not seem to accept the credibility of your request.

The Pesticide Action Network of North America, PANNA, has an excellent website with links to each state’s pesticide enforcement bureaus and the state’s pesticide-use rules. See www.panna.org/subscience/if-you’ve-been-drifted. PANNA’s Midwest office is located in Minneapolis. The phone number is 510-788-9020.
Movement of Animals

In order to choose biosecurity practices that will provide the most benefit, it's important to have a basic understanding of common diseases for the type of livestock you have, to know whether your current farm is free of the disease-causing agent or not, and to have some idea about the likelihood of exposure from neighboring farms, farm traffic, or wildlife. Exposure of the flock or herd to new, potentially disease-carrying animals increases disease risk.

Testing animals for disease before purchase and movement to your farm is a good practice and is required to move animals across state borders. An accredited veterinarian must inspect the animals, do the required testing and complete an interstate health certificate prior to sending animals to an out-of-state destination. The requirements for testing vary with species and differ depending on the state of origin and ultimate destination for the animals. A local veterinarian can assist you with completing this process.

Even when testing is not required, it can be extremely valuable. For example, cows carrying the mastitis-causing bacteria Staphylococcus aureus may not show any signs of disease. However, the bacteria can be transferred to other cows by equipment at milking time. Cows that develop Staph aureus may become difficult to cure, eventually leading to significant losses. Testing milking cows for Staph aureus infection before buying them is a good practice if you are unsure whether the herd of origin or individual cows may be carrying this infection.

We often talk about having a “closed herd” to minimize exposure to disease-causing organisms—bacteria, viruses or parasites—being carried by infected animals. A truly “closed” herd raises all of its own replacement animals, never takes animals to shows or fairs and uses male breeding animals raised on the farm or artificial insemination for breeding. Farmers often overlook the purchase of breeding males as a potential carrier of disease. Dairy farmers, for example, frequently say they keep a closed herd and forget the fact that they purchase bulls for breeding. There’s nothing wrong with bringing in new animals to provide genetic diversity or improvement; it’s the way new additions are brought into the operation that’s important.

The introduction of new animals to a farm should include a period of isolation from the herd or flock during which the newly acquired animals are observed for disease problems. Ideally these animals would be kept in facilities away from the main herd for a period of three to four weeks. This quarantine period allows time to make sure the new animals are healthy, and provides the opportunity to complete testing for specific disease and/or vaccination if these procedures weren’t done prior to moving the animals.

An alternative approach to quarantine is to practice “all in, all out” management. Egg farmers often do this with laying hens—culling the entire flock of birds in a building after they reach an age when production has declined. Facilities are cleaned out, disinfected, allowed to remain empty for a period of time and then restocked for the next production cycle. This periodic emptying, cleaning and disinfection of a building breaks the chain of infection from disease-causing germs. The principle can be applied on a smaller scale on other livestock farms. We have seen dairy farms that provide individual pens for calving inside during winter. Each cow and her newborn calf are provided with a pen that’s been completely cleaned out and disininfected prior to the cow giving birth. This breaks the cycle of exposure to bacteria like E. coli and viruses such as coronaviruses that cause calf scours.

Limiting contact with other animals is an important strategy to consider if wildlife in your region carry infectious organisms that are likely to affect your livestock. As organic farmers, we consider the complex interactions between species in an ecosystem to be important. We value diversity and “being in touch” with soil, plants and animals, working to promote harmony and synergy between all members of an ecological community. Keeping animals confined (as in the case of HPAI “bird flu”) goes against our nature as it probably well should. If wildlife disease in your area becomes a significant concern for your animals, you may be able to reduce risks to an acceptable level by removing clutter and cleaning up feed storage areas to minimize rodents, managing outdoor areas and planning grazing rotations with consideration for wildlife migration patterns and life cycles.

Vaccination is another important biosecurity practice. It does more than just protect the animal receiving the injection. By reducing the number of pathogens that animal sheds into the environment, vaccination helps prevent disease in other herd members and reduces the odds that people or animals will spread the pathogen to other areas. For example, bovine virus diarrhea (BVD) is very common in cattle, and is easily transferred by infected animals or people who move between farms after working with or being near cattle. Regular vaccination for BVD can be an important tool in a biosecurity program that considers neighbors as well as one’s own farm.

Movement of People

People who work in agriculture transport pathogens on their boots and outerwear, on vehicle tires or in footwells, in their hair and even in their nostrils. Whether you’re moving between farms, or between the sick pen and the rest of the herd on your own farm, the following guidelines can minimize the risk that you will help pathogens do their dirty work:

1. Visit the cleanest sites first and dirty sites last whenever possible.
2. Carry clean coveralls and disinfected or disposable boots.
3. Wear a light nylon shell alone or over a regular coat if needed.
4. Remove and bag dirty boots and outerwear (inside out) before entering your vehicle.

If you suspect contact with a pathogen that could cause serious harm, the safest course of action is to launder all outerwear, shower, and minimize farm contact for 24 to 48 hours. While this is seldom considered practical, it’s good to be aware of the “gold standard” course of action, so that any deviation from that best practice can be done thoughtfully.

Neighbors and visitors can do their part by using common parking areas, away from farm-related traffic, and by staying out of animal areas unless there is a need to enter those areas. Some callers may wish to act appropriately, but lack knowledge about biosecurity or about specific pathogens present in your area. A biosecurity sign with simple instructions to clean boots and avoid animal areas can provide guidance for those individuals and help prevent trouble.

Disinfect Boots, Vehicles and Equipment

Disinfectants should be chosen for effectiveness against the target organisms in the environment in which they’re used. Other considerations include safety, convenience, environmental impact, and cost. In many cases, basic cleaning removes most of the infectious agents present, and disinfection simply finishes the job—it’s important to clean regularly with soap or detergent, in addition to using the right disinfectant. (See the chart on page 14 for help choosing a disinfectant.)

Oils and organic materials such as dirt, feed or manure can extend a pathogen’s lifespan from hours to days to months or even years. Such substances provide a safe haven for bacteria and viruses, protecting them from chemicals, sunlight, and dessication. Organic material can also deactivate many disinfectants. It is critical to remove grease and organic material before applying most disinfectants! At the same time, some disinfectants are inactivated by detergents or other chemicals, so it’s also important to rinse away other cleaners before disinfecting.

When mixed at an appropriate concentration—about 1 cup of 5.25% commercial bleach per gallon of water—bleach is one of the most practical and efficacious disinfectants for footwear. Its broad-spectrum effectiveness is not reduced by

To Biosecurity on page 14

Organic Crop Improvement Association MN #1 Organic Certification through OCIA International

**FARM**

**LIVESTOCK**

**PROCESSORS**

Join us today

“Personalized support & education through your local member led chapter”

2609 Wheat Drive, Red Lake Falls, MN 56750

218-253-4907

www.ocia.org • www.mnncia.org

Lori Ann Hartel, Chapter Administrator
DeEtta Bilek, Education Coordinator

SEA - 90' Sea Minerals

**INCREASE PROFIT AND PRODUCTION**

Add SEA-90 to Fertility and Mineral Programs and Save Money while Improving the Quality of Farm and Garden Production

- Increase crop and pasture yield
- Improve microbial populations and soil health
- Optimize healthier livestock and improve reproduction rates

SeaAgri Offers:

- SEA-90 Natural Fertilizer: Broadcast on soil to replace mineral elements
- SEA-90 Foliar Fertilizer and Poultry: Spray all growing seasons
- SEA-90 Essential Elements: Livestock and poultry mineral

Use as directed and see Improvement in 4-90 days

I “used SEA-90 Natural Fertilizer on my corn, soybeans and cotton during a drought and had huge results. The plants showed perfect root growth! My cattle that ate the grain we produced plus SEA-90 Essential Elements seemed much healthier. It’s sold as an “SEA-90”—Stuart C., Centerville, KY, 40

Sustainable Ocean Products

Sea Energy Agriculture

70, 25 Ecu, Eastport, CA 95626 • 770-410-1700

www.seaagri.com
Potlucks help women network, grow organic movement locally

By Lisa Kivirist

Ask an organic farmer what was his or her best source of information on farming, and you probably won’t get a book or website recommendation. Undoubtedly, it will be another organic farmer. From the serendipitous conversation you have with the person you sit next to at lunch at the MOSES Conference to questions answered at a field day, the strength of this movement deepens and widens through our support of each other.

Take those connections a step further, and you can create a local farmer network right in your community. That’s exactly what seeded five years ago when a group of women committed to sustainable agriculture started meeting regularly for potlucks here in my south central area of Wisconsin, specifically Lafayette, Green and Iowa counties. This area sits in the heart of America’s conventional dairyland, where organic farmers are still the underdog minority. For that underling reason, it quickly became apparent that our fledgling group shared a priority to connect regularly and support each other.

Flash forward to 2015 and our “South Central Wisconsin Women in Sustainable Agriculture” group’s impact can be felt locally, both from an economic and educational perspective. Our flagship annual event, Soil Sisters, now lures both tourists and locals to over 12 women-owned farms to experience sustainable agriculture and rural living at its finest. Soil Sisters: A Celebration of Wisconsin Farm and Rural Life, now a project of the Wisconsin Farmers Union along with MOSES, Renewing the Countryside and the Wisconsin Department of Tourism, consists of a full weekend of engaging and interactive activities, July 31 through Aug. 2. From our MOSES In Her Boots workshop for aspiring women farmers to culinary events to a free tour day involving eight women-owned farms, our local farmer network’s impact now goes beyond dishes served around a potluck table: we’re positively impacting our community.

Soil Sisters and the South Central Wisconsin Women in Sustainable Agriculture group took root on a November evening five years ago in Madison, when I taught an introductory beginning farming workshop for women through the MOSES Rural Women’s Project. About 30 women gathered that night, none of whom I knew. After a brief welcome, I kicked things off as I always start my workshops with everyone quickly introducing herself—name, where you’re from, and what farm dreams brought you here tonight.

First, Lindsey Morris Carpenter stood up and introduced herself as from Monroe and running Grassroots Farm. Later, Lori Stern said she and her partner had just moved to the area with visions of launching a farm stay. The introductions wrapped up with Katie Lijes, a new chicken farmer in my area. I thought, “Who are these interesting women, located within 30 miles from me, and why haven’t I met them before?” That intrigue lingered as I drove the hour home, up and down the hilly rural roads. Somewhere in the middle of those cornfields, I decided to throw a potluck. I emailed an invite for the first Sunday night in December and left it at that. And, come together we did. All homergrown dishes passed around, a welcoming warmth filled the room. Early into the evening, folks already started shouting out “When are we doing this again?”

Today, our South Central Wisconsin women’s group boasts over 50 active members who gather at six-on-farm potlucks throughout the year. What continually amazes me is the long, growing list of tangible outcomes that come out of women informally but regularly gathering over supper. A beginning farmer connected with a woman with extra land to lease, and a partnership formed. Some women started a chicken feed buying co-op to enhance buying power. Countless baby goats, heritage hogs, and local insurance agent recommendations are shared.

“I wouldn’t be here today if it wasn’t for the support of other local women farmers,” shared Lori Stern, a local friend who moved to our area in 2010 with her wife, LeAnn Powers. “Successful local food entrepreneurs, Stern and Powers first launched Lucky Dog Farm Stay, which included converting their barn into a yoga studio where Stern teaches classes. The next entrepreneurial chapter involved starting Cow and Quince in her small rural town of New Glarus, creating the Community Supported Restaurant (CSR) and local food hub in our county.

“When I needed anything, from contacts for suppliers to advice on dealing with state inspectors, I knew who to talk to,” Stern said. “That kind of support and knowing someone is on your side is priceless, especially in our traditional rural community where male-run, conventional agriculture is still the norm.”

Soil Sisters host their annual weekend of on-farm food and fun July 31-Aug. 2 in South Central Wisconsin. The “sisters” are: (back row from left to right) Lori Stern, Cow & Quince and Lucky Dog Farmstay; Jen Riemer, SpecFamry; Katie Lijes, Green and Iowa; Neta Fauber, Scotch Hill Farm; Lindsey Morris Carpenter, Grassroots Farm; and, Kris Marion, Circle M Market Farm; (front row) Erica Roth, Windy Hill Farm; and, Lisa Kivirist, Inn Serendipity.

Photo by John Ivanko

Registration is open! See Organic Field Days under the Events tab at mosesorganic.org. Call 715-778-5775 to request the event brochure. These events are free unless noted.

2015 Schedule:

Wednesday, July 15, 9 a.m. to Noon
Beaver Creek West Farm, Caledonia, Ill.

This field day will showcase 44 acres of spring wheat: Orleans, Red Fife and Wilkens wheat from Fields Best Seeds. Also on the farm this summer is 1.5 acres of red clover seed and 3 acres of diversified vegetable production.

Tuesday, July 21, 10 a.m. to 2 p.m.
Sweet Springs Farm, Gays Mills, Wis.

Harriet Behar and her husband, Aaron Brin, have a 216-acre certified organic farm where they grow a variety of vegetables for wholesale and retail markets. Their fields feature both standard and unusual cover crops. They also have vegetable fields with living mulches and rye mulch.

Friday, July 31, 10 a.m. to 3 p.m.
Christensen Farm, Browntown, Wis.

In Her Boots workshop: $50 (includes lunch)

Katy Dickson has a diversified farm with over 80 varieties of vegetables, plus berries, eggs and honey. Morning workshops will cover CSA management, cover crops for specific benefits, family-friendly farming, and affordable equipment. Lunch is provided by MOSES and Organic Valley. The afternoon tour includes the growing fields, cover crops, hoophouses and packing system.

Kick off the SoilSisters weekend:

July 31-Aug. 2

Soil Sisters Farm Tour, South Central Wisconsin

Over 20 farms offer tours, food and craft demos, tastings, and more during this family friendly weekend at women-run farms.

Thursday, Sept. 10, 1 to 4 p.m.
Standard Process, Palmyra, Wis.

Standard Process grows the pure ingredients for its whole food supplements on a 450-acre certified organic farm between Madison and Milwaukee. Crops include alfalfa, barley grass, beets, Brussel sprouts, buckwheat, kale, kidney beans, oats, pea vine, Spanish black radish, and sweet potatoes. See how the farm uses cover crops, manages weeds organically, and composts on the farm.

Tuesday, Sept. 15, 1 to 4 p.m.
Greg Reynolds, Riverbend Farm, Delano, Minn.
MOSES Organic Farmer of the Year

Greg and Mary Reynolds, the 2015 MOSES Organic Farmers of the Year, grow vegetables and small grains on 30 acres that have been certified organic since 1994. Their four-year rotation features cover crops, such as buckwheat, peas, rye, and yellow sweet clover. Their markets include an 84-share CSA and wholesale to restaurants, food co-ops, nursing homes, hospitals and schools. They will talk about fresh market organic vegetables, seed saving, farming efficiency, and soil health.

moseorganic.org  |  715-778-5775  |  7
Along with well-deserved public recognition for their land stewardship, the Farmers of the Year receive a monetary award, an engraved plaque and a prize package that includes admission and lodging for the MOSES Conference.

The consumer trusts the organic certification process to make sure the rules are consistently implemented across all organic products. The consumer trusts the organic certification seal when labeled “natural” or perhaps even “better than organic.” I had one noncertified producer who said his product is comparable to one bearing the organic claim. “No-spray” on a farmers’ market sign does not mean a farmer was not using synthetically treated seeds, insect dusts or chemical fertilizers. Producers using these claims are nowhere near the consumer’s desire to purchase something that protects the environment and human health as organic certification provides.

Nominate by Sept. 15, 2015!
Nominees must be certified organic and farm in the Midwest. See mosesorganic.org/projects or call 715-778-5775 to request a nomination form.
Author offers sage advice for small-scale, beginning market farmers

By Katie Bishop

New Agrarians embody the movement for local, small-scale and sustainable food systems. These young farmers are passionate, resourceful and tech-savvy, but likely very new to farming. Jean-Martin Fortier's The Market Gardener is undoubtedly written for these farmers. Importantly, Fortier's book speaks to aspiring farmers who will farm on smaller parcels of land, providing sound advice on how to profitably raise vegetables on as little as 1.5 acres of land with only a modest initial investment.

Fortier's business sense is right on. His approach to direct selling to consumers guides the reader in farming acumen and marketing know-how. For instance, his perspective on the advantages of a CSA model is relevant to a young farmer who may consider a CSA to help with the initial investment costs of starting a farm; the "Crop Planning" section of the book aids in the important steps needed to ensure the CSA is successful.

The book is an excellent resource for marketing advice as well. Too often, farmers (both new and experienced) underestimate the power of marketing their products; Fortier emphasizes the need to understand which vegetables command a higher price over others, and provides strategies for obtaining those prices from your customers. He notes sagely, that "market gardening is as much about selling as it is growing." I nodded my head in agreement when I read his take on adding value to crops, as this is something I personally spend countless hours contemplating. He explains, "In 2012, a five pound bag of organic carrots sold for $85 in the grocery store ($1.20/lb.), while the same carrots in a bunch sold for $2.50 per pound. The value of the carrots more than doubled simply by leaving the leaves on to indicate freshness."

Sometimes it can feel like the weeds are chasing you, and dealing with that chase is overwhelming at best and - at worst - can be the reason you don't have carrots or salad mix to bring to market or to put in CSA boxes. If you're a new farmer who hasn't made enough capital to invest in larger equipment, having an experienced farmer like Fortier acknowledge the challenges faced when farming organically, and then provide smart and inexpensive solutions is extremely useful.

An example of some of this great advice is found in Chapter 9 "Weed Management."

The concept of "getting ahead" of weed pressure before it becomes a problem is some of the most valuable information in this book. During my first year growing on my own 1.5 acre plot, a seasoned farmer responded to my complaints by saying "Mulch, mulch, mulch." Now I raise vegetables on 10 acres and the advice still rings true. Similarly, Fortier provides concrete, manageable and affordable ways to deal with weed pressure. I personally needed the motivation and reinforcement Fortier provided on this topic and hope to implement his ideas on stale seed bedding with my onion crop next year.

My only significant quibble with the premise of this book is the author's insistence on non-mechanization. Throughout this book Fortier argues that small farms with no mechanization are more profitable. More experienced farmers may find this claim to be less easy to swallow, since mechanized mechanization aids the inevitable physical toll that organic farming takes on our bodies. Constant stooping, bending, and leaning is hard on the farmer's body, and moderate, thoughtful mechanization in the form of a weedeer or a mechanical transplanter supports sustainability of the body for the farmer and farmworkers.

Also, with slightly larger acreage, the ability to rotate fields — leaving some fallow or planted with cover crops — and integrating livestock allows for greater soil fertility and is an economic benefit to the small farmer. At PrairiErth Farm, we are able to save money and add value to the farm through the sale of grains and beef, chicken, pork and eggs. Much of this is difficult to do with very small acreage. Nevertheless, it's clear that many new farmers will be raising vegetables on small acreage farms; significantly, these philosophies of non-mechanization also address global warming concerns and the importance of putting our food system in line with calls to address climate change.

This book is valuable because these young farmers matter. Their commitment to small-scale agriculture means maintaining biodiversity, cultivating their communities' values and economics and aiding in rural re-development and preservation. And, while directed towards micro farmers, the book still resonates with "larger" small farms.

The beginning farmer will find value in the functional way Fortier lays out specific crop information in the form of charts and graphs depicting data such as his rotation plan, seeding dates, and pricing strategies. The content of this book resembles many conversations I've been lucky enough to have with mentors, consultants and fellow farmers. This exchange of information is so important for farmers, young and old alike. Given the rapid emergence of today's "new agrarian" movement, this book is timely, useful and valuable to small-scale farmers with limited access to land and financial capital to get started and for those without access to those intimate conversations with more experienced farmers.

Katie Bishop and her family own and operate PrairiErth Farm, a certified organic, diversified market farm in Central Illinois.
Research shows farmers use mob grazing for variety of benefits
By Anders Gurda

For those of us interested in grass-based agriculture, mob grazing is likely not a new concept. We’ve heard the mob-grazing gurus talk at conferences, read the articles, and listened to fellow farmers or agricultural advocates rave or rant about it. Although it has been the subject of much discussion, there still seems to be a lack of consensus about how mob grazing should or should not be implemented. As is true for any production strategy, there is no one, right way. Learning about the many right ways that mob grazing can work for graziers has been the focus of my research for the past few years.

What is Mob Grazing?

Mob grazing finds its inspiration in the behaviors of wild, rangeland herbivores such as bison and elk in the American West. Those lumbering ungulates roam in miles-long herds, grazing, trampling, and fertilizing the plains as they moved. The heavily disturbed path they left would recover and regrow, likely not to be grazed again for many months or years. It was exactly this pattern of disturbance and rest, along with periodic fires, that created some of the richest soils in the world. If the Midwest owes its considerable agricultural inheritance—a disappearing Loess-rich nest egg—to this recurring interplay between forage and forager, then why wouldn’t we want to mimic this system?

“That soil didn’t just happen,” says Cheyenne Christianson, a Wisconsin dairy farmer. “Something made that happen.” It’s mob grazing that Christianson thinks will keep this fertility-giving gift of the environment interplay going into the future as we domesticate this agrarian inheritance—a disappearing Loess-rich nest egg. Armed with a video camera and lots of questions, I spent time with 10 very gracious farmers—Connie Long of Wisconsin—an experience that brought the practice to life. Armed with a video camera and lots of questions, I spent time with 10 very gracious farmers—Connie Long of Wisconsin—an experience that brought the practice to life. Armed with a video camera and lots of questions, I spent time with 10 very gracious farmers—Connie Long of Wisconsin—an experience that brought the practice to life. Armed with a video camera and lots of questions, I spent time with 10 very gracious farmers—Connie Long of Wisconsin—and was able to see, firsthand, what mob grazing looks like on the landscape.

The main thrust of my research focused on mob grazing as a control strategy for Canada thistle. However, I also conducted a series of interviews with mob graziers throughout the Midwest to see the method in action.

The field research compared three treatments and their impact on Canada thistle populations and forage production over three seasons: a one-time fall herbicide application followed by rotational grazing, mob grazing, and a rotationally-grazed control. Simply put, we found that mob grazing may be an effective control strategy if used in diverse, productive pastures, but may increase thistle density in less productive swards.

Farmers’ Experiences

As mob grazing has primarily been a farmer-generated practice, we went right to the source, learning from producers not only their reasons for using or not using mob grazing, but also how they actually implement the practice. I was lucky enough to take a week-long road trip in the summer of 2013 through Iowa, Minnesota, and Wisconsin—an experience that brought the practice to life. Armed with a video camera and lots of questions, I spent time with 10 very gracious farmers who use mob grazing (and don’t mind cameras in their faces) and was able to see, firsthand, what mob grazing looks like on the landscape, why it should or shouldn’t be used, and how best to implement the practice.

At every farm, I was struck by how mob grazing was adapted for that farm, and the reasons for those adaptations. While some farmers were really just “towing” with the practice, others had learned to be flexible, sking “what the environment, what the weather, and what Mother Nature tell you that you have to do,” as one farmer explained.

At the time of my visits, many of the grazing

Imagine how much you could grow with the guidance of an experienced organic farmer—someone with “insider secrets” to move your farm forward!

That’s the kind of guidance you’ll get from the Farmer-to-Farmer Mentoring Program.

Apply online: mosesorganic.org/projects/mentor-program

Boost your farming skills. Apply now to get a farming mentor!
Beef cattle graze on Dave Nortunen’s farm in northern Wisconsin. Mob grazing is similar to rotational grazing, but producers typically graze forage that is more mature with more animals per unit area, faster paddock moves, and a longer regrowth period after grazing events. Producers find benefits include weed control, even distribution of manure, pasture resilience, decreased animal selectivity and improved soil health.

Farmers were destocked to average rotational densities. Using higher stocking densities in the spring and then slacking off as the summer heat came on was a common practice. I learned that mob grazing is a strategic tool that can be used for various amounts of time and to various degrees depending on the manager’s goals.

When asked to define mob grazing, most farmers laughed. When pushed, however, the farmers offered up that it generally includes higher stockers. "Mob grazing is a nice way to grow your business," Ludlow added. Animal performance might not be the first benefit that comes to mind when mob grazing matures, but many of the producers insisted that the increased fiber in the grass balances the protein-fiber ratio and ensures that cows aren’t too loose in the springtime and can utilize all of the energy in the forage. "It makes a perfect manure," Craig said. These dairymen are also grateful for the excuse to see their animals multiple times a day, checking on watering systems, observing the animals grazing, and identifying problems preemptively. Craig finds that "seeing those cattle more often per day is a better thing." 

Disadvantages

Although there appear to be considerable benefits for farmers who have learned to adapt mob grazing to their operations, nothing comes without drawbacks that can be overcome with some forethought. Mob grazing is a tool, not an inflexible rule. A refrain that I heard throughout my travels was mob grazing is best used as a tool, not an all-inclusive view: “Take your time, and make adjustments as you go. Watch the condition of the animals.” These sentiments were echoed by all of the farmers. Start slowly, ask lots of questions, focus on trampling forage to “jumpstart” the system, use it in the spring, be flexible, and adapt.

Video Series

With the annual organic farming conference, this publication, and many other programs, MOSES facilitates an exchange that we all know to be the basis of effective agricultural education: that farmers learn best from each other. One of our key goals as researchers is to facilitate these educational conversations. Realizing the videos I captured that summer might be valuable to other producers, we recently released a four-part series titled “In Their Own Words,” which covers mob-grazing definitions, benefits, risks, and implementation tips. (See bit.ly/MobGrazing.)

These farmers’ stories provide the most comprehensive picture of mob grazing to date, revealing it as an emerging practice with considerable potential but with drawbacks that can be overcome with slow and strategic implementation by producers. A refrain that I heard throughout my travels was that mob grazing is best used as a tool, not an inflexible rule.

If mob grazing is a tool, then I’ll like to think of it as a Leatherman—an infinitely useful multi-tool. From increased stocking capacity to soil health and resilience, mob grazing can be applied to the landscape in any number of ways for any number of reasons. Mob grazing elegantly applies ecological principles in a way that honors the system while simultaneously seeking to maximize production.

Instead of the behavior patterns they seek out specific grasses they like, there’s so much cattle around them that they realize, “If I don’t eat this, somebody else will.” A large-scale beef grazier, Matt Ludlow, found that he was able to increase his stocking capacity by about 5% per year with mob grazing, due to decreased selectivity and increased forage production. "If you can do that without having land, it’s a nice way to grow your business," Ludlow added.

The dairy producers in the group emphasized the importance of careful management, encouraging those interested in mob grazing to graze earlier rather than later. “Be on that early cycle,” Chris-tianson recommended. “You can register it daily in the bulk tank—see how fast that milk starts to plummet as that maturity cycle increases.”

Mob grazing may not be perfect for every type of livestock; it also may not fit every environment. Nortunen had some early challenges that resulted from mismanagement and not destocking in time. “High density has some really good things,” he said. “You can really heal the land, and you can wreck the land probably twice as fast.” These growing pains are normal, other growers said, many relating that it may take a few years to see any of the impacts from adopting mob grazing.

“I get ready to screw up!” an Iowa beef producer warned when asked what advice he would give to other farmers interested in experimenting with mob grazing. Another manager gave a more nuanced view: “Take your time, and make adjustments as you go. Watch the condition of the animals.” These sentiments were echoed by all of the farmers. Start slowly, ask lots of questions, focus on trampling forage to “jumpstart” the system, use it in the spring, be flexible, and adapt.

Anders Gurda is an associate researcher in organic and sustainable cropping systems at University of Wisconsin-Madison. UW Extension, Hay & Forage Grower, Center for Integrated Systems, Ceres Trust, and SARE provided support for the videos.
Potluck Networks — from page 7

These outcomes go beyond the sharing economy, sparking new businesses and dollars flowing into our community. For example, Anna Landmark and Anna Thomas Bates met at a potluck and eventually formed a strong business partnership. Landmark was already on her way to earning her cheesemaking license to launch her own operation but needed a partner to help with the business and marketing side. Bates, a food writer savvy on the food scene, gladly filled that role. The duo launched Landmark Creamery, which is now an award-winning cheesemaking venture.

“We’re both moms with kids in the same school district, and we’ve even married these women-in-agriculture potlucks,” Landmark reminisced.

“Even if we had met in a school setting, I’m not sure we would have had the opportunity to connect in a way that we did over cheese and wine. The potluck provides a welcoming, supportive setting through which women like myself and Anna feel comfortable sharing our big picture visions and dreams.”

“Twenty years ago, I felt pretty much like the Lone Ranger when we started,” shared Debra Endris, who runs Stotch Hill Farm with her husband, Tony, a certified organic CSA in Brodhead. “It is so wonderful to see the growing number of sustainable and women farmers in our area thanks to this network and the connections made. My youngest son and daughter-in-law are planning on supplying goat milk to Landmark Creamery. We supply organic produce, meat and milk soap to Cow and Quince. We added our two Oberhasli Bucks we share with Lucky Dog Farm. Our South Central Wisconsin Farmers Union Chapter was born out of this group of amazing people, too.”

A local network can provide the support you need when you can’t find it elsewhere. “It really helps me to receive back-up verbal support from other women farmers because I don’t always get that from some members of my family or community,” said Katie Dickson of Christiansen Farm in Brownstown. Dickson will be hosting the In Her Boots workshop on her farm to kick off the Soil Sisters weekend July 31, sharing her experiences over the past eight years running a CSA in a rural area.

Such networks also create an easy and accessible means for new farmers to immediately feel connected. Such was the case for Erica Roth and her family, who moved to the Albany area from Kentucky a year ago and started Windy Acres Farm.

“I immediately felt completely empowered and welcomed when I first moved to our property and attended my first potluck hosted by MaryAnn Belazzini of Campo Di Bella Farm,” Roth said. “The lack of intimidation of this group immediately struck me. No matter where you were on your farming journey, others supported you and connected resources to help you further. I’m looking forward to hopefully attending my first MOSES Conference next year, thanks to strong recommendations from all these local women farmers I have met.” Roth also jumped in to be part of the Soil Sisters tour this year, hosting a family-friendly workshop Aug. 1.

“The impact of these women farmers building local networks and resulting events like Soil Sisters bring strong economic ripple effects into our broader community,” shared Cara Carper, Executive Director of the Monroe Chamber of Commerce and Industry. “Soil Sisters lures tourists to the area who specifically seek out local and organic food options on the menu. This then prompts interest of other restaurants in the area to start incorporating locally-sourced produce and seasonal items on their menus, which in turn grows the successful relationships of our local farmers and restaurants, which brings more tourists.”

“Build it and they will come” may work for a baseball field of dreams in the middle of Iowa, but it also adds up to good advice when you harbor this need to connect with other local milked farmers. Start inviting, keep inviting and stay in it for the long term, and you will amaze yourself with the women who show up around the table, thanks to your leadership.

4 Tips to Start Potluck Network

1. Commit to lead one year.

Make organizing a local network your personal project for at least one year. While these networks do not need to be formal organizations with elected officers, bank accounts, and high commitments, they still need consistent leadership to get successfully off the ground. Be that person to recruit other potluck hosts, set a schedule, send out reminders, and answer questions.

2. Set calendar yearly.

Given the demands of the growing season, it helps to set potluck dates for the whole year in January. This way, it’s much easier for hosts to commit before their schedules fill up. Our gatherings are usually a Sunday supper but sometimes brunch or lunch. Our format is different every year to keep it fresh.

3. Create communication channels.

Make an easy way for folks to keep in touch, based on the media preferences of your group. Some like a Facebook page, but for us, a simple free email forum works well and serves as a means to find a home for extra piglets or to share information on a community event.

4. Keep it local.

While we have a Yahoo email forum, it isn’t open to the public. Requests come through me. Our goal is to develop a tight local network of women who know each other individually. Therefore, you need geographic ties and a kinship with shared values of sustainability and local food. Some women on the list may be looking to move to the area, hoping to make connections and find local resources before they buy a farm.

Come visit during this year’s Soil Sisters weekend and meet our network firsthand, and hopefully you’ll head home with inspiration to launch your own area gatherings, changing communities one potluck at a time.

Lisa Kivirist coordinates the MOSES Rural Women’s Project. She and her husband, John Ivanko, run Inn Serendipity Farm B&B near Brownstown, Wis.

Local Women in Sustainable Ag Networks

The MOSES Rural Women’s Project provides opportunities for women farmers to get together and develop strong local connections and collaborations. Statewide networking sessions are held at the annual MOSES Organic Farming Conference. Local networks meet regularly for potlucks and farm tours. Potlucks are announced on the Rural Women’s Project Facebook page: www.facebook.com/RuralWomensProject.

Contact the organizers below to be added to that group’s email list.

South Central Wisconsin
Contact: Lisa Kivirist, lisa@innserendipity.com
General region: Green, Iowa, LaFayette, western Rock and southern Dane counties

Southeast Wisconsin
Contact: Christine Welcher, christine.welcher@gmail.com
General region: Walworth, Rock (eastern), Jefferson, Racine, Kenosha, Waukesha counties

West Central Wisconsin
Contact: Teresa Davis, brunnette.80@gmail.com
General region: Dunn, St. Croix, Pierce, Pepin and Barron counties

Great River Women in Sustainable Agriculture Contact: Nad Geraldson, learnatoday@yahoo.com
General region: Vernon, Crawford and La Crosse counties

Don’t see your area listed? Contact Lisa Kivirist at lisa@innserendipity.com for help starting a network in your area.

A Celebration of Wisconsin Family Farms & Rural Life

SOIL SISTERS

3 Days • 5 Unique Components • 20+ Farms Create Your Own Farm and Culinary Adventure

Tour of Farms
Saturday, August 2 Visit numerous women-owned farms in the Monroe and Brodhead areas. Free.

Green Acres Hands-on Workshops Friday, July 31 and Saturday, August 1 Milk a goat, preserve the harvest, go on a honey tour, spin fiber and much more! Ticketed events on separate tickets.

Taste of Place at Cow & Quince Saturday, August 1 A limited-edition wine and cheese celebration. Ticketed event.

Dinner on the Farm Saturday, August 1 Farm to table dinner featuring local produce & live music. Kids under 10 free. Ticketed event.

Dine Folk at Restaurants Friday, July 31 to Sunday, August 2 Local women farmers host dinners at the restaurants.

Contact Lisa Kivirist at lisa@innserendipity.com 608-982-7079

West Central Wisconsin
Contact: Teresa Davis, brunnette.80@gmail.com
General region: Dunn, St. Croix, Pierce, Pepin and Barron counties

Great River Women in Sustainable Agriculture Contact: Nad Geraldson, learnatoday@yahoo.com
General region: Vernon, Crawford and La Crosse counties

Don’t see your area listed? Contact Lisa Kivirist at lisa@innserendipity.com for help starting a network in your area.

A Celebration of Wisconsin Family Farms & Rural Life

SOIL SISTERS

3 Days • 5 Unique Components • 20+ Farms Create Your Own Farm and Culinary Adventure

Tour of Farms
Saturday, August 2 Visit numerous women-owned farms in the Monroe and Brodhead areas. Free.

Green Acres Hands-on Workshops Friday, July 31 and Saturday, August 1 Milk a goat, preserve the harvest, go on a honey tour, spin fiber and much more! Ticketed events on separate tickets.

Taste of Place at Cow & Quince Saturday, August 1 A limited-edition wine and cheese celebration. Ticketed event.

Dinner on the Farm Saturday, August 1 Farm to table dinner featuring local produce & live music. Kids under 10 free. Ticketed event.

Dine Folk at Restaurants Friday, July 31 to Sunday, August 2 Local women farmers host dinners at the restaurants.

Contact Lisa Kivirist at lisa@innserendipity.com 608-982-7079

West Central Wisconsin
Contact: Teresa Davis, brunnette.80@gmail.com
General region: Dunn, St. Croix, Pierce, Pepin and Barron counties

Great River Women in Sustainable Agriculture Contact: Nad Geraldson, learnatoday@yahoo.com
General region: Vernon, Crawford and La Crosse counties

Don’t see your area listed? Contact Lisa Kivirist at lisa@innserendipity.com for help starting a network in your area.
The Most Economical Way To Build Soil Health

SUSTANE®
Natural Fertilizer, Inc.


www.sustane.com
(507) 263-3003 or kyle@sustane.com
310 Holiday Ave, Cannon Falls, MN 55009
Call today for a free soil building consultation!

DRAMMATIC®
Natural Fish Fertilizers for Organic Crop Production

DRAMM Corporation
Manitowoc, WI • U.S.A.
www.FishFertilizer.com
920.684.0227
Fax: 920.684.4499
ORDER 800.258.0848

Partners start open-sourced network to grow seeds for research, preservation

By Jody Padgham

Climate change and monoculture farming threaten the world’s food supply—it’s a food system “propped up by three inappropriate pillars: GMO corn, GMO soy, and hybrid wheat, all grown with intense chemical inputs,” claimed Nate Kleinman. Hoping to turn the tide, Kleinman and his business partner, Dusty Hinze, have created the Experimental Farm Network, an open-source network to facilitate collaboration on plant breeding projects and other agricultural research.

Kleinman and Hinze believe that sustainable crops and growing systems of the future—including those with the power to reverse climate change—will be developed through a large-scale effort that is open, transparent, and organized from the ground up. They started the Experimental Farm Network (EFN) last year and signed up 300 volunteer growers in every zone from Maine to Hawaii.

“We plan for EFN to one day become the largest ‘citizen science’ project in history. Our primary goal is to stop or even reverse climate change through agricultural innovation,” Kleinman said. “We are sure this is possible, but ‘how’ remains an open question.”

Expanding an early passion for plant diversity, Kleinman discovered the USDA National Plant Germplasm System (NPGS) database. NPGS is a cooperative effort by public and private organizations to “acquire, characterize, preserve, document, and distribute to scientists, germplasm of all lifeforms important for food and agricultural production.” The database has over 12,000 plant species, which researchers can request for genetic research and other projects. USDA research facilities and government funds are used to do some research and grow germplasm material. The goal, though, is to have an interactive website where researchers (“Experiment Designers and Volunteer Growers”) can grow out germplasm for ongoing preservation.

Kleinman spent months exploring the database listings from around the world—from Afghanis- tan to Iceland, and Indonesia to Syria. He was especially drawn to plants from countries under siege either from human conflict, or environmental conflict, such as rising sea levels.

“There is so much genetic material there that could be important to our future,” Kleinman stated. He feels that government and big ag-funded researchers can’t be counted on to protect and explore the vast diversity and potential. He sees the government as being ultimately ineffective at protecting and utilizing this vast and important resource. “The system relies on the support of the federal budget, so it is vulnerable.”

For the past several years Kleinman has himself been receiving seeds, tubers, plant cuttings and bulbs from the NPGS, which will distribute to researchers through the network, Kleinman said.

There is much vision in the project. “To create a new paradigm—to not only be sustainable, but restorative—we will need new crops, new methods, and plenty of new farmers, too. We are committed to finding these new crops, new methods, and new farmers, and we recognize that none of us can do these things alone.”

EFN was piloted in the growing season of 2015, and around 300 participants in 43 US states and 4 Canadian provinces are currently taking part as either Experiment Designers, Volunteer Growers, or both. Current EFN projects involve quests for perennial wheat and sorghum, and Dr. Frank Kutka’s “organic-ready” corn that resists outcrossing. Kleinman hopes to see additional efforts to develop perennial grains and oilseeds which would sequester carbon, preserve soil, and require fewer inputs.

Kleinman expects that the EFN will breathe new life into long-running efforts that have yet to live up to their potential. “It may take many more years or decades still, before EFN innovations are ready for wide use, but we are nevertheless certain that our open-source, participatory model will yield innovations none of us can yet predict,” he explained.

In its first year, EFN relied on the labor of Kleinman and Hinze to create the matches between growers and researchers and source the germplasm material. The goal, though, is to have an interactive website where researchers (“Experiment Designers”) and growers can find each other.

“As the network develops, seed will be coming back,” Kleinman explained. “Saved seeds will eventually go bad, they must continue to be grown out. A major goal is to get people growing seeds to preserve for future use. Even if it’s not obvious now, they may be important for some reason in the future. There is great value in keeping them growing.”

While it’s too late to join for this year, it’s not too early to start thinking about how you might like to use the EFN next year, whether designing experiments or taking part as a volunteer grower. Even gardeners with only a few square feet to spare—just enough to grow out a few plants of a rare landrace wheat from Syria, for instance—can make a difference. Kleinman noted that those with solid experience in successful organic growing are especially needed so researchers can be assured that their projects will unfold and viable seed will be created.

Plant breeders and researchers are encouraged to think of how they can utilize dozens of volunteers across the country willing and able to help. Kleinman hopes that the EFN website will be open soon, with applications for Experiment Designers and Volunteer Growers later this fall. He noted that a crowd-sourced fundraising effort will soon be launched to help cover costs of the network’s development.

“Neither giant agri-businesses nor the universities and governments they bankroll will ever innovate a challenge to the dominant status quo, said Kleinman. “The system needs a new life, a new energy—today’s efforts are especially needed so researchers can be assured that their projects will unfold and viable seed will be created.”
Biosecurity — from page 6

Organic BrOadcaster — July | August 2015

Effective lifespan and deactivation by organic matter makes it a mediocre choice for use in a boot bath. Phenolic compounds tend to be preferred because they remain a bit more robust as the bath inevitably becomes contaminated with dirt and manure. Even so, boots should be cleansed of organic matter prior to entering the bath, and the solution must be changed every 1 to 3 days to remain effective. While a boot bath can be a useful part of good farm biosecurity, it should not be the primary method for addressing dirty boots.

For passenger vehicles, tires are a primary biosecurity concern. A pressure washer may be needed to remove gross dirt and manure from treads. The entire vehicle should be washed with detergent before disinfectant is applied. Environmental impact of runoff is a significant factor when cleaning vehicles, and iodophores (iodine-based products) tend to be used for this application.

While washing and disinfecting a vehicle, be sure to include the undercarriage. While the products suggested are accepted in organic production for the general uses described here, it is recommended that you check with your certifier before using any product in a new way.

### Characteristics of Selected Disinfectants

<table>
<thead>
<tr>
<th>Deionized Category</th>
<th>Alcohols</th>
<th>Aldehydes</th>
<th>Biguanides</th>
<th>Halogenated Hydrocarbons</th>
<th>Halogens: Iodine Compounds</th>
<th>Oxidizing Agents</th>
<th>Phenols</th>
<th>Quaternary Ammonium Compounds (QACs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapper in Task Areas</td>
<td>Ethanol (70% v/v)</td>
<td>Isopropyl alcohol</td>
<td>Formaldehyde</td>
<td>Glutaraldehyde</td>
<td>Chloramine T</td>
<td>Peracetic acid</td>
<td>Peroxides</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
</tr>
<tr>
<td>Mechanism of Action</td>
<td>Inactivates proteins</td>
<td>Destroys cell membranes</td>
<td>Destroys proteins</td>
<td>Chloramines</td>
<td>Peroxides</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
</tr>
<tr>
<td>Advantages</td>
<td>No sweating</td>
<td>No eye or respiratory irritation</td>
<td>No skin irritation</td>
<td>No skin irritation</td>
<td>No skin irritation</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
</tr>
<tr>
<td>Disadvantages</td>
<td>Rapid evaporation</td>
<td>Temperature, humidity or hard water</td>
<td>Vital organ damage</td>
<td>Eye irritation</td>
<td>Eye irritation</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
<td>Polyhexamethylenebiguanide (PHMB)</td>
</tr>
</tbody>
</table>

### Temperature, Humidity, or Hard Water

Bleach is quickly rendered ineffective by evaporation or contamination with organic matter, so it should be mixed just before use, and boots should be cleaned before it is applied.

While the bleach solution described above is appropriate for disinfecting boots, its short effective lifespan and deactivation by organic matter makes it a mediocre choice for use in a boot bath. Phenolic compounds tend to be preferred because they remain a bit more robust as the bath inevitably becomes contaminated with dirt and manure. Even so, boots should be cleansed of organic matter prior to entering the bath, and the solution must be changed every 1 to 3 days to remain effective. While a boot bath can be a useful part of good farm biosecurity, it should not be the primary method for addressing dirty boots.

For passenger vehicles, tires are a primary biosecurity concern. A pressure washer may be needed to remove gross dirt and manure from treads. The entire vehicle should be washed with detergent before disinfectant is applied. Environmental impact of runoff is a significant factor when cleaning vehicles, and iodophores (iodine-based products) tend to be used for this application.

While washing and disinfecting a vehicle, be sure to include the undercarriage. While the products suggested are accepted in organic production for the general uses described here, it is recommended that you check with your certifier before using any product in a new way.

### Best Management Practice: Adaptation

One aspect of organic farming that’s important to remember is each region, farm and year are unique—we shouldn’t expect to have protocols, practices or a strict set of rules that apply in all situations. This reality gives some farmers much discomfort as they search or long for “best management practices” that can be blindly followed. Instead, good organic farmers stay in touch with changing situations and adapt their efforts to balance what they are experiencing with basic principles as their guide. Each of us must strike a balance between the extremes of livestock totally confined, isolated or controlled and being totally open, allowing unlimited access to the animals and free flow of all types of pathogens. As we watch for changes in animal health and productivity that could help shape biosecurity practices, we have many tools at our disposal to help reduce the risk of disease transmission by either limiting exposure to pathogens or building resistance in our animals through genetics, nutrition, vaccination and stress reduction.

Dr. Jen Burton and Dr. Guy Jodarski are veterinarians with Organic Valley/CROPP Cooperative.
Changing climate impacting agriculture, especially livestock production

By Kelli Boylen

“The things are warming up,” said Bill Bland, University of Wisconsin Extension Soil and Water Conservation Specialist, during his workshop on climate and agriculture at the 2015 MOSES Conference. “Yes, some places are cooler some years, but overall things are warming up.”

Bland said there is often confusion between weather and climate, and some people tend to argue about global warming during really cold winters. He said the simple answer to that is, “Climate is what we expect, weather is what we actually get.” He further explained as the number of extreme weather events accumulate it create a new climate.

Bland is based in Wisconsin, where he says the weather trends have followed global trends. From 1950 to 2006, the average year-round temperature increased 1 to 2 degrees. The last day of spring freeze now is 6-12 days earlier, and the date of the first frost in the fall is 3-18 days later.

“Humans are changing the Earth’s climate. That is well-understood and well-underway,” he added.

Although climate statistical models can make predictions on growing season length and average temperatures, the changes are not going to be uniform across all locations, especially when it comes to rainfall, Bland explained. Rainfall may increase by several inches in one region while an area 100 miles away will see a several-inch decrease.

Models are predicting that by mid-century the Upper Midwest will have up to four more inches of rain a year on average, and the Southern Midwest will see a .01 to 2.8 percent milk loss. Dairy producers, however, may be able to reduce greenhouse gases by increasing cow longevity and increasing milk production.

In some areas of Wisconsin, the number of days with more than 2 inches of rainfall has increased by .5 days. He explained, “The amount of atmospheric moisture is going up because the warmer air holds up to 40 percent more water vapor.”

Although the average temperature will likely be warmer than we have ever known, Bland said it’s the extremes of the weather that we are going to have to figure out how to manage. He said what people now consider unthinkable in a given area will become more common, and that is a huge issue of animal welfare and public health.

Currently in the Upper Midwest, the “warmest day of the year” is usually in the mid-90s. By mid-century, the warmest day of the year in the Upper Midwest is expected to be in the high 90s. That can make a big difference for those raising livestock, Bland added.

Using the Cattle Comprehensive Climate Index, the impact variations of temperatures can be more readily understood when factoring in wind, relative humidity and solar radiation. To a beef steer on a feed lot, an overcast 95-degree day with 20 mile-an-hour winds and 50 percent relative humidity will feel like 89 degrees. A sunny 95-degree day with 2 mile-an-hour winds and 80 percent humidity will feel like 125 degrees to a steer.

At present in a typical summer, there may be just a few days that these temperature extremes cause issues in the Upper Midwest. In the future, there may be more than a dozen days above 100 degrees each summer, which will cause significantly more animal losses. In the South heat deaths have always been “part of the price of doing business, but it will become more common here in the late century as well,” Bland said.

Dairy producers may see economic loss due to increased climate temperatures as well. Bland predicts that within the next 15 years the Upper Midwest will see a .01 to 2.8 percent milk loss due to heat, as well as an increase in heat-related death loss. Reproductive rates tend to have harsh declines in extreme heat as well, which also will impact the financial bottom line.

In some areas of Wisconsin, the number of days with more than 2 inches of rainfall has increased by .5 days. He explained, “The amount of atmospheric moisture is going up because the warmer air holds up to 40 percent more water vapor.”

That increase in major rain events in turn will cause another problem for farmers. “Soil erosion challenges are only going to get worse,” Bland said.

Future crop production is likely to be impacted in both negative and positive ways overall. Using predicted temperature and precipitation models, it is possible that some grain production states will lose up to 34 percent of their production of crops such as soybeans, while other states will see an increase of up to 22 percent. Overall, however, Bland believes the country’s ability to produce grains will decrease.

In the U.S., agriculture is responsible for 6 to 10 percent of greenhouse gas emissions, compared to 32 percent for electricity, 28 percent for transportation and 20 percent for industry. Bland said thus far organic cropping systems have not shown lower greenhouse gas emissions than conventional. Dairy producers, however, may be able to reduce greenhouse gases by increasing cow longevity and increasing milk production.

The complete recording of Bland’s workshop, Climate and Agriculture: Our Evolving Understanding, is available on the MOSES store in MP3 and CD formats. See mosesorganic.net/product/climate-and-agriculture.

USDA’s Focus on Climate

Earlier this spring, Agriculture Secretary Tom Vilsack laid out a comprehensive approach to partner with agricultural producers to address the threat of climate change. Building on the creation of USDA’s Climate Hubs last year, the new initiatives will utilize voluntary, incentive-based conservation, forestry, and energy programs to reduce greenhouse gas emissions, increase carbon sequestration and expand renewable energy production in the agricultural and forestry sectors.

Through these efforts, the USDA expects to reduce net emissions and enhance carbon sequestration by over 120 million metric tons of CO2 equivalent per year—about 2 percent of economy-wide net greenhouse emissions—by 2025. That’s the equivalent of taking 26 million cars off the road, or the emissions produced by powering nearly 11 million homes last year.

To Climate Change on page 16
Gift preserves farmland, creates legacy

By Casey Bowman

Economic and environmental challenges have led—or forced—many farmers to sell their land. Development encroaches even our best farmland; pesticides are killing off our pollinators; there are fewer farmers, yet we are faced with feeding a rapidly growing population—it’s easy to feel there is nothing one person can do to turn this tide. However, there are people who have stepped forward and chosen to take on these challenges as a personal responsibility. One of them is Indiana native Betty Phelps Refior.

Betty’s husband grew up on the Phelps family farm and, in her 93 years, Betty has witnessed firsthand the changes in agricultural practices and their impact on the environment. She is not the type to take things lightly. Her great love and respect for both honeybees and native bees inspired her and, after years of observation and research, she developed a plan to address her concerns—a plan which will carry on into the future. Her vision is to ensure that the 128-year-old Phelps family farm, located near Peru, Indiana, remains in agriculture and that bees will enjoy a newly established pollinator habitat.

Betty entered into a Memorandum Of Understanding (MOU) with the Michael Fields Agricultural Institute (MFAI) in July of 2013. The MOU states that MFAI intends to obtain organic certification of the farm by October 2017. MFAI also is establishing pollinator habitat for native bees and honeybees. Through this agreement, Betty’s habitat for the bees is well on its way to becoming reality.

Currently the farmland is in “transition year 2” of organic production, and organic certification will likely be accomplished ahead of the agreed upon date of October 2017. The 20 acres of woods and area where the bee sanctuary will be located is in the process of being certified organic.

In order to make sure that Betty’s vision is realized, the agreement is written to ensure that the land remains in agriculture. MFAI is working with the NRCS Conservation Easement Program, which protects the long-term viability of the nation’s food supply by preventing conversion of productive working lands to non-agricultural uses. Additionally, NRCS will be working with MFAI under the Environmental Quality Incentive Program (EQIP) to assist in the creation of the pollinator habitat for the bees. Native bees and honeybees are responsible for the pollination of at least 1/3 of the food we eat—without them, our plates would look very different. Their importance cannot be overstated.

Betty’s gift of the Phelps farm to MFAI reaches farther than its 226 acres. It serves as a model and inspiration for others. Farmers, as they reach an age or situation when they no longer farm, must decide what to do with their land. For some, selling is the answer; others want to honor the past and the future by providing a legacy. The Phelps farm transfer process can be a roadmap for these farmers.

Such projects involve a great deal of research, thought and planning. Betty’s vigor, enthusiasm and passion have kept her actively involved in the process, making sure her voice is heard as the steps are taken to fulfill her dream. Her love for the soil, the bees and the environment will carry on past her lifetime as an example to all and as an outward sign of her personal dedication. The world—and the bees—need more Betty Refiors!

For more information on the NRCS Programs see www.nrcs.usda.gov.

Casey Bowman, Center Valley Organics, has been working on the Phelps Farm bee project.

Climate Change — from page 15

The USDA has outlined the following “Building Blocks for Climate Action.”

Soil Health: Improve soil resiliency and increase productivity by promoting conservation tillage and no-till systems, planting cover crops, planting perennial forages, managing organic inputs and compost application, and alleviating compaction. For example, the effort aims to increase the use of no-till systems to cover more than 100 million acres by 2025.

Nitrogen Stewardship: Focus on the right timing, type, placement and quantity of nutrients to reduce nitrous oxide emissions and provide cost savings through efficient application.

Livestock Partnerships: Encourage broader deployment of anaerobic digesters, lagoon covers, composting, and solids separators to reduce methane emissions from cattle, dairy, and swine operations, including the installation of 500 new digesters over the next 10 years.

Conservation of Sensitive Lands: Use the Conservation Reserve Program (CRP) and the Agricultural Conservation Easement Program (ACEP) to reduce GHG emissions through riparian buffers, tree planting, and the conservation of wetlands and organic soils. For example, the effort aims to enroll 400,000 acres of lands with high greenhouse gas benefits into the Conservation Reserve Program.

Grazing and Pasture Lands: Support rotational grazing management on an additional 4 million acres, avoiding soil carbon loss through improved management of forage, soils and grazing livestock.

Private Forest Growth and Retention: Through the Forest Legacy Program and the Community Forest and Open Space Conservation Program, protect almost 1 million additional acres of working landscapes. Employ the Forest Stewardship Program to cover an average of 2.1 million acres annually (new or revised plans), in addition to the 26 million acres covered by active plans.

Energy Generation and Efficiency: Promote renewable energy technologies and improve energy efficiency. Through the Energy Efficiency and Conservation Loan Program, work with utilities to improve the efficiency of equipment and appliances. Using the Rural Energy for America Program, develop additional renewable energy opportunities. Support the National On-Farm Energy Initiative to improve farm energy efficiency through cost-sharing and energy audits.

Kelli Boylen is a freelance writer with a farming background. She lives with her family on a homestead in Iowa.
New Staff at MOSES
MOSES has hired Jennifer Nelson (left) as an Organic Specialist, and Lauren Langworthy as Office and Events Manager.

Nelson and her husband, Michael Leck, grow organic flowers on Humble Pie Farm, which has been part of the incubator program at Gardens of Eagan in Minnesota. They have nearly completed organic certification. They plan to relocate their farm near Spring Valley, Wis. this fall. Nelson is on the board of the Riverwalk Market Fair in Northfield, and was the market manager at Rochester Downtown Farmers’ Market. She has a teaching degree in elementary education and middle school communication arts. She is currently participating in the MOSES Farmer-to-Farmer Mentoring Program under the mentorship of Martha Smart of Conrath, Wis. Langworthy also participated in the MOSES Farmer-to-Farmer Mentoring Program. She and her husband, Caleb, own and operate Blue Ox Organics, a certified organic market farm near Wheeler, Wis. They raise pastured lamb, and grow hay, small grains and vegetables, selling wholesale and direct to consumers mostly at Linden Hills Farmers’ Market in Edina, Minn.; they plan to start a winter CSA later this year. Langworthy’s background includes office administration. She’s also an artist, selling felted animal sculptures and illustrations at local shops, online, and at their market stall.

Organic Checkoff Deadline
The USDA has extended the deadline to July 20, 2015 to submit alternative proposals or partial proposals for an organic research and promotion check-off program. In May, the Organic Trade Association (OTA) submitted its proposal called GRO Organic (Generic Research and Promotion Order for Organic). The USDA isn’t taking comments on the submitted proposal at this time. A comment period will open when the USDA Agricultural Marketing Service publishes a proposed order. See the proposal at geoorganic.net.


To learn more about both sides of the organic check-off, see the MOSES Take Action page: mosesorganic.org/policywork/take-action.

MOSES Mentoring Program
Want an experienced farmer to guide your fledgling farm? Want to share your experience with a beginning farmer and encourage sustainable, organic production? Sign up now to participate in the MOSES Farmer-to-Farmer Mentoring Program. The 2016 program runs from December 2015 to February 2017—a bit more than one year. It includes admission to both the 2016 and 2017 MOSES Organic Farming Conference. Applications close Nov 5, 2015. Find more information on the applications online on the MOSES website (mosesorganic.org) under the Projects tab.

Organic Profitability
Researchers at Washington State University analyzed the financial performance of organic and non-organic agriculture and found that, in spite of lower yields, organic agriculture was significantly more profitable (as much as 35% greater, in some cases) for farmers. Moreover, with an emphasis on organic practices, organic agriculture can contribute a larger share in sustainably feeding the world, the researchers said. Their findings were reported in the recent Proceedings of the National Academy of Sciences, available at bit.ly/101Nuxf.

New Fact Sheet
MOSES has a new fact sheet, “How to Write a Conservation-Focused Land Rental Agreement,” that makes the case for landowners to find good land stewards to rent their land. The fact sheet includes tips for finding a farmer who uses organic conservation practices as well as points to include in a lease. Farmers who are looking for land to rent can use this fact sheet to help them explain to landowners the benefits of working with an organic farmer using a longer-term lease. This new fact sheet is on the MOSES website (mosesorganic.org) in “Organic Fact Sheets.”

Online GAP courses
Iowa State University Extension and Outreach now offers free online food safety training modules for farmers’ market managers and vendors. The four modules cover good agricultural practices for growers, wholesale and direct-to-consumer sales information, and goat meat report is available through the USDA Agricultural Marketing Service. The report covers wholesale and direct-to-consumer sales information plus market commentary for this expanding livestock segment. See bit.ly/GrassFedLamb.

Farmer Podcasts
Chris Blanchard, creator of the Farmer to Farmer Podcast, recently interviewed MOSES board member Nick Olson on how he and his wife, Joan, balance young children, farming, and finances. See www.farmeroffarmerpodcast.com.

Food Safety Decision Tools
The national Good Agricultural Practices (GAP) website has added farm food safety “decision trees” to help farmers identify risks and implement food-safe practices. Nine decision trees are available, including worker hygiene, soil amendments, wildlife management, and postharvest handling. Each decision tree includes samples of recordkeeping logs and standard operating procedures, as well as template farm food safety plans. See gaps.cornell.edu/tree.html.

Origin of Livestock
USDA Agricultural Marketing Service (AMS) seeks comments by July 27 on a proposed rule to clarify the requirements for the transition of dairy animals and management of breeder stock into organic production. The proposed rule requires that milk or milk products labeled, sold, or represented as organic be from dairy animals that have been organically managed since the last third of gestation, with a one-time allowance for a producer to convert conventional dairy animals to organic milk production after a one-year transitional period. The rule also clarifies management of breeder stock for any organic edible livestock product, such as fiber. See proposed rule and comment at bit.ly/LivestockOrigin.

Prescribed Grazing
Grazing Native Plants in Iowa is a new publication from the Leopold Center at Iowa State University showing how farmers and land managers are using prescribed grazing for prairie management and gaining agronomic, economic and ecological benefits. The 16-page publication includes information on how to incorporate prairies into a grazing operation, why grazing prairies can be beneficial, and what questions remain for future research and the publication at bit.ly/PrescribedGrazing.

Grass-Fed Lamb Report
A new national monthly grass fed lamb and goat meat report is available through the USDA Agricultural Marketing Service. The report covers wholesale and direct-to-consumer sales information plus market commentary for this expanding livestock segment. See bit.ly/GrassFedLamb.

LILLISTON
Effective Weed Controller, Mulcher, Aerator, Incorporator ALL IN ONE MACHINE Reduce Your Weed Pressure In Your Crops With The Lilliston Rolling Cultivator
S & D Sales
24185 45th Avenue
Cadott, WI 54727
715-289-4866
mosesorganic | 715-778-5775 | 17
Organic Research

With a $1 million gift to the University of Wisconsin-Madison, Cliff Bar and Organic Valley have created the nation's first endowed chair focused on plant breeding for organic crops. The endowment includes a $1 million matching gift from UW graduates John and Tashia Morgridge. The money will fund research to develop crop varieties adapted to organic systems. Cliff Bar is working with other organizations to fund four additional chairs at other universities.

An endowed chair supports the research work of a faculty member through the fund's interest income. UW-Madison will award the chair position to a faculty member with an established record of crop development under organic conditions. In addition to conducting research, the faculty member will also mentor students in the discipline of organic agricultural systems.

Conservation Reserve Program

The USDA will hold a general sign up from Dec. 1, 2015 through Feb. 26, 2016 for the Conservation Reserve Program (CRP). Producers who have existing CRP contracts expiring in September can enroll in the wildlife program at any time. For producers available through continuous sign up; producers and Duck Nesting Habitat initiatives also will be extend their contracts for one year. Enrollment projects range from $5,000 to over $30,000. Projects are only funded if the full goal amount is raised. Fees amount to 5% for Barmraiser and 4-5% for credit card and payment processing partners. See www.barmraiser.us.

Insect Search Tool Online

A new search engine for tree fruit diseases, insect and mite pests, and beneficials is now online at the Michigan State University website, www.ipm.msu.edu/search. Searches can be conducted by name or category.

Food Labeling

A free ebook, FDA Food Label: Requirements in a Nutshell, simplifies the complex FDA requirements for proper food labeling for nutrition facts, ingredients and other necessary information. See www.foodpackaginglabels.net/food-labeling-requirements. This book doesn't address use of the organic seal—for that information, see mosesc.org/whyorganic/organic-labeled.

Organic Commodity Pricing Resources

Organic Milk Prices

NODPA: www.nodpa.com/payprice.shtml 413-772-0444

Organic Livestock Prices

CROPP Cooperative Organic Trader farmers.coop/feed-program/organic-trader 1-888-809-9297

Buyers and Sellers of Organic Products


September Open House

Come spend the day with Fertrell!

Date: Saturday, September 12

Time: 9:00am-4:00pm

Location: The Fertrell Company

600 North Second Street

Bainbridge, PA 17502

Cost: Free — lunch is included!

RSVP: by September 4

During our open house, we’d like to invite you to come see what we’ve been up to lately! We’re opening the doors to our manufacturing plant, as well as offering walk throughs of our fields to see our current research trials on corn, cover crops, poultry, and turkeys!

We’ve also invited guest speakers Howard Vlieger (GM Office Feeding Trial Research) and Dr. Richard Ollee (USDA & Human Health) to speak!
**Hay for Sale**

ery available. Sno Pac Farms, Pete, 507-725-5281.

**bales**

For sale:

Dave Silbernagel Organic Farms 208-867-9939.

priced. Delivery available. Located in Linton, ND.

Call Dave@ 608-397-4979.

**Katahdin Sheep**

holl@gwtc.net.

August. Pot load western SD. 605-685-3376. Mark-

May to August. Weigh about 500# now, 750-800 in

Organic grass-fed feeder cattle

condition. 319-269-3904.

book $7 ,800/OBO, Mike 815-405-5377.

rotor speeds, good condition, Instruction/parts

20 foot Hatzenbichler tine weeder

MNGGREGOR@GMAIL.COM, 507-779-8091.

Weed Badger implement

Ph. 712-298-1027. Chuck Duhn, Emmetsburg, IA.

20 foot Hanzenbichler tine weeder in very good condition with extra tires. Call 608-863-2457.

Howard Rotavator M130. 150” width, 4 standard rotor speeds, good condition. Instruction/parts book 57,800/0BO, Mike 815-405-5377.

Wanted: 6 or 7 foot – 3 point rotavator in workable condition. 319-269-3904.

**LIVESTOCK**


Katahdin Sheep: meat breed, no shearing. 40+ breeding ewes, $250 each. Ewe lambs, $180 each. Call Dave@ 608-397-4979.

**FORAGES**

Organic Alfalfa and Alfalfa/grass 3x3x8 square bales. Test results available. Good quality and fairly priced. Delivery available. Located in Linton, ND.

Dave Silbernagel Organic Farms 208-867-9939.

For sale: organic hay, round bales, dry and silage bales, 1st, 2nd and 3rd crops. Also oats straw. Deliv-

ery available. Sno Pac Farms, Pete, 507-725-5281.

Hay for Sale, MOSA certified organic alfalfa stand-

ing or made into large round bales. Between Clifton and Wilton, 608-427-3354.

Organic Hay, big round or big square organic alfalfa/grass hay, semi-loads, delivery available, will cut at bud stage. Call Mark 515-338-0151.

For Sale: Organic wrapped and dry hay, big bales, can deliver, 608-574-2160.

For sale: MOSA certified Organic Baleage. Rough-

ly 200 bales at 60% moisture. Primarily alfalfa with grass. A bit stumpy, perfect for TMR. $100/ton dry hay equivalent. New Holstein, 920-844-4201.


**GRAINS**

Non-GMO oats, wheat, barley, rye feed mix (un-

treated/cleaned) suitable for all livestock, $125/ton semi loads available. 507-373-3161 or 800-352-5247.

We buy organic: corn, wheat, soybeans

semi loads available. 507-373-3161 or 800-352-5247.

**FARMS/LAND**

80+ acre farmette for sale in Central Wisconsin.

Mixture of trees and tillable acreage. Also included is remodeled farmhouse with outbuildings. Call 715-340-1966 for more information.

Fully certified organic crop land. Options open (lease, 50/50,etc.-open to arrangements). 160-200 acres of well-tended soil, in central Ohio. Older farmer needs less to manage. Certain dedicated equipment available for use. 740 852-9289.

**ORCHARDS**

Idaho: 26 acre irrigated organic orchard, Guaranteed to produce! 952-212-6579 or ed@bovinebasics.com and visit Great Harvest Organics.

BMR84 Seed Corn For grazing under $40 per 50 pounds. Go to www.pagesecond.com for seeds-


Smart Oranges offers 4 products to the Organic Farmer that are approved by the FDA and produce a superior Non-Chemical alternative to Antimicrobi-

als, Sanitizers, Disinfectants and Foliar Sprays. Takes the place of Toxic Pesticides, Herbicides, Fungicides and Preservatives. For Dairy a Non-Toxic Teat Dip that dramatically lowers Somatic Cell Count and replaces iodine. hradi@sdts.net or 414-732-7017.

Garlic! MOSA certified. 16 varieties of hard neck and 2 varieties of soft neck. $12 per pound plus

MOSA CERTIFIED ORGANIC FARM

866.834.7888 GreatHarvestOrganics.com

FOR MORE INFORMATION & FULL TERMS

TERMS

PLAT

AFFORDABLE. Check it out!

LOCATION: 1514 ½ Avenue, Dallas, Wis.

ONLINE ONLY AUCTION: Bidding ends Aug. 31, 2015 at

8 p.m. www.hagerauction.com

OPEN HOUSE: Aug. 6 from 5-7 p.m.

MOSA CERTIFIED ORGANIC FARM: Since 2004. Get your financing in order and invest in a unique property.

PARCEL 1: 112 +/- Acres Productive Ag Land. 71.27 Acres Tillable. Balance wooded (last logged in 1968). A natural spring flows in the woods.

PARCEL 2: 7.96 +/- Acres Hobby Farm (will be surveyed). Buildings include a 1991 14x70 Mobile Home with 3-bed and 1 ½ baths, A Farm House with 1 bath. A 40x80 Pole Shed, Great Views! This parcel will be AFFORDABLE. Check it out!

PLAT: Part of Sections 9 & 10, T32-R12W, Dallas Twp, Wis.

Taxes: No buyer’s fees. Parcel 1 $25,000 down; Parcel 2 $5,000 down. Balance cash at closing.

FOR MORE INFORMATION & FULL TERMS:

See www.hagerauction.com or call Barry J. Hager,

Broker & Auctioneer at 715-273-4638.
Organic Farming School
Mondays through Aug. 17 | 6 p.m. | Minneapolis, Minn.
Summer program includes lectures and hands-on work- shops related to sustainable agriculture, food justice and today’s local food movement, bringing urban farming and small rural farms together. bit.ly/1KSLiQq

Organic Field Day
July 15 | $25 | Lambertton, Minn.
Hosted at SWROC, the day will include a field tour highlighting the most recent and innovative research on organic crops being conducted at the SWROC, and a speaker’s section talking about marketing organic crops. bit.ly/1TL60H

Organic Spring Wheat Field Day
July 15 | 9 a.m.-12 p.m. | Calera, W. Fields Best Seeds event on Beaver Creek West Farm will showcase 44 acres of Orinolea, Red Rite and Wilken wheat. All spring wheat varieties Fields Best Seeds is regionally adapting to better serve Midwest farmers and their markets. Sponsored by MOSES. bit.ly/1YkGOS

A Vegetable Farm Start-Up: The First 5 Years
July 15 (3-6 p.m.) | Logan, Iowa
PFI event about beginning farming experiences on diverse vegetable and herb farm. bit.ly/PFIFielddays

Webinar: Organic Labeling
July 16 | 11 a.m. Central | $20
CCOF Foundation webinar on developing product labels that comply with organic standards provides insight on common mistakes and step-by-step process for developing labels that comply with the USDA National Organic Program standards. bit.ly/1BJSMSq

Webinar: Fruit & Vegetable Organic Reporting
July 16 | 1-2 p.m. Central
AMS introduces the Fruit & Vegetable Market News: how it works; the scope of organic reporting capabilities; and how to put organic reports to work for you. bit.ly/1Us5g

On-Farm Safety for Agritourism and U-Pick
July 19 | 2-5 p.m. | Donnellon, Iowa
Hosted by PFI, learn about Harvestville Farm’s agritourism operation. Discussion will encompass the problem areas and best practices for keeping guests – and your farm – safe. bit.ly/PFIFielddays

MOSES Cover Crops Field Day
July 21 | 10 a.m.-2 p.m. | Free | Gay’s Mills, Wis.
Join Harriet Behar, MOSES Senior Organic Specialist and her husband, Aaron Brin, to tour their 216-acre certified organic farm. Field day topics will include: standard and unusual cover crops, living mulches and rolled rye mulch with organic vegetable production, soil health, and finding grants to fund solar energy projects. mooses.org/events/organic-field-days/cover-crops/

Organic Field School
July 22 | $10 | Lambertton, Minn.
This SWROC event consists of hands-on activity showing/teaching how to deal with weeds in organic corn and soybeans. The implements being demonstrated include: flame weeder, tillseton cultivator, tinny weeder, and a couple others. bit.ly/1SwVUE

MOSA Organic Farm Field Day
July 21 | 10 a.m.-3 p.m. | Free | Coon Valley, Wis.
Join MOSA for an in-depth look at St. Brigids’ Meadows LLC operation, including intensive grazing, an on-farm store, direct marketing, and meat processing. Contact Joe Pedretti, 608-637-2526 x45. at MOSA to make your reservation.

Establishing On-Farm Pollinator Habitat
July 25 | 2-5 p.m. | Ames, Iowa
PFI event on incorporating pollinator habitat into annual and perennial food production. Tour and discuss these habitats at Mustard Seed Farm. bit.ly/PFIFielddays

Humus Advantage Composting Workshop
July 28-30 | $995 | Tampa, FL
Midwest BioSystems provides hands-on training at a compost production site about making humus compost, the highest quality compost on the market. bit.ly/1Lzd7H

In Her Boots: Diversification 101
July 31 | 10 a.m.-3 p.m. | Brownstown, Wis.
Join MOSES and tour this highly diversified operation with over 80 varieties of vegetables along with raspber- ries, strawberries, currants, rhubarb, eggs and honey. Katy will take us through the growing fields, hoophou- ses and packing systems, explaining how she manages her CSA operation. bit.ly/RWPFieldday

Soil Sisters Farms Tour
July 31-Aug. 2 | Southern Wis.
For 3 days and with 5 unique components and involving more than twenty farms, the jam-packed Soil Sisters culinary event celebrates Wisconsin’s family farms and rural life in and around the farming communities of Monroe and Brodhead. www.soilsisters.org

Whole-Home Revenue Protection Talk and Field Day
Aug. 1 | 10 a.m.-12 p.m. | Elkhart, Iowa
NATC explains the Whole-Home Revenue Protection crop insurance program, which offers a higher subsidy than previous crop insurance products for specialty crops, organic, and diversified crop and livestock producers. Includes tour of Tony Thompson’s farm. natc.org/events

Organic Production Field Day
Aug. 1 | 1 p.m. | Bradford, Ill.
Hosted at the University of Minnesota Bradford Research Center, topics will include: weed & insect management, compost and compost tea, soil fertility, companion planting and rotation, marketing, and more. bit.ly/1LzcYe

Webinar: Opportunities for Conservation in Organic Livestock Systems
Aug. 4 | 2 p.m. Central
Oregon Tilth and NRCS will discuss opportunities for conservation in organic livestock systems from both the NRCS and producer perspectives. bit.ly/1IqCqTF

MOSA Organic Field Days
This month MOSA will bring you two events.

Mother Earth News Fair
Aug. 8-9 | West Bend, Wis.
A sustainable lifestyle event featuring practical, hands- on demos and workshops, is coming to Wisconsin for the first time. MOSA will be there with free resources and presentations. motherearthnewsfair.com/wisconsin

Organic Dairy Day
Aug. 11 | 10 a.m.-3 p.m. | Monro, Minn.
University of MN field day featuring a seminar on soil fertility in dairy pastures and interpreting soil analysis. Field tour and a pasture walk with grazing and species selection. bit.ly/1Ycifyun

On-Farm GAPs Workshop
Aug. 11 | Lake City, Minn.
Aug. 27 | Hutchinson, Minn.
Aug. 31 | Duluth, Minn.
Hosted by UMN On-Farm GAPs Education Program, learn how GAPs can help minimize food safety risks with fresh produce. Workshops are intended for fruit and vegetable farmers. safety.cfas.umn.edu

Wisconsin Cover Crops Conference
Aug. 14 | Eau Claire, Wis.
The theme is “Cover Crops and Agricultural Resiliency” and will feature a mix of general sessions and bus tours highlighting successful cover crop practitioners in south- east Wis. in a variety of cropping systems. bit.ly/1CqMfLP

Pizza Farm Field Day
Aug. 15 | 10 a.m.-2 p.m. | SSI | Wylie, Minn.
Aug. 20 | 10 a.m.-2 p.m. | SSI | Athens, Wis.
RTG hosts a behind-the-scenes tour of successful pizza farm operations, including the commercial kitchen set- up, wood fired oven and pizza preparation process. Host farmers will share their start-up experience, challenges and advice. bit.ly/1EOOon

Field Day at Otter Creek
Aug. 18 | 10 a.m.-3:30 p.m. | Free | Avoca, Wis.
Midwestern BioEg event with on-farm demonstrations including corn plots, soil health demonstrations, ag technology review, cover crops, and dairy management. bit.ly/1BA2Qna

Farm Starts – Beginning Farmers Explore Production, Business and Marketing
Aug. 19 | 9 a.m.-3:30 p.m. | Free | Bloomfield, Iowa
Funded by USDA – NIFA, this program is designed to help beginning farmers learn more about organic dairy and or- ganic grain production. Open to conventional and organic producers, workshops cover grain marketing, budgeting, fertility and weed control, and more. bit.ly/1KkULi

Webinar: Environmental Benefits of Organic Agriculture
Aug. 27 | 2 p.m. Central
NRCS will present scientific research examining the benefits of organic farming practices to soil. Soil building practices such as crop rotations, cover crops, and organic fertilizers are central to organic practices. bit.ly/1deIO2G