Silvopasture works with landscape, climate to meet farming goals

By Keefe Keeley

Although a subject of contemporary agricultural science, silvopasture has timeless roots. The word comes from the Latin silva for forest, or the Roman deity Silvanus, known for protecting woodlands, fields, and flocks of livestock. Aptly enough, silvopasture integrates these very elements of the farm.

In more recent history, USDA scientist J. Russell Smith researched the value of trees in agricultural systems. The first half of his classic volume *Tree Crops* is devoted to the use of trees in livestock production. Silvopasture—the integration of livestock, pasture, and tree crops—offers a modern method to achieve Smith’s vision of trees providing for human needs while sustaining the land. The USDA considers silvopasture one of five practices from other farming methods:

- *Intentional* combinations of trees, livestock, and forage for their mutual benefit;
- *Intensive* management of land, fertility, grazing, water, and other farm features;

Not to be confused with the tree-like Ents of Tolkien’s Middle Earth, these four “Ints” distinguish silvopasture and other agroforestry practices from other farming methods:

Silvopasture is one of the many applications of agroforestry, which integrates trees, crops, livestock, and forage components; it function in a single management unit, including both farm and forest production as well as amenity values such as wildlife habitat, water quality, and soil conservation. Although still relatively uncommon in the Midwest, silvopasture is big business in other parts of the world. *Dehesa* silvopasture in Spain and Portugal covers about 5 million acres (one-seventh the area of Wisconsin). This cultural landscape features oak for cork, acorns for high-value Iberian ham, and fodder for other livestock to graze among the trees. In Finland, Norway, and Sweden, commercially-harvested reindeer graze 100 million acres of managed birch and pine forests—an area nearly the size of California. Silvopastures also are common in the pine plantations of the southeastern U.S.

Business is booming for St. Paul-based aquaponics venture

By Jennifer Nelson

Where once beer flowed off an assembly line, tilapia and leafy greens grow. Aquaponics facility, Urban Organics (UO) now grows thousands of pounds of fish and certified organic produce in the former Hamm’s brewery near downtown St. Paul. UO opened in 2014 and already has a second site in the works at the former Schmidt brewery on West 7th Street, also in St. Paul, Minn.

Dave Haider, UO’s co-founder and manager, took time out of his busy schedule overseeing operations and construction of the new facility to share the business’s founding story. Haider ran a construction business for years, and came home one evening after a long, hot day and told his wife, Kristin Koontz Haider, he wanted to do different work. Watching TV that evening, she saw the charismatic Will Allen of Growing Power talk about the benefits and ease of aquaponics. Koontz Haider encouraged her husband to look into it. Haider did his research, and soon had two friends, Chris Ames, a realtor, and Fred Haberman, a marketer, interested in the project. With these thoughtful, creative minds involved, it wasn’t long before the quartet—Koontz Haider jumped in to help—was in the aquaponics business.

Haider oversees operations while managing the production at the Hamm’s site. His day often begins with maintenance on the recirculating aquaculture system, including feeding and taking care of the fish. Currently they are growing tilapia with a 12-month growth cycle. On the other side of the aquaponics system is the vegetable production, including seedling, transplanting, and harvest. Urban Organics sells leafy greens of kale and chard, and herbs including basil and cilantro directly into seedling trays, then transplant into main grow-out area. The vegetables grow in inert neutral growth substrate under 180 fluorescent grow lights for 14 to 16 hours per day. The fish wastewater cycles through the agri-foam, feeding nutrients to the veggies. The vegetable-cleaned fresh water filters back into the fish tanks, and so the cycle continues.

Lunds and Byerly’s are loyal buyers of UO fish and vegetables, along with many local restaurants and retailors. Kristin Koontz Haider facilitated the organic certification process through the Minnesota Crop Improvement Association (MCIA) in 2014. Dave

Greens irrigated by water from the fish tanks in the foreground grow inside the Urban Organics aquaponics facility in St. Paul, Minn.

Photo by Urban Organics
From the Executive Director

Twenty years ago MOSES was just a glimmer of an idea. Today, it’s a thriving organization with 10 hard-working staff members and many program areas, including the flagship MOSES Organic Farming Conference. I have been privileged to be a part of growing MOSES into a nationally respected organization serving farmers and advocating for organic and sustainable farming.

Today, I’m announcing that I’ll be leaving MOSES in the spring of 2016. I was the first MOSES employee all those years ago, and it’s time to pass the reins to someone new. This is a great time for MOSES: our core programs are thriving; we have two new Organic Specialists in the MOSES office; we are strong financially; and, we have many solid programs in place and new partner projects underway.

It gives me such hope to see the commitment and dedication to organic farming of so many people from diverse backgrounds. When I started organic farming more than 30 years ago it was hard even to be taken seriously. Now organic has become mainstream! There are so many terms used now to talk about healthy food. Whether you’re growing organic, local, sustainable, natural, biological, or grass-fed, you’re helping change the way America farms.

One farm at a time, we are creating a better world. I feel truly blessed to be part of the good food revolution. I look forward to many more years of shaping our agricultural future.

~ Faye Jones, MOSES Executive Director

From the Board President

The organic food sector has seen tremendous growth in the past 25 to 30 years. What some may not know is that the pioneers in this movement were working the fields, walking the halls of Congress, and developing strong standards many years before the federal Organic Foods Production Act of 1990.

Faye Jones was one of these pioneers. Her early leadership and resulting contributions have been instrumental in making MOSES what it is today: a leading national resource for farmers who want to transition to or improve their organic and sustainable practices. Her creativity, energies and vision helped shape the annual MOSES Organic Farming Conference into an event now serving over 3,400 attendees from all across the U.S. and overseas.

As a long-time organic farmer and teacher, I will be forever grateful for the programs, materials and personal connections MOSES has made available to me over the years. As president of the MOSES Board of Directors, I speak on behalf of current and past board members in thanking Faye for the strong organization we have today. It is fiscally sound, programmatically robust, and very well staffed.

As our first, and, to date, only executive director, Faye has plowed an impressive path. It is hard to imagine MOSES without her. We honor her transition and wish her well in her next chapter. We are confident our next executive director will find MOSES well positioned for the future.

~ Carmen Fernholz, MOSES Board President

Change is coming to MOSES

Posting for MOSES Executive Director: mosesorganic.org/farming/job-postings

Buying and Selling Organic Grains

F.W. Cobs Company Inc. - The trusted name in the Organic Feed Industry.

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

888.531.4888
www.fwcobs.com
Spread word about benefits of organic to counter negative media stories

By Harriet Behar

Each year, organic products make up a higher percentage of the food and fiber market in the United States and around the world. With success comes negative media attention, questioning the value and integrity of organic. My sense is that this negativity is coming from those who feel organic is taking away their market share, and others who feel they need to point out that organic is not the “good food” story that most people believe.

But, the good news is we have a secret weapon to combat negative media stories: the army of organic ambassadors, which includes you! As someone who has visited more than a thousand organic farms and has seen the diversity of organic agriculture, I know that many of you farmers making a living from organic farming can use one of their meetings to open up their eyes to opportunities they may not know exist. A small seed planted in the minds of our youth can bring us all a brighter future, resulting in more organic farmers, or at least those who have a positive view of organics and use some organic practices on their farms.

Many of us are involved in our local communities in one way or another. Our children, nephews, nieces, grandchildren are in Scouts, 4-H or FFA. Inviting these groups to visit your farm, or offering to talk about the basics of organic farming at one of their meetings can go a long way to opening up their eyes to opportunities they may not know exist. A small seed planted in the minds of our youth can bring us all a brighter future, resulting in more organic farmers, or at least those who have a positive view of organics and use some organic practices on their farms. Your church, Lions or Kiwanis clubs, hospital auxiliary, local environmental organizations, rod and gun clubs, and more could all be small scale venues where you can build understanding and dispel myths about organic. Think about the common theme of each of these groups focus upon and tailor your discussion with them around your farm, generally saving most of the time with the group for their questions.

Do organic farmers spray their fields? Maybe, but what matters is what’s in the sprayer. There is a rigorous review of all synthetic materials allowed in organic production, making sure they are the least toxic products. Organic farmers must also try various mechanical or cultural methods and must show they were unsuccessful before using any synthetic materials. The chemicals are not mandated in non-organic agriculture.

The requirement that organic farmers have a soil-building rotation, that we continually improve organic matter and increase soil biological life through plant- and animal-based inputs goes a long way to mitigating the negative effects our tillage causes. Yes, organic farmers use manure to fertilize crops, but we are held to a strict standard of how soon we can harvest after that application to prevent pathogens from contaminating our food.

As someone who has visited more than a thousand organic farms, I can say that each one has an important and positive story to tell. Your discussion of what you actually do on your farm is an important and positive story to tell. Your discussion of what you actually do on your farm is a secret weapon to counter negative media stories. The majority of organic farms have become industrial or “factory-style” operations, or that they are too small to be sustainable (funny how neither of these statements are true, and contradict each other). Some articles may point out that organic farmers spray and use toxic pesticides just like non-organic farmers, and that our tillage causes severe environmental degradation. These statements have only a small germ of truth and leave out a lot of very important details. Are there large-scale organic farms? Yes. But are they exactly like the large, non-organic CAFOs we see across the countryside? No. Do organic farmers spray their fields? Maybe, but what matters is what’s in the sprayer. There is a rigorous review of all synthetic materials allowed in organic production, making sure they are the least toxic products. Organic farmers must also try various mechanical or cultural methods and must show they were unsuccessful before using any synthetic materials. These chemicals are not mandated in non-organic agriculture.

The requirement that organic farmers have a soil-building rotation, that we continually improve organic matter and increase soil biological life through plant- and animal-based inputs goes a long way to mitigating the negative effects our tillage causes. Yes, organic farmers use manure to fertilize crops, but we are held to a strict standard of how soon we can harvest after that application to prevent pathogens from contaminating our food.

As someone who has visited more than a thousand organic farms, I can say that each one has an important and positive story to tell. Your discussion of what you actually do on your farm is the enduring message needed to overcome the negative media stories that are becoming all too prevalent. Try to reach out to at least one organization this winter—you may find you really enjoy being an organic ambassador.

Harriet Behar, MOSES Senior Organic Specialist, answers farmers’ questions about certification and organic practices. Email her at harriet@mosesorganic.org.
“What type of feed supplements can I give to my organic livestock?”

Answer by Harriet Behar

All agricultural feed, such as corn, beans, small grains or forages, must be certified organic in order to be fed to organic livestock. Organic crops grown by small-scale producers who are exempt order to be fed to organic livestock. Organic crops—grains or forages, must be certified organic in specific amounts. Fish or crab meal is not allowed in organic livestock, and only for poultry DL methionine is the only synthetic amino acid considered agricultural at this time, but some might be certified organic in used in livestock feed. Organic regulations have some allowances for synthetic materials when a product is used to promote health, such as a homeopathic remedy. You give to your livestock on a regular basis, or seasonally as part of their feed, are considered feed additives or supplements and not healthcare products. For example, if you feed eggs to your calves to help them avoid diarrhea for a week, the eggs are a healthcare product and do not need to be organic. But, if you feed eggs regularly until the calves are a certain age, the eggs would be considered a feed and would need to be certified organic. Yeast and bacteria cultures do not need to be certified organic, even though some may be available in an organic form. However, you must have documentation that they are not from a genetically modified source. Fish and crab meal, usually seen as a “natural” form of the amino acid methionine, may be allowed by your certifier as a feed additive. Fish and crab meal that are not organic, would not be allowed as a significant ingredient in organic livestock feed. DL-methionine is the only synthetic amino acid allowed in organic livestock, and only for poultry in specific amounts. Fish or crab meal is not considered agricultural at this time, but some might contain a prohibited preservative: ethoxyquin. Make sure you and your certifier have complete information on any ocean-sourced product to determine if it is acceptable. The organic regulations also clearly prohibit some ingredients and uses. For example, you cannot feed supplements or additives above the amount needed to supply the nutritional needs of the animal. Plastic pellets, urea or recycled manure cannot be fed to organic livestock. Drugs, hormones, antibiotics or ionophores (ion carriers) cannot be fed to organic livestock. No poultry or mammalian slaughter byproducts can be fed to organic mammals or poultry. This includes blood meal, bone charcoal, bone meal, or gelatin. Any minerals that have been proteinated or derived from slaughter byproducts or GMOs are not allowed. Some of this information will be in the ingredients statement and some will not. Since the label might not provide all the information you need to judge a product’s acceptability for organic production, you should work with your organic certification agency to verify acceptability of feed supplements for your organic livestock or those you’re transitioning to organic. If you are working with an animal nutritionist who is willing to help you verify products are allowed in organic production, you can recommend finding acceptable sources of vitamins and minerals by checking those sources: the Food and Drug Administration (FDA) Code of Federal Regulationss Title 21, in the 500a or the current edition of the American Association of Feed Control Officials (AAFCO) Official Publication. If a nutrient is listed in either of those publications and meets the parameters outlined previously, it would be acceptable. Minor ingredients used in vitamins, such as any type of carriers or diluents that are part of the formulation, are allowed. There is a fee to view the AAFCO Official Publication that is based on how often you want access. See www.aafo.org/Publications. The Code of Federal Regulations is searchable at www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfr/cfsearch.cfm.

“Can I get more for my land if I rent for organic production versus conventional corn production?”

Answer by Jennifer Nelson

Organic farming is more than a season of putting seeds in the ground and harvesting the plants. It is a farming system that integrates cultural, biological, and mechanical practices to foster cycling of resources, promote ecological balance, and conserve biodiversity. As such, renting land to an organic farmer has advantages that come from improvements to your land. It requires more than just a lease. It’s a conversation between a landlord and farmer, and an agreement based on a few shared understandings. Below are a few things to think about while coming to an agreement.

The price of renting organic land on your farmland, depends first on the quality of the land. Is it rich bottom land, or rocky or sandy terrain? Whether or not it is managed using organic production methods, land has inherent qualities that make it especially valuable as such. This year, even with commodity prices dropping, land prices have remained relatively stable. However, there are other variables that factor into acreage cost. For example, if your land has been fallow for years, it’s likely the organic farmer would need to add soil nutrients and tillage to get the soil ready for planting crops. Organic pastures can be a good option for previously fallow land, but only with good diverse forage and food water in place to give the land value as pasture. Additionally, it’s very important to test the soil and have it evaluated by a professional consultant so you both know what it holds to begin with. Organic farmers will want to rent the land for a longer term because they will need to plant a five- to seven-year rotation to build up the soil and grow a cash crop. The farmer and landowner should discuss if the price will fluctuate between when they are growing higher value crops like corn and beans and years they are soil-building by growing small grains and hay. The rental fee could be an average of these numbers and have the same fee each year, or the lease could reflect the crop rotation plan and be less during the lower crop value years. Ultimately, the price you’ll receive comes down to a shared agreement between you and
**Sample Market Assessment: Carrots**

Let's say that you currently sell bunched carrots and other vegetables at a Saturday farmers' market in Carrottown from 7 to noon, and at a Wednesday market in Beav ville from 2-6 p.m., but want to look at selling bulk carrots to a nursing home in Cabbageburg. You go to 20 weekly markets at each location, and could deliver to the nursing home once a month for 4 months.

You've been going to the farmers' markets for two years, and estimate that carrots are about 15 percent of your total sales. This summer you sold 400 bunches of carrots at Carrottown, and 200 bunches at Beavville, for $2.50 per bunch. Each bunch has a pound of carrots. You talked to the cook at the nursing home, and they'd like to buy 600 pounds of carrots this winter and are willing to pay you $0.80 per pound. Unfortunately, for now that's all they'll buy from you.

Since you want to compare selling carrots bunched with greens and boxed wholesale, which will be harvested and packed differently, you will consider the common costs of production through the time of harvest. At harvest, different labor is needed to process carrots for bunching vs. bulk pack. But, since you don't have a mechanical harvester, the difference starts in the packing shed because all carrots will be dug by hand.

The Carrottown market is 30 miles from the farm. You leave for the Saturday market at 5:30 a.m. and come home at 2 p.m. It is busy, though, so two of you need to be there. Beavville is 45 miles away, but the Wednesday market does not start until 2 p.m., giving you time to harvest in the morning and leave the farm at noon. One person can do that market, and is home by 8 p.m.

The Cabbageburg nursing home is 30 minutes in the other direction. Each sales call will take 1.5 hours per person.

Looking at the results of the analysis below, we can see that if we want to continue selling bunch carrots at Beavville, we must raise our price.

We actually lost $26 selling carrots at $2.50 per bunch this year. While it is a lot less work to sell at the nursing home, our net profit per pound is lower due to the much lower selling price. If we could sell the nursing home more items or more carrots each time we go, we could split the delivery costs among more items and this would be more profitable. If we could convince the chef that our carrots were really worth $0.90 per pound, we'd make $0.14 per pound—a good looking $84 profit above labor for the four deliveries. Obviously Carrottown is the best market here, but it takes us 9 hours to harvest and 340 hours to do the actual selling. That is a lot of time. We have to be sure to have a lot of labor available to make this market work.

There are a few things to note about this exercise. Be sure to pay yourself (and your friends or relatives) for the labor you put in, including management and time at the market. A lot of farmers say that they’ll “pay themselves from the profit.” But, it is better to figure your wage into the selling price, then the net profit (after your time is paid) can be reinvested in the operation or saved. Of course, the mighty dollar isn’t the only decision factor in selling a particular product in a specific market. You must take into account your labor force, your interests, your time availability and what the competition is doing in order to decide if a particular product or market is right for you. While wholesale may mean lower per piece profit, the sales take a lot less time out of your day (or week, or month) and orders are generated and done in advance. You can plan your growing and harvesting, and will not be bringing any valuable product home, as is common at a farmers’ market. Wholesale accounts also have the potential to grow with very little additional cost. If the nursing home loves your carrots, there’s a good chance you can talk them into buying potatoes or onions next year, with very low additional marketing costs.

In this example we just looked at one product: carrots. You can use this model to look at your market at any scale—from everything you sell to one or a few items. Just fill in the numbers appropriate to the sector of your production that you want to assess. A market cost assessment such as this can be very useful in helping you gauge the potential success of a future market or the value of a market you are currently using.

Jody Padgham is the financial director for MOSES and editor of the book Fearless Farm Finances.
Silvopasture — from page 1

Silvopastures mimic or modify the workings of natural ecosystems for farm purposes. Just as management-intensive rotational, ultra-high stock density, and patch-burn grazing practices mimic the way wild herds and grassland ecosystems work, silvopasture mimics a savanna ecosystem. Often found in transition zones between forest and grassland biomes, savannas include trees, shrubs, and a diversity of shade-tolerant grasses and forbs. By some estimates, oak savanna once covered 50 million acres of the Midwest. The Driftless Area, for example, was recently determined to have about 70 percent oak savanna prior to European settlement. Silvopasture takes its cues from an ecosystem that works with our landscape and climate, adapting form and function to accomplish agricultural goals.

Silvopasture in Practice

Like any farming practice, planning is key to successful silvopasture. What are your goals? How will silvopastures fit into your existing systems for watering, fencing, and providing shade and shelter? Will the tree, forage, and livestock combinations you have in mind be a good fit? What are your time, budgetary, and knowledge constraints? Addressing these questions will help determine if silvopasture is a good fit for your farm, and what steps you need to take to establish and manage it.

Put most simply, silvopasture can be established in two ways: planting pasture in trees or planting trees in pasture. Between 30 and 70 percent cover is often the goal for silvopastures. A tree canopy denser than 70 percent will stifle forage growth, and one overtopped and suppressed by surrounding trees you risk having the fast-growing species overtop and suppress their neighbors. This is important for fertility.

In existing woodland, forestry techniques can be used to achieve desired tree canopy cover. Use crop tree management: identify the high-quality trees and cut low-quality neighboring trees that compete for sunlight, water, and nutrients. Young trees that reach the top of the canopy are generally selected as crop trees. But, in silvopasture applications, timber value and potential for growth may not be the only measures of quality. Filtered shade, forage value of fruit and foliage, shelter value of evergreens, or strategic location for afternoon shade, aesthetics, and wildlife habitat also should be considered.

Once you’ve thinned to your desired canopy cover, you may decide to provide forages under the trees. Some farmers like to do this to ensure forage production, while others say it’s not worth the time and expense, especially on the edge of open pasture where pastures grasses and forbs can come in on their own. I recently started a research project where after thinning the tree canopy, we’re comparing a domestic seed mix, a native savanna species seed mix, and a control without any seedlings. We are measuring plant diversity, establishment success, forage quantity, quality, and utilization, so stay tuned for the results.

When planting trees into open pasture, your goals and circumstances will dictate what is best for your farm. You should consider where to plant the trees, what species and age of trees to plant, how to prepare the site for tree planting, how to manage competing vegetation once trees are planted, and how to protect young trees from livestock and wildlife pests. Research in the Midwest to help you make these decisions is scant, but here’s what I recommend.

When deciding where to plant, aim for uniform shade in each paddock to keep livestock from foraging. Planting trees all along the western edge of paddocks will provide shade in the afternoon when animals need it most. The filtered shade from trees like locust, walnut, and poplar will allow more grass growth than trees like maple with dense canopies. A diversity of trees can provide multiple functions, a succession of harvests, and insurance against selective pests. On the other hand, when you alternate different tree types you risk having the fast-growing species overtop and suppress their neighbors.

In general, older trees cost more and are more work to plant, but take less maintenance and provide their benefits sooner. Younger trees are more affordable, and you can put hundreds in the ground in a day with a tree planter—the most I have heard of is 12,000 trees planted in a day! Preparation of the site should address weed, soil, and drainage issues. Tillage, repeated mowing, staked seedbeds, or temporary row covers can all be used for weed control prep. Ideal soil conditions vary by tree species. For example, many trees and shrubs are susceptible to iron chlorosis in alkaline soils, so liming may not be advisable. A single-shank subsoiler or keyline plow can work wonders for root penetration and water infiltration, but if you plant into the trench, back fill soil thoroughly around roots, or plant your trees just up- or downhill of the trench. Roots in large air gaps cannot absorb water and nutrients, and the trench can make a nice home for rodents that eat tree roots and bark.

Once trees are planted, their growth and survival will be enhanced by managing competing vegetation. Although there is a lot of research that shows that silvopasture reduces competition from weeds, animal damage can make or break a young planting. Protection systems can be as simple as a low fence or as complex as an entire field of protection trees. Protective plantings are expensive, so focus on protecting the most valuable trees. Your local forester can help design a system that works for your farm, and what type of livestock you have, and what steps you need to take to establish and manage it.

Plant high yielding Great Harvest Organics non-GMO seed corn and soybeans! We offer access to a broad source of genetics. Contact us to learn more. FOR A GREAT ORGANIC HARVEST, PLANT GREAT HARVEST ORGANICS!

866.834.7888
GreatHarvestOrganics.com
Book blends latest science on climate change with farmers’ experience

By Audrey Arner

Here on the western Minnesota prairie at Moonstone, our perennial polyculture farm, the season is winding down. We’re moving cattle through the paddocks for the last rounds, have finished the fruit and nut harvest, and are beginning to batten down the hatches for whatever the winter brings.

Our landscape, still photosynthesizing with startling tenacity, is a biological island amid the chemical and tillage-intensive agricultural lands that surround us. Somewhere in the mid-1990s we quit growing annual cash crops and, applying the lessons of the Great Prairies, chose to perennialize and sequester carbon in soils, but also to withstand the onslaughts of extreme weather episodes we will continue to experience.

I appreciate her explanation of the earliest forms of agriculture: pastoralism, horticulture and sedentary agriculture and how each adapted to ecological resource limits. We are reminded that more food energy was produced than energy invested in production, and each resulted in an energy profit. I loved Lengnick’s succinct history of climate change, which was responsible for the last great ice melt 10,000 to 12,000 years ago. This led to changes in the ranges of plants and animals, changing the mix of available food species and causing plants and animals that could not adjust to the new climate conditions to disappear. Sedentary agriculture then reduced the profit in half for the labor calorie invested and made possible the human population explosion we continue to experience.

Drawing deeply from recent research and historical records, Lengnick explores five categories of agricultural endeavor: vegetables, fruits and nuts, grains and livestock from the perspectives of award-winning farmers throughout all regions of the agricultural United States. Most cite more extreme weather events as being more pronounced in the last decade or so; a few maintain that the weather has always fluctuated. Her concise history of the rise of industrial agriculture and the U.S. food supply is rich in data. This serves as an important basis for laying out how we can better understand the situation at hand and what needs to be considered in making adaptations. In understanding agricultural exposure and how we might reduce it, considered in making adaptations. In understanding agriculture and how each adapted to ecological resource limits. We are reminded that more food energy was produced than energy invested in production, and each resulted in an energy profit. I loved Lengnick’s succinct history of climate change, which was responsible for the last great ice melt 10,000 to 12,000 years ago. This led to changes in the ranges of plants and animals, changing the mix of available food species and causing plants and animals that could not adjust to the new climate conditions to disappear. Sedentary agriculture then reduced the profit in half for the labor calorie invested and made possible the human population explosion we continue to experience.

Her concise history of the rise of industrial agriculture and the U.S. food supply is rich in data. This serves as an important basis for laying out how we can better understand the situation at hand and what needs to be considered in making adaptations. In understanding agricultural exposure and how we might reduce it, I especially appreciated the need to understand the sensitivities of species, production systems, natural resources, management challenges, threats to built infrastructures and production costs.

Resilience is the adaptive capacity of the way we humans manage the ecosystem. The section on ecosystem processes (energy flow, the water cycle, the nutrient cycle, and community dynamics) draws right out of holistic management. As a devotee of Allan Savory, who clarified these processes for me and thousands of other land managers, I immediately locked onto the citations and appendix checking for an attribution to Savory or Holistic Management. I was disappointed that there was none and the adaptive management strategy involving goal setting, resource assessment, planning and implementation, monitoring progress towards goals and re-planning fell under the often-used terminology of “Whole Farm Planning.” Why not give credit where credit is due since other citations were so source specific?

Some historical mention is made of indigenous agriculture in the Americas, but I did not find any suggestion of how the practical knowledge of indigenous cultures can help us all adjust and survive in the face of major climate change. Let’s also remember that there will be psychological and spiritual needs ahead.

Lengnick interviewed a wide range of large- and small-scale farmers across production specialties and geography, including some often-quoted farm stars from the Upper Midwest like Gabe Brown from North Dakota, Richard DeWilde from Wisconsin, and Ron Rossman from Iowa. Long-time MOSES Organic Farming Conference presenter Elizabeth Henderson from Peacework Organic CSA in New York is quoted thusly: “You have to be so nimble these days.”

Lengnick gets down to bedrock in her wrap-up section, “New Times, New Tools: Managing for Resilience.” Her key qualities and considerations of resilient systems—some of which are more familiar to sustainable farmers than others—are worth deeply examining as we together move through the uncertain, disturbing and unexpected effects on food production.

As the leaves fall, and the cover crops are seeded, the livestock preparations for freeze-up are in place, Resilient Agriculture will make for provocative early winter brain food. Give it a read before you begin farm planning for the next growing season so that you can nourish your decision making.

Audrey Arner and her husband, Richard Handeen, own and operate Moonstone Farm near Montevideo, Minn.

---

Laura Lengnick
June 2015
New Society Publishers
356 pages
$19.95 list price
Get it here: mosesorganic.net

Certified Organic
Potato Seed

• Seed Quality Certified by the State of Wisconsin Seed Potato Program
• Organic Certified by Midwest Organic Services Association (MOSA)
• Varieties selected for Organic Production, backed with over a decade of growing experience
• On farm pick up and regional distribution points to eliminate long distance trucking

organicpotatoseed.com

608-212-7816
Vermont Valley Community Farm LLC
4628 County Road FF Blue Mounds, WI 53517

Vermont Valley Community Farm

AGGRAND FERTILIZER 4-3-3 ORGANIC SERIES
• OMRI Listed
• Fish/koelp fertilizer formulated with soft rock phosphate and sulfate of potash
• Available in 5-gallon pails, 55-gallon drums or 275-gallon totes
• AGGRAND products are distributed by independent dealers
Silvopasture — from page 6

Pasture performance has also been the subject of silvopasture research, testing how trees within pastures affect forage quality, quantity, and availability. One potential benefit of silvopasture is a less drastic slump in forage yield during summer months. Decreased production in shaded pastures during the spring flush can be a small price to pay for paddocks that continue to grow later in the year when open pastures go dormant.

It may not just be shade that keeps the grass green under trees during heat spells and droughts. Through a process called hydraulic lift, some deep-rooted trees actually bring water up from lower soil horizons, where it is used by neighboring plants. Although no one has reported hydraulic lift occurring in silvopastures, it has been documented in potential silvopasture tree genera such as pine and oak. Moisture retained from slower snow melt can also impact seasonal forage growth in silvopastures.

Studies have also shown improvements in forage quality under partially shaded conditions. Researchers at Iowa State showed in vitro digestible dry matter was 3-5 percent greater for grasses grown under partial shade, compared to those grown in full sun. Another study in Missouri showed higher protein and lower fiber content in annual ryegrass and cereal rye grown under a pine and walnut canopy, compared to treeless pasture controls. This study also showed that, although cumulative forage production over several years was reduced by about 20 percent in the silvopasture, beef feeders grazed in the silvopasture showed no difference in gains than animals in the open pasture controls, likely because the silvopastures grew forage of better quality.

Many of these studies are from hotter parts of the country, where heat stress and summer pasture slump are more serious concerns. The climate extremes we are increasingly subject to in the Upper Midwest suggest that we might do well to take lessons from folks in warmer, drier places.

Tree Products

Growing trees with long, branchless trunks to make high-value saw logs can be a challenge in silvopastures, given the partially open canopy. In natural forests and plantations, shade from neighboring trees inhibits branching. That said, after a thinning, large dominant trees grow fewer new branches than young and outtopped trees. Some research has shown that crop trees retained when establishing silvopasture maintain their timber value, and even increase growth rate.

As previously mentioned, trees planted for timber can also be trained to straight branchless growth via interplanting with fast-growing “nurse” trees. These nurse trees can be harvested early for many purposes, from pulp to firewood to mushroom inoculum. Leguminous nurse trees can also fertilize crop trees while being coppiced or browsed for fodder. Many “weed” trees like locust, box elder, and mulberry have leaves of high forage quality, making them potential candidates for the “dinner” rows of a hedge that protects and trains inner timber rows.

Silvopastures can also integrate human food production with fodder for livestock. Orchards that pasture fowl early in the season to eat insect pests or hogs to clean up after fruit harvest exemplify this stacked enterprise strategy. It is important to be aware of food safety regulations regarding livestock use and wastes where produce is grown, while also recognizing the potential of livestock as a tool in orchard sanitation and vegetation management.

Restoring Ecosystem Function

Silvopasture, when well managed, can restore ecological features and functions to farmland. The practice mimics savanna ecosystems, where diverse plant types add habitat for declining savanna specialists like the redheaded woodpecker and the whippoorwill. Some of my ongoing research is testing silvopasture establishment as a tool for restoring native savanna structure to degraded farm woodlots. Besides biodiversity benefits, other potential gains in silvopasture ecosystem functions can be realized in nutrient cycling, soil conservation, carbon sequestration in trees and soil, improved soil hydraulic function, and water quality.

Not all trees in pastures restore ecosystem function. A few trees by a creek where dozens of cattle congregate and erode the riparian area will not restore anything. Likewise, continuous access to woods will just lead to compacted soil, sick trees, and diminished wildlife and plant diversity. Without adaptive planning and management, these are not actually even examples of silvopasture.

Turning livestock out into a single pasture for the season does not qualify as managed grazing, and by the same token simply giving livestock access to the woods or having a couple of trees in the pasture does not count as silvopasture. Mis-managed livestock have a long history of degrading prairies, savannas, forests, wetlands, and riparian areas. For example, studies have shown that decades after farmers started excluding live-stock from hillsides in the Driftless Area the improved water infiltration has increased flow rate from springheads, which has helped restore trout habitat.

Silvopasture is not a fancy word to excuse abuse of healthy natural areas. It is a method of intensive management that integrates trees to profitably raise livestock and care for the land. Visit our website www.savannainstitute.org to see examples of farms practicing silvopasture and other savanna-mimicking farming techniques. Get in touch to join in these efforts.

Keefe Keeley is the executive director of the Savanna Institute, a nonprofit that carries out case studies of savanna-based agriculture across the Midwest. He has a master’s degree in agroecology from the University of Wisconsin.
Research at Iowa State University shows how no-till works in organic system

By Kathleen Delate

No-till or reduced tillage has been proven to provide multiple environmental benefits on conventional farms, particularly in the area of soil conservation. The practice also reduces costs associated with machinery, labor and fuel. On organic farms, no-tillage systems had been constrained by the prohibition of herbicides to terminate cover crops. To overcome this barrier, the Rodale Institute began investigating using a roller/crimper to crush cover crops in lieu of herbicide termination to fit within organic rules. This roller/crimper can be purchased or manufactured using plans published online at rodaleinstitute.org/sour-work/organic-no-till/no-till-rollercrimper-plans.

In 2006, the Rodale Institute invited Iowa State University (ISU) to join a consortium with Rodale and UC-Davis, Michigan State (MSU), University of Georgia and Virginia Tech to participate in the first multi-state research on no-till systems for organic farming. As a member of the USDA-NRCS Conservation Innovation Grant for No-Till for Organic Systems (“No-Till Plus”), I conducted the first research on organic no-till systems in Iowa that year.

Our results were encouraging enough to warrant an expansion of this research in 2008 through a consortium of six institutions (ISU, Rodale, MSU, University of Wisconsin (UW), University of Minnesota, North Dakota State University (NDSU), funded by the USDA-NRI Integrated Organic Program.

In 2010, another project was funded with the University of Florida on organic no-till vegetable systems by the NIFA-Organic Transitions Program there. ISU also participated in a USDA-SARE project, Organic Corn in No-Till Systems, in partnership with NDSU (Pat Carr) and UW-Madison.

Researchers use a water wheel transplanter to put broccoli into rolled and crimped hairy vetch-rye cover crop mix. Photo by Kathleen Delate

USDA-ARS, Ames, Iowa, has documented increases in soil carbon and microbial biomass carbon and nitrogen in the organic no-till system compared to the normal, tilled organic system. The challenge remains to balance improving soil quality with maintaining optimal yields. Cambardella has found some interesting results, too, with the no-till organic systems sequestering more soil carbon than tilled plots. Nitrate leaching is also reduced in the cover crop-based systems compared to completely tilled plots.

We have found that the vegetable systems are more amenable to organic no-till compared to row crops, due to our ability to use drip irrigation during the crucial period when cover crops are decomposing and the cash crop needs additional moisture. In Florida’s sandy soils, no-till summer squash yields were equal or greater than tilled yields. We saw no significant difference between no-till and plastic mulch, which is phenomenal, when you consider how much additional savings Floridians could obtain by not using plastic mulch.

No-till or reduced tillage has been proven to provide multiple environmental benefits on conventional farms, particularly in the area of soil conservation. The practice also reduces costs associated with machinery, labor and fuel. On organic farms, no-tillage systems had been constrained by the prohibition of herbicides to terminate cover crops. To overcome this barrier, the Rodale Institute began investigating using a roller/crimper to crush cover crops in lieu of herbicide termination to fit within organic rules. This roller/crimper can be purchased or manufactured using plans published online at rodaleinstitute.org/sour-work/organic-no-till/no-till-rollercrimper-plans.

Francis Thicke, organic farmer in Fairfield, Iowa, drilled his organic no-till soybeans on 7-inch rows this year, as opposed to our 30-inch rows. He is expecting over 40 bushels per acre. However, based on Thicke’s experience, we are ready to try 7-inch rows next year.

Yields in the organic no-till vegetable systems we have studied in Iowa (broccoli, tomatoes, peppers and lettuce) have been competitive with conventional yields when sufficient biomass is produced by the cover crop, and moisture levels are kept adequate through irrigation. We’ve found that planting the cover crop at 1.5 to 2 bulacres is best. Sweet corn, however, performs best in tilled systems, which is what we found for field corn, too.

Ideal results occur when the cover crop can be crushed early in the spring (before May 15) when the rye reaches, or is past, anthesis (pollen shed). This timing has become more difficult in recent years with global climate change creating cooler, wetter springs, slowing cover crop growth.

Cindy Cambardella, Soil Scientist at USDA-ARS, Ames, Iowa, has documented increases in soil carbon and microbial biomass carbon and nitrogen in the organic no-till system compared to the normal, tilled organic system. The challenge remains to balance improving soil quality with maintaining optimal yields. Cambardella has found some interesting results, too, with the no-till organic systems sequestering more soil carbon than tilled plots. Nitrate leaching is also reduced in the cover crop-based systems compared to completely tilled plots.

We have found that the vegetable systems are more amenable to organic no-till compared to row crops, due to our ability to use drip irrigation during the crucial period when cover crops are decomposing and the cash crop needs additional moisture. In Florida’s sandy soils, no-till summer squash yields were equal or greater than tilled yields. We saw no significant difference between no-till and plastic mulch, which is phenomenal, when you consider how much additional savings Floridians could obtain by not using plastic mulch.

Organic no-till holds the most promise in warmer climates because of the potential for early cover crop planting, continuous cover crop growth over the winter months, and earlier termination dates in the spring. SANDier soils also seem to be more amenable to organic no-till, as has been demonstrated in both Florida and Pennsylvania, where even no-till corn yields were high. A mechanical issue (e.g., the ability of the roller/crimper to sink deeper into the soil and crush the cover crop that much better) may be a factor here.

ISU has a video showing the roller/crimper in action that explains how no-till works in an organic system. See www.lesgold.iastate.edu/news/ on-the-ground-organic-no-till-farming.

Kathleen Delate is a professor of organic agriculture at Iowa State University, and directs the Organic Agriculture Program there.

Soybeans emerge through no-till rye. Research showed best results when rye was rolled and crimped early in the spring when it reached anthesis. Photo by Kathleen Delate

Broccoli transplants grow well with a hairy vetch-rye mulch. Photo by Kathleen Delate

How Crumby is your soil?

Before soil testing farmers could assess the health of their soil based on its texture or crumb.

Want a nice crumb? Call us, we can help.
Pack your plaid for annual MOSES Conference
By Lauren Langworthy

The time is coming to dust off your favorite plaid and make plans for the 27th Annual MOSES Organic Farming Conference. This much-loved weekend of learning, laughing, and eating well will take place at the La Crosse Center in La Crosse, Wis. Feb. 25-27, 2016.

Whether you're a long-time organic farmer, a New Organic Steward, or curious about organic production methods, you’ll have a fun and informative experience with over 3,000 other farmers and advocates of the family farm. While you’re at the conference, you’ll have the opportunity to attend your choice of insightful workshops, relax and converse over organic meals, revel with hundreds of others at the caller-led contra dance, find some wonderful new resources for your library in the MOSES Bookstore, explore the two-floor Exhibit Hall, catch an engaging film, or participate in a Roundtable discussion.

Over the years, we've tried out a lot of new things, and have been narrowing in on what works best. The 2016 MOSES Conference will use the staggered morning schedule we introduced last year. This allows you to choose either an earlier or later workshop within each morning session. You still get to enjoy six sessions throughout the event, but you also get the benefits of less hallway congestion and more time to network, process, wander, and meet up with friends both old and new.

There will also be a few new changes to the conference layout. The first thing you’ll notice is that you'll enter through new doors this year. They’re just to the right of the doors you've always used; there will be signs to guide you. This will keep the lobby much warmer so those wonderful volunteers at Check-In won’t need their parkas.

Coat racks and free resources have new homes, so take a minute with your program map and watch for signs. The change you’re most likely to notice, though, is that we’ve reconfigured the Dining Hall to provide more seats as we all share wonderful meals.

Speaking of sharing—you’ll have some new opportunities to show off your plaid at this year’s conference, as well! Keep your eyes open for the photo booth and a great new backdrop—perfect for posing! Get a group shot with your family and friends or snap a few great farmer selfies (also known as “felfies”) and share them through your favorite social media using #MOSES2016 so others can find your pics.

We’re thrilled to announce this year’s keynote speakers: Eric Lee Mäder, the Pollinator Conservation and Ag Biodiversity Program Co-Director at the Xerces Society for Invertebrate Conservation; and, Mary Jo Forbord, a farmer and conservationist. She and her husband, Luverne, raise cattle on their farm in Starbuck, Minn. They will be co-presenting a workshop on the topic of pasture management.

For our tech-savvy attendees, make sure to download the MOSES Conference app, available Nov. 30, to stay in the loop. Besides providing all the details from the conference program, the app gives you another way to connect with other conference-goers. It has its own message feed and links to Instagram and other social sites. Through the app, you can also access shuttle service schedules, maps for the La Crosse Center and surrounding area, and contact information for members of your favorite farming community. We recommend downloading the app before the conference so you can bookmark work shops and must-see exhibitors. It will be available through our website and your registration confirmation.

The Registration Guide—that handy booklet with all the workshops—will be in your mailbox in late November. If your copy hasn’t arrived by Dec. 15, go on our website for a downloadable version or call the office to have one mailed to you.

We hope you are as excited as we are to add another year onto the long-standing tradition of fantastic conferences. Hope to see you in La Crosse this February!

Lauren Langworthy is MOSES’ Event & Education Specialist.
Intensive, full-day courses offer chance to learn more about farming topics

Organic University™ gives farmers the chance for in-depth education on a particular farming topic. Those 10 courses are taught by experienced farmers and educators. Each course includes a custom-made companion resource book.

Courses run from 9:30 a.m. to 5 p.m. Thursday, Feb. 26 at La Crosse Center in La Crosse, Wis. (just prior to the MOSES Organic Farming Conference). Registration opens Nov. 30. Since class size is limited by room capacity, popular topics can fill up quickly.

For more information about pricing and registration, see mosesorganic.org/organic-university.

Manage Your Way to Farm Success
Chris Blanchard

A successful farming operation requires not only plenty of technical know-how, but also some serious management skills. Learn how to use a systematic approach to create predictable results in all aspects of farm management—production, employees, administration, and finances. From big ideas down to practical examples, this engaging session will help you understand and control the factors that lead to a successful and profitable farm that won’t drive you and your family crazy.

Understanding and Enhancing Living Soil
Ray Archuleta and Gabe Brown

Uncover the mysteries and complexity of soil life to see how to mimic natural systems to revitalize degenerated land, minimize erosion, and encourage nutrient-dense plant growth. Numerous demonstrations will help you understand the living soil and its water-holding capacity, fertility needs, and crop/fORAGE production potential. See the financial impact of soil conservation farming, which requires fewer off-farm inputs while at the same time increases productivity even in times of extreme weather. You’ll also learn about various cover crops, crop rotations and farming systems to enhance the living soil on your farm.

Tools of the Trade: Machinery and Equipment on Vegetable Farms
Steve Pincus and Adam Cullip

To grow your farming operation, you need an evolving kit of tools, machinery and equipment to ensure reliable production, handling and delivery, as well as a family-size income. This course will help you decide which equipment will work best for your farming system. Two experienced market farmers will explain how they handle tillage, weed control, pests, transplanting, seeding, material handling, irrigation and more. They’ll show off their favorite tools, and make recommendations to help you assemble affordable tools that work with diverse crops, weather and skills. They’ll also explain how to convert a gas-powered tractor to electric, and talk about tractor maintenance, safety, and simple repairs to keep work moving.

Exploring Advanced Organic Management of Row Crops, Small Grains and Forages
Jonathan and Carolyn Olson, Jack Erisman, Joel Gruver

Expand your knowledge of organic row crop, small grain and forage production through this course with experienced and experimental practitioners. They’ll cover ways to minimize soil disturbance while staying competitive in an organic system; equipment and strategies for effective weed management plus specific problematic weeds in mature organic fields; using GPS technology for efficiency; and, dealing with the major pests while bringing in acceptable yields. The panel also will explore nutrient management through cover crops and interseeding, unique and effective crop rotations, and soil and plant testing.

Transitioning to Organic Row Crops, Grains, and Forages
Jeff Moyer

The organic marketplace continues to grow at a rapid pace and needs more farmers. This course will cover organic farming practices as well as the steps you’ll need to take to successfully implement this vibrant and profitable farming system on your own farm. Learn how to organically manage weeds, pests and diseases, and farm with minimal off-farm inputs. See how to use cover crops and green manures in a crop rotation scheme that recycles nutrients, builds soil health and disrupts pest and weed cycles. And, find out which records you’ll need to keep to achieve and maintain organic certification.

Transitioning and Beginning Organic Dairy
Dr. Brad Heins, Dr. Guy Jodarski

Strong consumer demand for organic dairy products makes this a great time to transition to organic. If you are a conventional dairy farmer, this course will give you the comprehensive, practical knowledge you need to make a successful transition to organic production. If you’ve just started in organic dairy farming, you’ll gain insights from these respected experts to help you improve your operation. Learn how to improve pastures starting with the soil. Explore organic dairy nutrition and feeding options for your whole herd, from calves to dry cows, plus how to manage herd health and treat problems organically. You’ll also learn about the records to keep to help you achieve and maintain your organic certification as well as track the success of strategies you use on your farm.

Medicinal Herb Production
Jeff and Melanie Carpenter

This course covers the process of growing high value-quantity products from seed through field management, post-harvest handling, drying, storage and marketing. Discover how to find your markets, configure the layout and design of your farm’s infrastructure, choose tools, prepare beds and fields, propagate plants, and control or prevent weeds, pests and disease. You’ll also learn about medicinal qualities of specific herbs and how to best retain those qualities, and how to produce value-added products from your herbs.

Integrating Livestock and Vegetables
Kay Jensen, Paul Ehnhardt, Harry Carr

The benefits of integrating livestock in your vegetable operation are many. Livestock assure access to a source of organic matter, control weeds, pests and diseases, disrupt crop/weed pest cycles, and improve soil structure which records you’ll need to keep to achieve and maintain organic certification.

When we are out working in the field, or loading the planter...that's where COG Pro really shines for us. It's there wherever we are, right when we need it.

John & Molly Breslin
Breslin Farms
Ottawa, IL

Now with GAP records!

Try it for FREE at www.cog-pro.com
Reap more rewards from your conference investment

By Chris Blanchard

Every winter, I look forward to making the rounds of farming conferences near and far. I get to see old friends, get new ideas, make new connections, and find inspiration for the year ahead. I’ve never been to a farming conference where I didn’t take away enough information to pay back the time and money I spent to get there. Even for the most expensive conferences, the investment pays back quickly, and the new knowledge becomes a permanent asset that provides returns year after year.

Unfortunately, it’s pretty easy to go to a conference and let the knowledge and connections slip right by. Approaching a conference like an investment can help you make the most of game-changing suggestions, enriching connections, and big opportunities, even if you have to get right into the greenhouse or field upon your return.

Preparing for a Conference

As in the rest of farming, taking a little time to prepare will dramatically increase your likelihood of getting great results from your conference investment.

Set Goals – Once you’ve decided to go to a conference, decide what questions you hope to get answered. I find that it’s easier to get concrete results when I identify specific questions, rather than just an area of interest: “How should I organize my packing shed to maximize workflow and ergonomics?” rather than, “I want to know more about packing shed organization.”

You might want to challenge yourself with other goals, as well. I will ask questions in three workshops, I will meet five other dairy farmers, and I will walk by every booth in the exhibit hall are all worthy objectives.

Plan Your Time – Take time to review the workshops as well as everything else on offer. Many conferences have a lot more going on than just workshops. It’s easy to miss these other opportunities, especially if they happen while the workshops are going on.

Organizers often post the conference program, with expanded workshop descriptions and updated schedules, in the days or weeks before an event. Figure out where you’re likely to get your questions answered, and what presenters you might want to connect with after their workshop is over. Once you get to an event, you’re probably going to be challenged to find your way around and navigate the crowds – reading a substantial program is probably not on the menu once you’re on-site.

More and more events are offering a conference app for your smart phone, which can make a nice addition to your conference planning by providing another lens to look through as you make your plans – plus, some conference apps allow you to download handouts before the conference, giving you a chance to preview workshop information in more depth. You may also be able to highlight exhibitors, workshops, and other things you want to make sure you don’t miss.

You may also want to make appointments to meet people ahead of time, especially at a big event. It’s easy to miss people if you just leave it to chance.

Prepare Your Kit – Finally, pack your business cards, a pen, and some paper. I really like to carry a clipboard with lots of fresh paper available, since the notes pages in the back of the conference program don’t always have a lot of room. You’ll probably want a tote bag or a pocket file to stuff all of the brochures from the exhibit hall—really like the expanding files that close with a flap and an elastic band. When that one key idea or one life-changing contact comes along, you don’t want to be stuck without the tools you need to make the most of it—and you don’t want to be fumbling with a pile of papers under your seat when it’s time to go to the next workshop!

At the Show

The show isn’t all about work, but a few key actions can dramatically increase the long-term value you derive from an event.

Engage the Material – Yep, it’s just like being back in school. You can increase your retention by actively engaging with each workshop you attend, rather than passively taking in information. Interpret key points for how they apply to your situation, rather than just writing them down. Rather than just writing, “Point shovel down to move more soil into the row;” add a note: “would help with weedy brocoli!”

Identify Actions – I take prolific notes, so it can be hard to identify the concrete actions I need to take, whether it’s following up an idea or reconnecting with a contact. Even where I don’t write down a lot of information, I like to write a dash (-) to the left of each action item; when I scan my notes after the conference, I can quickly identify items to put on my task list, and show that I’ve done it by turning the dash (-) into a plus (+).)

Ask Questions – Please, ask questions! Speakers dread having a disengaged audience. There are few things more unnerving than leaving the requested the 10 minutes for questions at the end of a talk and facing a silent audience. Remember the questions you wrote down in preparation? Now is the time to get them answered.

Make Connections – Don’t immerse yourself in your phone or the conference materials between sessions. Smile, be open, approach people and be approachable. Everybody’s there to make connections with a contact. Even where I don’t write

Imagine an event so powerful that people come from around the world to attend. You can be part of the experience.

For more information or to register, go online or call toll-free! 1-800-355-5313 • www.acresusa.com

PO. Box 301209, Austin, TX 78703

Ag-Objetrics • Texas Plant & Soil Lab • Organic Gem • Hillard Naturalists • Kinsey Agricultural Services

Midwestern BioAg • Agriculture Solutions Inc. • DBS Farm & Garden Supply • Raincoast Harvest

Organic Broadcaster

Upcoming Farming Conferences

2015 SOIL Conference
Nov. 19-20 | Des Moines, Iowa

Iowa Organic Conference
Nov. 22-23 | Iowa City, Iowa

Midwest CSA Conference
Dec. 3-4 | Eau Claire, Wis.

Acres U.S.A. Conference and Trade Show
Dec. 8-11 | Pittsburgh, Penn.

Conservation Tillage Conference
Dec. 15-16 | Willmar, Minn.

Illinois Specialty Crops, Agritourism, and Organic Conference
Jan. 6-8 | Springfield, Ill.

Great Plains Growers Conference
Jan. 7-9 | St. Joseph, Mo.

Minnesota Organic Conference
Jan. 8-9 | St. Cloud, Minn.

GrassWorks Grazing Conference
Jan. 14-16 | Wisconsin Dells, Wis.

2016 Organic Agriculture Research Symposium
Jan. 20 | Pacific Grove, Calif.

EcoFarm Conference
Jan. 20-23 | Pacific Grove, Calif.

NPSAS 37th Annual Winter Conference
Jan. 21-23 | Aberdeen, S.D.

Practical Farmers of Iowa Conference
Jan. 22-23 | Ames, Iowa

Wis. Fruit & Vegetable Grower Conference
Jan. 24-26 | Wisconsin Dells, Wis.

Organic Seed Growers Conference
Feb. 4-6 | Corvallis, Ore.

Sustainable Farming Association Conference
Feb. 13 | St. Joseph, Minn.

Midwest Soil Health Summit
Feb. 17-18 | Alexandria, Minn.

27th MOSES Organic Farming Conference
Feb. 25-27 | La Crosse, Wis.
Farmers find strength marketing together in rural Northern Wisconsin

By Kelli Boylen

Bayfield Foods is proof that there is often great strength in collective marketing. The cooperative started when some local meat producers wanted to cross-market each other's products, and five years later things continue to bloom.

"We realized that the customers buying grass-fed beef were likely the same people that were looking for pastured pork or lamb," explained Chris Duke, a charter member. "The next step was having mixed meat boxes that customers could get with a variety of different meats in them. People really liked the convenience of getting it all in one stop. Duke added. "So we got to thinking about all the other great products that farms were raising in the area—like fruit, cheese, bakery, other value added goods, and vegetables—and how the CSA concept would allow us to get the product from different area producers into a single box, working with a system where logistics were streamlined."

Bayfield Foods was created in 2010 with 20 original members. In just five short years, the cooperative has clearly demonstrated its worth. "Why wouldn't you want to be part of a diversified local cooperative that has a proven multi-year track record with significant yearly sales growth that helps support over 20 producer-members?" asked charter member David Nortunen.

Founding members are excited to have been able to increase sales enough to bring in additional producers. Sales have increased 20 percent just in the last year.

Bayfield Foods currently has 24 producer-members and is putting out 145 CSA shares a week in the warmer months as well as shares once a month in the winter. The Bayfield Regional Food Producers Cooperative (BRFPC), which is the group's formal name, started primarily as a marketing-focused cooperative, but the organization's mission is growing. It now manages a successful CSA, and is looking at ways to improve its distribution network.

Bayfield Foods operates the Lake Superior CSA, South Shore Meats wholesale program and the Bayfield Shores Harvest Trail. Producer-members choose to participate in any or all of the programs on a fee-for-service basis. In addition, Bayfield Foods works to find financial and other resources to support individual producer-members.

Stefanie Jaeger, Lake Superior CSA Manager, said the cooperative's efforts give all producers an equal shot at getting their products to the public. Most of the CSA shares are "whole diet" shares which include fruits, vegetables and meats. Others are bakery or coffee-only shares. CSA members can also get a "plus" share and get value-added products such as fermented goods, goat and sheep cheese, spritzers, maple syrup, honey, jams and jellies, coffees and baked goods.

Shares of veggies and meats go out weekly from May to October, twice in November, then once a month until the last delivery in March. That way producers can take a month off of delivery in April. New shares start back up in May. Winter shares typically do not include fruit.

The cooperative also supplies local foods to Northland College, a private college in Ashland. The college purchased more than $50,000 worth of goods in 2014. "There is definitely an increase in the number of folks wanting local, sustainable food," Jaeger added. "And since I was looking for a way to diversify my farm income and not be reliant on commodity pricing," he said.

He enjoys the opportunity to be part of a collaboration that provides multiple sales opportunities, including both local and regional sales via a CSA, wholesale (stores and restaurants), special orders, and even shipping directly to consumers' homes.

"We currently market more than 100 distinct products and almost all of Bayfield Foods sales dollars go directly to our local producers," Nortunen said. "Working with over 20 different producers has allowed us to collaborate and network together. The CSA has been very instrumental in keeping my business profitable as I am able to sell all parts of the animal including less popular cuts like roasts as opposed to only selling wholesale where all they want is ground beef, and I get stuck with a significant amount of other cuts that do not sell nearly as well as ground beef."

Nortunen is a fourth-generation owner of Hidden-Vue Farm, which has been in his family for more than 100 years. They primarily raise and sell Red Devon beef cattle as well as some St. Croix lamb. They farm around 600 acres, and usually have between 250 and 300 animals on the farm.

Duke, who owns and operates Great Oak Farm, said he was interested in the cooperative to reach more markets.

“Our primary markets prior to becoming involved in the Lake Superior CSA were the local farmers' market, and a little wholesale to the local food cooperative,” he explained. “I realized that, in order to make a living from farming, I would need to sell a higher volume of produce. Ashland is our closest ‘city.’ With a population of only 8,000 people, sales are limited. Working with the other growers in the cooperative helped to pool our resources and afford a delivery van to get our products further out into and better serve our community.”

“Also, selling directly to consumers at market is great, but you are really limited by the weather—rainy days usually mean very few sales,” he added. “Since becoming one of the primary veggie growers in our cooperative—Lake Superior CSA—I definitely added only by invitation from an existing producer-member, and must be approved by both the board and the general membership.

Jaeger said much of the decision-making and communication is done via email. The CSA season is well planned out in advance. “Organization is key!” she said. There are bylaws and procedures for everything, and communication is very important to making it all work. And, of course, there are the members who are willing to put in unpaid time to do what needs to be done.

Nortunen is the primary beef producer for the co-op and the current president of Bayfield Foods. This is his second year serving in the lead role and third year of serving on the board. “I joined because working with over 20 different producers has allowed us to collaborate and network together. The CSA has been very instrumental in keeping my business profitable as I am able to sell all parts of the animal including less popular cuts like roasts as opposed to only selling wholesale where all they want is ground beef, and I get stuck with a significant amount of other cuts that do not sell nearly as well as ground beef.”

Nortunen is a fourth-generation owner of Hidden-Vue Farm, which has been in his family for more than 100 years. They primarily raise and sell Red Devon beef cattle as well as some St. Croix lamb. They farm around 600 acres, and usually have between 250 and 300 animals on the farm.

Duke, who owns and operates Great Oak Farm, said he was interested in the cooperative to reach more markets.

“Our primary markets prior to becoming involved in the Lake Superior CSA were the local farmers' market, and a little wholesale to the local food cooperative,” he explained. “I realized that, in order to make a living from farming, I would need to sell a higher volume of produce. Ashland is our closest ‘city.’ With a population of only 8,000 people, sales are limited. Working with the other growers in the cooperative helped to pool our resources and afford a delivery van to get our products further out into and better serve our community.”

“Also, selling directly to consumers at market is great, but you are really limited by the weather—rainy days usually mean very few sales,” he added. “Since becoming one of the primary veggie growers in our cooperative—Lake Superior CSA—I definitely

To CSA Cooperative on page 16
Aquaponics — from page 1

Haider asserts that certification was a must from the start. “It’s how we eat, it’s how we live,” he stated. They had a very positive experience working with MCIA, and Haider feels that the interaction with the organic inspector taught them how to operate more efficiently.

They’re thankful for aquaponics and aquaponics under the USDA Organic label continues to be a polarized issue. In 2010, the National Organic Standards Board (NOSB) recommended with a vote of 12 to 1 that the USDA shouldn’t allow organic crops to be produced using hydroponic and aquaponic methods. They reasoned that organic crops produced in soilless systems don’t align with the organic principle of “feed the soil, not the plant.” However, the USDA decides organic production as “a production system that is managed in accordance with the (Organic Foods Production) Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.” Soil isn’t present in the language of the definition. However, there are guidelines within the organic regulations that specifically refer to soil fertility building and health maintenance.

For now, aquaponic and hydroponic operations are inspected and certified according to individual certifying agencies, and those standards can vary. Haider states that aquaponics has the potential of producing more food with less water, fossil fuels and waste than traditional farming. In the “food desert” of East St. Paul, veggies and protein are dearly needed. The USDA Agricultural Marketing Resource Center (AgMRC) at Iowa State University agrees with Haider. According to their online Aquaponics Profile in July 2013, aquaponics uses 10 percent of the land area and 5 percent of the water compared to growing vegetables outside of a greenhouse in soil. The grow lights and nutrients added to the growing medium also allow some crops to cut their growing time in half.

Aquaponic growers trade weather challenges for potential indoor air-quality tasks. These elements are closely monitored using science-based methods in this highly controlled, closed system. The intended result is a resource-efficient method for growing a lot of cosmetically attractive food.

How does it fit into the National Organic Program (NOP)? Despite the NOSB’s nearly unanimous vote in 2010, the USDA-NOP did not act on the recommendation. The NOP recently appointed a new Hydroponic and Aquaponic Task Force to re-examine the methods and make recommendations on organic certification of hydroponic and aquaponic operations. Those are expected in fall 2016.

Dave Chapman of Long Wind Farm has grown certified organic tomatoes in Vermont soil since 1984. He built his first glass greenhouses in 1990. He currently sits on the NOP task force, and takes a strong stance against the allowance of hydroponics and aquaponics. A long-time organic farmer, he believes in the basic organic system foundation of stewarding the soil to feed the plant, and is concerned about the unintended consequences of fertilizers used.

“ Soil is the basis,” he states simply, “Aquaponics are not organics. I have great friends who are aquaponics and hydroponic growers and appreciate the support of the system. Call it what it is, though, because organic means something else.” He suggests something along the lines of “Aquaponic Unsprayed” as a label.

Dave Haider feels that the task force could be a positive step in further defining the methods within organic certification guidelines, and feels that it is too soon to make a judgment about the outcome given that the task force is scheduled to share their findings a year from now. Right now, he’s very busy opening a new aquaponic facility.

Pentair Aquatic Eco-systems, the largest global source of aquaculture systems and products, announced a formal collaboration with UO in September. Together, they are transforming the former 87,000-square-foot Schmidt Brewery building in St. Paul into one of the largest commercial aquacaponics facilities in the world. The new facility will enable UO to go from growing the 24,000 pounds of produce they currently produce to a potential 400,000 pounds. Not to mention the 275,000 pounds total of cold water trout, char and salmon they intend to grow to meet local retail and restaurant demand. Planning is underway with hopes of harvesting the first fish and certified organic produce by summer 2016.

Jennifer Nelson, MOSES organic specialist, and her husband, Mike Leck, own Humble Pie Farm in Plum City, Wis.

Conference Tips — from page 12

connections, and a room full of strangers can be a lonely place. Walk right up, introduce yourself, and build a connection, and a room full of strangers can be a room full of friends.

Make the Most of Connections — Use your business cards liberally. Handing out a card is a great way to get one from somebody else. Write notes on the back of the card to help remember who they are, what they do, and connections are still fresh. Reviewing your notes to provide a quick refresh, and lock in that knowledge. If you’ve got some obvious dump notes to provide a quick refresh, and lock in that knowledge. If you’ve got some obvious dump notes to provide a quick refresh, and lock in that knowledge.

Process Connections in Real Time — At the end of each day, empty the business cards from your wallet, and quickly sort them into three piles: the first for those that you absolutely plan to follow up with, the second for those that you want to put into your address book, and the third for, “who is this person?” Throw the third pile away, and keep the other two accessible for when you get home.

For the cards in the first group, write a note on the back about your intended action, something like “send info on transplants for sale,” or “ask for about cultivating tools resource.”

Lightly Process Notes and Materials — Empty out your tote bag or pocket file every night, so that you’ve got room for the next day. Clear off your clipboard of the day’s notes. Glance over your notes to provide a quick refresh, and lock in that knowledge. If you’ve got some obvious dump items, throw them away now, so that they aren’t clogging up your systems later.

When You Get Home

You’ll get the most from the conference if you can follow up in short order, while the information and connections are still fresh. Reviewing your notes, information, and connections shortly after the event is a great way to increase retention and internalize important messages. Processing soon after the event also ensures you don’t get caught up in the work that has been waiting for you before you have a chance to fully realize the value of being at the event. By changing the context and the format of the information, your brain uses different pathways to log the same information, improving your ability to remember and access it later.

Identify Actions — Pull out those notes, review the actions you identified, and decide if they’re still meaningful. Put the ones you want to follow up on into your task management system.

Connect with Connections — Follow up with connections. If you had a specific request or intended action, make it happen. Waiting until weeks after the conference will allow you to slip from people’s minds, and any urgency they might have felt to respond can easily go by the wayside. Ask everybody else to your address list, and consider reaching out to them on Facebook or through a quick email.

A good conference can be a great place to get inspired, follow some intellectual rabbit trails, and meet a ton of new people — but you want to make the most of your investment. Those of us in the world of farming have chosen a life where knowledge and connections can turn into actions to improve the planet, provide real food, and build community, as well as to provide a return to our businesses. A little bit of additional effort — before, during, and after the event — can turn the outcome of a conference creates on your farm and in your life.

Chris Blanchard provides consulting and education for farming, food, and business through Purple Pitchfork. He will present two workshops at the MOSES Conference as well as an all-day Organic University course on efficient farm management.

Conference Tips — from page 12

connections, and a room full of strangers can be a lonely place. Walk right up, introduce yourself, and build a connection, and a room full of strangers can be a room full of friends.

Make the Most of Connections — Use your business cards liberally. Handing out a card is a great way to get one from somebody else. Write notes on the back of the card to help remember who they are, what they do, and connections are still fresh. Reviewing your notes to provide a quick refresh, and lock in that knowledge. If you’ve got some obvious dump notes to provide a quick refresh, and lock in that knowledge. If you’ve got some obvious dump items, throw them away now, so that they aren’t clogging up your systems later.

Process Connections in Real Time — At the end of each day, empty the business cards from your wallet, and quickly sort them into three piles: the first for those that you absolutely plan to follow up with, the second for those that you want to put into your address book, and the third for, “who is this person?” Throw the third pile away, and keep the other two accessible for when you get home.

For the cards in the first group, write a note on the back about your intended action, something like “send info on transplants for sale,” or “ask for about cultivating tools resource.”

Lightly Process Notes and Materials — Empty out your tote bag or pocket file every night, so that you’ve got room for the next day. Clear off your clipboard of the day’s notes. Glance over your notes to provide a quick refresh, and lock in that knowledge. If you’ve got some obvious dump items, throw them away now, so that they aren’t clogging up your systems later.

When You Get Home

You’ll get the most from the conference if you can follow up in short order, while the information and connections are still fresh. Reviewing your notes, information, and connections shortly after the event is a great way to increase retention and internalize important messages. Processing soon after the event also ensures you don’t get caught up in the work that has been waiting for you before you have a chance to fully realize the value of being at the event. By changing the context and the format of the information, your brain uses different pathways to log the same information, improving your ability to remember and access it later.

Identify Actions — Pull out those notes, review the actions you identified, and decide if they’re still meaningful. Put the ones you want to follow up on into your task management system.

Connect with Connections — Follow up with connections. If you had a specific request or intended action, make it happen. Waiting until weeks after the conference will allow you to slip from people’s minds, and any urgency they might have felt to respond can easily go by the wayside. Ask everybody else to your address list, and consider reaching out to them on Facebook or through a quick email.

A good conference can be a great place to get inspired, follow some intellectual rabbit trails, and meet a ton of new people — but you want to make the most of your investment. Those of us in the world of farming have chosen a life where knowledge and connections can turn into actions to improve the planet, provide real food, and build community, as well as to provide a return to our businesses. A little bit of additional effort — before, during, and after the event — can turn the outcome of a conference creates on your farm and in your life.

Chris Blanchard provides consulting and education for farming, food, and business through Purple Pitchfork. He will present two workshops at the MOSES Conference as well as an all-day Organic University course on efficient farm management.
Organic University — from page 11

an abundant and regular product to market, especially when the weather impacts vegetable yields. Composted manure from cows, sheep, goats, and poultry improve the fertility of your vegetable fields. You can also take advantage of natural animal behaviors, using hogs to root and loosen soil and poultry to eat insect pests. Learn from these experienced farmers what it takes to raise organic livestock in a diversified operation. They’ll cover organic regulations along with what various livestock require from you in terms of time, labor, acreage, fencing, housing, and feed. They’ll examine processing options and related organic considerations. They’ll also discuss marketing and the expected economic return from various marketing avenues.

Growing in High Tunnels
Collin Thompson and Terrance T. Nenich

With the advent of high-tunnel programs, high tunnels are accessible to more farmers. High tunnels, also known as hoophouses, not only extend the growing season, but also protect crops from the stress of wind, hard rain, and snow. They can allow growers to plant varieties not normally grown in this area, grow more unblemished produce, and take advantage of longer market windows. Production in a high tunnel is different than in the open field. This course will delve into best practices to enhance production and profitability in your high tunnels. You’ll learn about the types of high tunnels available, structural considerations, site selection, soil preparation, soil amendments, fertilization, irrigation, plant configurations, pest and disease control, and weed management.

Your organic operation will need to cover the costs up front and get a paid invoice from the certifying agency. Then, complete and submit all the required application components including a copy of your current organic certificate and the invoice(s) of certification costs paid during the federal fiscal year (Oct. 1 to Sept. 30). Organic operations can receive support for up to 75% of certification costs, but are capped at $750 per year by certification scope (livestock, crops, wild harvest, and handling).

Beyond those programs, some regions offer other opportunities. For example, Minnesota has a “Transition to Organic Cost Share Program” that supports state residents who are not currently certified, but are actively transitioning into organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic.” Farmers transitioning to organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic” may offer professional help to identify conservation concerns and organic requirements to address on your land. For more information about opportunities for your county or National Resource Conservation Service (USDA-NRCS) grants, Fish & Wildlife partnerships, and other programs that support conservation, natural resources, and wildlife habitat. While they usually won’t cover certification costs, they may help you implement practices that are valuable to your farm operation and help you meet the requirements of certification. For example, they may help you purchase cover crop seed or mobile fencing or offer incentives for conservation practices. For those transitioning into organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic” may offer professional help to identify conservation concerns and organic requirements to address on your land.

Contact your state’s Department of Agriculture for more information about the NOCCSP and AMA Organic Certification Cost Share programs or other regional initiatives. Your certifier is also a valuable asset and may be aware of additional prospects. For insight into local opportunities, ask around your farming neighborhood, your buyers, and any farm or food organizations you may know.

Ask a Specialist — from page 4

Silvopasture: Multiple Crops, Multiple Benefits
Jason Fischbach and Mike Miles

Silvopasture is the practice of combining low-density forestry with grazing livestock and forage in a way that’s mutually beneficial. Trees are managed for high-value sawlogs, nuts or fruits and, at the same time, provide shade and shelter for livestock and grasses, reducing stress and increasing the health of both. Silvopasture mimics the natural savanna ecosystem, working with our Midwestern climate and landscape to meet agricultural goals. This course covers everything you need to know to incorporate silvopasture on your farm to enhance and protect the soil, raise healthy livestock, manage water resources with strategies such as keyline design, and increase your long-term income.

Growing in High Tunnels

Collin Thompson and Terrance T. Nenich

With the advent of high-tunnel programs, high tunnels are accessible to more farmers. High tunnels, also known as hoophouses, not only extend the growing season, but also protect crops from the stress of wind, hard rain, and snow. They can allow growers to plant varieties not normally grown in this area, grow more unblemished produce, and take advantage of longer market windows. Production in a high tunnel is different than in the open field. This course will delve into best practices to enhance production and profitability in your high tunnels. You’ll learn about the types of high tunnels available, structural considerations, site selection, soil preparation, soil amendments, fertilization, irrigation, plant configurations, pest and disease control, and weed management.

Your organic operation will need to cover the costs up front and get a paid invoice from the certifying agency. Then, complete and submit all the required application components including a copy of your current organic certificate and the invoice(s) of certification costs paid during the federal fiscal year (Oct. 1 to Sept. 30). Organic operations can receive support for up to 75% of certification costs, but are capped at $750 per year by certification scope (livestock, crops, wild harvest, and handling).

Beyond those programs, some regions offer other opportunities. For example, Minnesota has a “Transition to Organic Cost Share Program” that supports state residents who are not currently certified, but are actively transitioning into organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic.” Farmers transitioning to organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic” may offer professional help to identify conservation concerns and organic requirements to address on your land. For more information about opportunities for your county or National Resource Conservation Service (USDA-NRCS) grants, Fish & Wildlife partnerships, and other programs that support conservation, natural resources, and wildlife habitat. While they usually won’t cover certification costs, they may help you implement practices that are valuable to your farm operation and help you meet the requirements of certification. For example, they may help you purchase cover crop seed or mobile fencing or offer incentives for conservation practices. For those transitioning into organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic” may offer professional help to identify conservation concerns and organic requirements to address on your land. Look for more opportunities on the “Funds for Farmers” page of the MOSES website.

Contact your state’s Department of Agriculture for more information about the NOCCSP and AMA Organic Certification Cost Share programs or other regional initiatives. Your certifier is also a valuable asset and may be aware of additional prospects. For insight into local opportunities, ask around your farming neighborhood, your buyers, and any farm or food organizations you may know.

For more about these programs and how to apply, see ama.usda.gov/services/grants/occsp.

Organic University — from page 11

an abundant and regular product to market, especially when the weather impacts vegetable yields. Composted manure from cows, sheep, goats, and poultry improve the fertility of your vegetable fields. You can also take advantage of natural animal behaviors, using hogs to root and loosen soil and poultry to eat insect pests. Learn from these experienced farmers what it takes to raise organic livestock in a diversified operation. They’ll cover organic regulations along with what various livestock require from you in terms of time, labor, acreage, fencing, housing, and feed. They’ll examine processing options and related organic considerations. They’ll also discuss marketing and the expected economic return from various marketing avenues.

Growing in High Tunnels
Collin Thompson and Terrance T. Nenich

With the advent of high-tunnel programs, high tunnels are accessible to more farmers. High tunnels, also known as hoophouses, not only extend the growing season, but also protect crops from the stress of wind, hard rain, and snow. They can allow growers to plant varieties not normally grown in this area, grow more unblemished produce, and take advantage of longer market windows. Production in a high tunnel is different than in the open field. This course will delve into best practices to enhance production and profitability in your high tunnels. You’ll learn about the types of high tunnels available, structural considerations, site selection, soil preparation, soil amendments, fertilization, irrigation, plant configurations, pest and disease control, and weed management.

Your organic operation will need to cover the costs up front and get a paid invoice from the certifying agency. Then, complete and submit all the required application components including a copy of your current organic certificate and the invoice(s) of certification costs paid during the federal fiscal year (Oct. 1 to Sept. 30). Organic operations can receive support for up to 75% of certification costs, but are capped at $750 per year by certification scope (livestock, crops, wild harvest, and handling).

Beyond those programs, some regions offer other opportunities. For example, Minnesota has a “Transition to Organic Cost Share Program” that supports state residents who are not currently certified, but are actively transitioning into organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic.” Farmers transitioning to organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic” may offer professional help to identify conservation concerns and organic requirements to address on your land. For more information about opportunities for your county or National Resource Conservation Service (USDA-NRCS) grants, Fish & Wildlife partnerships, and other programs that support conservation, natural resources, and wildlife habitat. While they usually won’t cover certification costs, they may help you implement practices that are valuable to your farm operation and help you meet the requirements of certification. For example, they may help you purchase cover crop seed or mobile fencing or offer incentives for conservation practices. For those transitioning into organic, NRCS Practice Standard 138: “Conservation Activity Plan for Those Transitioning into Organic” may offer professional help to identify conservation concerns and organic requirements to address on your land. Look for more opportunities on the “Funds for Farmers” page of the MOSES website.

Contact your state’s Department of Agriculture for more information about the NOCCSP and AMA Organic Certification Cost Share programs or other regional initiatives. Your certifier is also a valuable asset and may be aware of additional prospects. For insight into local opportunities, ask around your farming neighborhood, your buyers, and any farm or food organizations you may know.

For more about these programs and how to apply, see ama.usda.gov/services/grants/occsp.
MOSES expands outreach to farmers through new grant-funded projects

By Jody Padgham

MOSES will reach more farmers through a diversity of new projects recently funded by grants. Building on three years of outreach through our New Organic Stewards Program, MOSES and Renewing the Countryside (RTC) will help beginning farmers connect, learn and improve the likelihood of their success. Backed by a three-year grant through the USDA Beginning Farmer and Rancher Development Program, MOSES and RTC will work with regional partners to host four trainings under the banner “New Farmer U.” These will be two-day “mini-conferences” offering basic farming education and networking in Wisconsin, Minnesota, Iowa and Illinois. Each event will be preceded by a one-day “Fearless Farm Finances” training, drawing on the MOSES book, which will be updated through the grant. We’ll also offer workshops and activities targeted to beginning farmers at the annual MOSES Organic Farming Conference over the next three years. New farmers can make connections at the conference and New Farmer U and through the New Organic Stewards Facebook group, which was created just last month. Search “New Organic Stewards” on Facebook and join in the conversation.

Through a three-year NRCS Conservation Innovation Grant, MOSES is helping the Minnesota Food Association, Farmers Legal Action Group and the Farley Center teach immigrant and underserved farmers about conservation and organic practices. We will offer a Hmong workshop track and scholarships at the 2016, 2017 and 2018 MOSES Organic Farming conferences, answer questions on organic production from this community, make farm visits and write NRCS Conservation Activity Plans.

Organic farmers have struggled to make the safety net of crop insurance effectively work in their operations, but the new Whole Farm Revenue Crop Insurance offers a fair solution. We are partnering with the Michael Fields Agricultural Institute and the Wisconsin Farmer’s Union to teach farmers about this new insurance and other risk management tools for organic systems. With funding from the USDA Risk Management Agency, we will offer workshops at four conferences (including the 2016 MOSES Conference), produce a webinar, provide crop insurance information at field days, develop educational materials and webpages through both MFAI and MOSES, and distribute information through the Organic Broadcaster and other publications.

We’ve also formed a one-year partnership with the National Children’s Center for Rural and Agricultural Health and Safety to teach farm families about children’s farm safety. We’ll offer a workshop at the 2016 conference, and share information and resources through our website, the Organic Broadcaster, and a field day next summer.

MOSES staff also are involved in a project with the University of Wisconsin to help farmers meet the market demand for organic grain. In 2012-2013, the U.S. imported nearly $170 million worth of organic soybeans, corn and wheat. With the organic food market estimated to continue growing at over 14 percent per year through 2018, the demand for organic grains as food, seed and livestock feed will only continue to rise. The Organic Grain Resources and Information Network (ORRAIN) is a two-year project funded by the USDA Beginning Farmer and Rancher Development Program. MOSES will provide day-long organic grain intensives and workshops at the 2016 and 2017 MOSES conferences, support grain farmers through our Farmer-to-Farmer Mentoring Program, and contribute to other offerings, including a Farm and Industry Short Course, online video series and on-farm field days.

Look for related stories about these exciting new initiatives in coming issues.

Jody Padgham is the Financial Director for MOSES. She manages grants for the organization.

### CSA Cooperative — from page 13

sleep better knowing that all the produce is essentially pre-sold to our CSA members, regardless of rainy Saturday!”

Duke said the cooperative’s CSA structure makes it easier for him to plan, budget, and purchase equipment. He also has found the shift from the Saturday farmers’ market to a CSA gives him the option to take a Saturday off in the summer. “This has really gone a long way to improving quality of life in our household!”

Being a master of the many crops that typically grow out in a CSA box is a difficult and sometimes overwhelming task for many growers, especially newer growers. Duke said that perhaps the biggest positive of working with other growers to form a cooperative CSA is that instead of each farm growing a little bit of a lot of different crops, and needing the infrastructure/bootsystems to efficiently handle all kinds of production, each grower can now specialize a little. “This really reduces the amount of different tasks each grower needs to do, and has helped each of the four veggie growers in the CSA to streamline production to be more efficient,” he said.

In addition, he appreciates having access to the cooperatively owned walk-in cooler and freezers. “It saves on each farm having to individually invest in that infrastructure and allows the farms to focus on other areas of infrastructure development,” he explained.

Duke’s Great Oak Farm started in 2006, mostly growing food for the family and selling the rest. In 2009, they started shifting to growing primarily for sale and eating the leftovers. The farm has been certified organic since 2011.

Currently, Great Oak Farm (60 acres total) has about 5 acres of cover crop/fallow ground worked up, and about 5 acres of veggies in production, including about 1.5 acres of cabbage and green beans for wholesale. The main vegetable crops include carrots, onions, winter squash, green beans, cabbage, cherry tomatoes, beets, and cucumbers, with many other crops in smaller amounts. They keep honeybees, raise about 950 pastured breeder chickens, and have a small flock of about 35 ewes for production of grass-fed lamb.

Along with the many benefits he has found in the cooperative, Duke likes that the growers in the Bayfield Region can rely on each other instead of “nameless, faceless outsourcing from wherever,” he said. “We are being a community again.”

Kelby Bowen is a freelance writer with a farming background. She lives with her family on a homestead in Iowa.
Call for Organic Research Posters

The 2016 MOSES Organic Farming Conference will include an organic research poster session Feb. 26 and 27 as part of the Organic Research Conference, funded by the Ceres Trust. The poster session will document completed and ongoing research projects related to organic agriculture. Researchers, academic faculty and staff, graduate/undergraduate students and farmer researchers may submit poster proposals for consideration by Dec. 18, 2015. Limited to 25 posters. See details on the Research Forum webpage under the Projects tab at mosesorganic.org.

Farmer Facebook Groups

MOSES has launched Facebook groups for farmers in our community. These forums provide a place to connect and share ideas or ask questions. MOSES Organic Specialists moderate the groups. Please join in the conversations happening on one or both of these new forums. To find these groups, simply search Facebook for Rural Women’s Project and New Organic Stewards.

Recognition for MOSES Staff

Faye Jones, MOSES executive director, has been selected to receive a Honorary Recognition Award from the University of Wisconsin Madison College of Agricultural and Life Sciences for outstanding and inspirational leadership, and for her contributions to agriculture. This award is among the highest honors bestowed by the college. The award presentation is Nov. 12 at the university.

Lisa Kivirist, coordinator of the MOSES Rural Women’s Project, has been awarded In Business magazine’s Women of Industry award for the significant impact she has made supporting women in the field of agriculture.

Research Grant Proposals

The Organic Farming Research Foundation (OFRF) grants program is currently accepting research proposals from farmers, ranchers, graduate students, early career researchers, veterans, and Extension personnel. Priorities for funding include projects related to soil health with emphasis on water management, livestock breeding for organic systems, diseases and pasture management, and small grain production, especially related to creating a diverse rotational system.

To submit a proposal, visit OFRF.org. The deadline for proposals is Feb. 8, 2016.

Organic Farm Profiles

Making the Transition to Organic: Ten Farm Profiles, a new publication from the Tools for Transition Project, features stories from a range of producers who have transitioned to organic or are in the process. Each profile addresses transition strategies, challenges, and resolutions. The Tools for Transition Project is based at the University of Minnesota. The profiles are online at organicinfo.info/toolsfortransition/reports.

Organic Transition Business Planner

Organic Transition: A Business Planner for Farmers, Ranchers and Food Entrepreneurs, a new publication from SARE, explores organic transition strategies and asks important questions to help farmers determine the best plan for their farm. It is free to download or $16 in print at www.sare.org/Learning-Center/Books.

USDA Websites for New Farmers

Start2farm.gov is a beginning farmer website of resources supported by the USDA and a good place to check out as you “start to farm.” Whether you are new to farming or already farming, you can choose links that will lead you to resources to answer your questions. From grant opportunities to sample land lease agreements to business planning and management, start2farm.gov is a database of great business resources for new and beginning farmers.

Newfarmers.usda.gov is the latest beginning farmer website offered from the USDA. It provides a wide selection of resources for new and beginning farmers, including a step-by-step plan to get started in your farm business, a discovery tool to personalize your search, and specific resources for women and veterans. The Farms in Transition tab also provides an increasingly important link between retiring farmers and beginning farmers to facilitate farm transfer relationships.

Management-Intensive Rotational Grazing

Researchers at the University of Wisconsin-Madison have published a research brief on their investigations into management-intensive rotational grazing (MIRG). The results suggest that MIRG offers farmers increased forage quality and quantity when compared to continuous grazing or haying. In addition, MIRG systems have greater potential for carbon sequestration compared to the other systems. Heightened production from the MIRG system compared to continuous grazing most likely includes the unique way that rotational grazing resets plant development and maintains a preferred plant community, rather than from increased nutrient availability through microbial activity. The complete report is online at www.cias.wisc.edu (Research Brief #95).

Results of National Organic Meeting

The National Organic Standards Board met in Stowe, Vermont last month, mostly to review and provide input on the 2016 National Organic Program that was updated after the removal of national standards for organic livestock systems. There was also a rally by New England growers, protesting the organic certification of hydroponic vegetable operations, stating that we should “keep the soil in organic.”

The new sunset voting procedure, which requires 2/3 of the NOSB vote for removal, was used this year, and did allow some materials that were close votes to remain on the National List. Items that were voted to be removed can still be used until their removal is published in the federal register, sometime in late 2016.

In crops, lignin sulfonate as a flotation agent was removed from the list. Aquatic plant extracts was retained after a close vote with 5 to remove, 6 to keep on the list and 3 abstentions. There was also a close vote about chemical harvesting of ocean ecosystems for this material. Ethylene, a material used to encourage flowering of pineapple had many comments to remain on the list, with 8 voting to keep on the list, 2 abstentions and 3 to remove. Laminarin, an algae was found to be nonsynthetic and will be allowed.

In handling, magnesium carbonate, used as an antiskaking agent, was removed from the National List. Mono and diglycerides will stay on the list, with a close vote of 6 to remove and 8 to retain.

In crops, lignon sulfonate as a floatation agent was removed from the list. Aquatic plant extracts was retained after a close vote with 5 to remove, 6 to keep on the list and 3 abstentions. There was also a close vote about chemical harvesting of ocean ecosystems for this material. Ethylene, a material used to encourage flowering of pineapple had many comments to remain on the list, with 8 voting to keep on the list, 2 abstentions and 3 to remove. Laminarin, an algae was found to be nonsynthetic and will be allowed.

In livestock, furosimide, used to treat pulmonary edema and hyperkalemia, will be removed from the list. The parasiticide Ivermectin, Moniltec, and Fenbendazole remain on the list, but further information will be gathered on this emulsifier. Agricultural products that were found to be available as organic will be removed from 205.606, which allows non-organic agricultural products in organic foods. These include chia seeds, dillweed oil, frozen galangal, inulin-oligofructose, frozen lemongrass, chipotle peppers, Turkish bay leaves and whey protein concentrate. The listing for natural flavors was changed to require organic material used to encourage flowering of pineapple was removed from the list. Aquatic plant extracts was retained after a close vote with 5 to remove, 6 to keep on the list and 3 abstentions. There was also a close vote about chemical harvesting of ocean ecosystems for this material. Ethylene, a material used to encourage flowering of pineapple had many comments to remain on the list, with 8 voting to keep on the list, 2 abstentions and 3 to remove. Laminarin, an algae was found to be nonsynthetic and will be allowed.

The new sunset voting procedure, which requires 2/3 of the NOSB vote for removal, was used this year, and did allow some materials that were close votes to remain on the National List. Items that were voted to be removed can still be used until their removal is published in the federal register, sometime in late 2016.

In crops, lignin sulfonate as a flotation agent was removed from the list. Aquatic plant extracts was retained after a close vote with 5 to remove, 6 to keep on the list and 3 abstentions. There was also a close vote about chemical harvesting of ocean ecosystems for this material. Ethylene, a material used to encourage flowering of pineapple had many comments to remain on the list, with 8 voting to keep on the list, 2 abstentions and 3 to remove. Laminarin, an algae was found to be nonsynthetic and will be allowed.

In handling, magnesium carbonate, used as an antiskaking agent, was removed from the National List. Mono and diglycerides will stay on the list, with a close vote of 6 to remove and 8 to retain.

In crops, lignon sulfonate as a floatation agent was removed from the list. Aquatic plant extracts was retained after a close vote with 5 to remove, 6 to keep on the list and 3 abstentions. There was also a close vote about chemical harvesting of ocean ecosystems for this material. Ethylene, a material used to encourage flowering of pineapple had many comments to remain on the list, with 8 voting to keep on the list, 2 abstentions and 3 to remove. Laminarin, an algae was found to be nonsynthetic and will be allowed.

In livestock, furosimide, used to treat pulmonary edema and hyperkalemia, will be removed from the list. The parasiticide Ivermectin, Moniltec, and Fenbendazole remain on the list, but further information will be gathered on this emulsifier. Agricultural products that were found to be available as organic will be removed from 205.606, which allows non-organic agricultural products in organic foods. These include chia seeds, dillweed oil, frozen galangal, inulin-oligofructose, frozen lemongrass, chipotle peppers, Turkish bay leaves and whey protein concentrate. The listing for natural flavors was changed to require organic material used to encourage flowering of pineapple was removed from the list. Aquatic plant extracts was retained after a close vote with 5 to remove, 6 to keep on the list and 3 abstentions. There was also a close vote about chemical harvesting of ocean ecosystems for this material. Ethylene, a material used to encourage flowering of pineapple had many comments to remain on the list, with 8 voting to keep on the list, 2 abstentions and 3 to remove. Laminarin, an algae was found to be nonsynthetic and will be allowed.
**NEWS BRIEFS**

**New Non-GMO Market Report**

The USDA Agricultural Marketing Service (AMS) is publishing a new report every Wednesday with sale prices for non-GMO corn and soybeans. The new report includes two price types: future delivery contract prices paid to the producer by the elevator, and spot market cash prices paid to producers by the elevator. The report can help farmers gauge prices for crops sold while in the period of transition to organic. AMS also has price reports for organic grain and feedstuffs and organic poultry and eggs. On the AMS website, users can create a custom report that includes organic pricing. See www.ams.usda.gov/marketing-news.

**Food Safety Rules**

The U.S. Food and Drug Administration (FDA) announced in early November that the food safety rule governing the safe growing, harvesting, packing, and holding of produce was submitted to the Federal Register for final publication. FDA recently issued final rules governing food processing facilities, and the publication of the Produce Rule will bring farmers another step closer to new food safety standards that will soon go into effect. For details about the FMSA rollout, see the National Sustainable Agriculture Coalition's blog: sustainableagriculture.net/blog.

**Real Food Cookbook**

Minneapolis-based Birchwood Cafe just published its first-ever cookbook, a collaboration with the University of Minnesota Press. The book includes recipes for the café’s signature “good real food” and profiles of the restaurant’s farmers/suppliers. MOSES Organic Farmer of the Year Greg Reynolds is one of the featured farmers. The book is available through the MOSES Bookstore (mosesorganic.net).

**Farm Law Resources**

Farm Commons has released a new series of farm law guides: Farm Employment Law; Financing a Farmland Purchase; Managing the Sustainable Farm’s Risks with Insurance; and, Building Strong, Legally Enforceable Sales Agreements. The free guides utilize a variety of methods from checklists to narratives to clarify the laws that affect farmers and landowners. See farmcommons.org/resources.

---

**National Organic Grain and Feedstuffs – Bi-Weekly**

<table>
<thead>
<tr>
<th>Organic Corn</th>
<th>Organic Soybeans</th>
<th>Organic Oats</th>
<th>Organic Barley</th>
<th>Organic Wheat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price</strong></td>
<td><strong>This Week</strong></td>
<td><strong>2 Weeks Ago</strong></td>
<td><strong>Year Ago</strong></td>
<td><strong>2018</strong></td>
</tr>
<tr>
<td>Organic Corn</td>
<td>Food Yellow</td>
<td>Feed Yellow</td>
<td>Feed Grade</td>
<td>Meal</td>
</tr>
<tr>
<td></td>
<td>9.25</td>
<td>11.00</td>
<td>10.42</td>
<td>10.25</td>
</tr>
<tr>
<td>Feed Yellow</td>
<td>9.67</td>
<td>11.00</td>
<td>10.42</td>
<td>10.25</td>
</tr>
<tr>
<td>Organic Soybeans</td>
<td>Food Grade</td>
<td>Feed Grade</td>
<td>Meal</td>
<td></td>
</tr>
<tr>
<td>Feed Grade</td>
<td>20.00</td>
<td>22.75</td>
<td>21.36</td>
<td>22.26</td>
</tr>
<tr>
<td>Meal</td>
<td>1126.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic Oats</td>
<td>Feed Grade</td>
<td>Feed Grade</td>
<td>Meal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.90</td>
<td>5.40</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Organic Barley</td>
<td>Feed Grade</td>
<td>Feed Grade</td>
<td>Meal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.24</td>
<td>8.24</td>
<td>8.24</td>
<td></td>
</tr>
<tr>
<td>Organic Wheat</td>
<td>Feed Grade HRS</td>
<td>Feed Grade HRS</td>
<td>Feed Grade SRW</td>
<td>Feed Grade HRS</td>
</tr>
<tr>
<td></td>
<td>30.75</td>
<td>30.75</td>
<td>30.75</td>
<td>30.75</td>
</tr>
<tr>
<td>Feed Grade HRS</td>
<td>Feed Grade HRS</td>
<td>Feed Grade SRW</td>
<td>Feed Grade HRS</td>
<td>Feed Grade HRS</td>
</tr>
<tr>
<td></td>
<td>11.25</td>
<td>11.25</td>
<td>11.25</td>
<td>11.25</td>
</tr>
</tbody>
</table>

---

**Real Food Cookbook**

Minneapolis-based Birchwood Cafe just published its first-ever cookbook, a collaboration with the University of Minnesota Press. The book includes recipes for the café’s signature “good real food” and profiles of the restaurant’s farmers/suppliers. MOSES Organic Farmer of the Year Greg Reynolds is one of the featured farmers. The book is available through the MOSES Bookstore (mosesorganic.net).

**Farm Law Resources**

Farm Commons has released a new series of farm law guides: Farm Employment Law; Financing a Farmland Purchase; Managing the Sustainable Farm’s Risks with Insurance; and, Building Strong, Legally Enforceable Sales Agreements. The free guides utilize a variety of methods from checklists to narratives to clarify the laws that affect farmers and landowners. See farmcommons.org/resources.

---

**Training for Minorties, Immigrants**

Minnesota Food Association is currently accepting 2016 season applications for its Big River Farms Training Program. The program serves immigrants, minorities, and individuals from other historically under-represented backgrounds who are interested in organic farming as a business. The association will hold an information session from 6 to 8 p.m. Tuesday, Nov. 17 at the Hmong American Partnership Paj Ntaub Center, 1075 Arcade Street in St. Paul. Training program staff will answer questions and 2016 applications will be available. RSVP to laura@mnfoodassociation.org or call 651-433-3676. Find more program details at www.mnfoodassociation.org/farmer-training-program.

---

**EQIP for Bees, Organic Practices**

Farmers and landowners in Michigan, Minnesota, Montana, North Dakota, South Dakota and Wisconsin can apply for Environmental Qualit y Incentives Program (EQIP) funding to make bee-friendly conservation improvements to their land, such as planting cover crops, wildflow ers or native grasses and improving management of grazing lands. The Natural Resources Conservation Service (NRCS) accepts EQIP applications on a continuous basis. Contact your local USDA service center.

Another NRCS program, the EQIP Organic Initiative, provides funds to organic and transitioning producers for conservation plans, buffer zones, pollinator habitat, irrigation efficiency, nutrient management, cover crops, and other conservation practices.

---

*“After using one for a year I will never farm again without it.”*  
-H. Eichelkraut, Jr., Belleville, WI

*Call for detailed documentation*  
www.shadehaven.net

Learn more about the benefits of mobile shade  
Call 1-855-247-4233 today
Like new Willisie hydro weeder. Used between 10-15 hours. Excellent shape. Asking $4000.obo. If interested and want pictures contact Shawn at 715-797-2719 or email info@cyproduce.com.

2 row Univiro eco weeder, 4 row carousel mechanical transplanter, 2 row John Deere potato digger: Glen, 633-379-3951 or gitsfresh@gmail.com.

For Sale: Buffalo planters and cultivators, new and used, 320-221-2266.

Get ready for spring!! 4 row Buffalo planter for sale. Completely rebuilt, shodded, with milo, corn, bean cups, residue separators, ridge-till attachments, markers. $3500. Call Lee at 785-738-8368.

David Bradley Fanning Mill. Cleaned and ready to go with new pans and shoots. Motorized and comes with several screens. $500. Call Ben at 920-418-3388.

Hiniker 6000 heavy duty 6-row cultivator, $4,500 or best offer. David Trickey, 217-491-3911.

**FORAGE**


Organic Certified (wheat) Straw 300 large square bale 2015, $100/ton plus shipping. Located near Thief River Falls MN. Thomas Silbernagel, 715-937-0328.

FOR SALE: MOSA CERTIFIED HAY & STRAW, WE HAVE 4X4 BALEAGE, INDIVIDUALLY WRAPPED. SMALL SQUARE BALES FROM 2ND & 3RD CROP. ALL NO RAIN, PLUS 4X5 NET WRAPPED ROUND BALES. HAVE 4X5 NET WRAPPED STRAW & SMALL SQUARE BALES 875-897-5572.

Organic rye and barley straw. I have 1500 bale winter rye $10.00/bu and 700 bale barley $.99/bu germination tested. Also 300 large square bales of straw. 608-732-3807.


**FARM/LAND**

Farm For Sale, Northfield, MN. 126 Acres of certified organic farmland with full set of bldgs and greenhouses. Well maintained farmhouse. New septic. Two wells. MLS #4599644 kubesrealty@kubesrealty.com, 952-445-9110.

Own & operate a Certified Organic Vegetable Farm w/40 Ac, Home, Commercial Kitchen, Packing Shed, Barn, 3 Hoop Houses, Greenhouse & 11Ac w/11 pc fence. Susan @ Heartland Realty 612-339-5537, $350,000.

**GRAINS**

We buy organic: corn, wheat, soybeans. Delivered to: Cromwell, IN. Contact: John 414-704-1344, jbrunnquell@egginnovations.com.

Organic rye and barley straw. I have 1500 bu winter rye 51.00/bu and 700 bu barley $.99/bu germination tested. Also 300 large square bales of straw. 608-732-3807.

For Sale: One semi load of MCI Certified Organic Barley/Field Pea grain mix. Ryan, batalden77@yahoo.com, 507-220-1036.

Organic Barley- Pea grain and Organic Barley- pea round bales of straw. 763-662-1389.

**OPPORTUNITIES**

Internship available for 2016 season on berry farm for interested single or family. Please contact The Honeyberry Farm, PO Box 512, Bagley, MN 56621, tel. 218-694-3071, info@honeyberryusa.com, www.honeyberryusa.com.

**GRAINS**

**GRASS**

**FARM/LAND**

**FORAGE**


Organic Certified (wheat) Straw 300 large square bale 2015, $100/ton plus shipping. Located near Thief River Falls MN. Thomas Silbernagel, 715-937-0328.

FOR SALE: MOSA CERTIFIED HAY & STRAW, WE HAVE 4X4 BALEAGE, INDIVIDUALLY WRAPPED. SMALL SQUARE BALES FROM 2ND & 3RD CROP. ALL NO RAIN, PLUS 4X5 NET WRAPPED ROUND BALES. HAVE 4X5 NET WRAPPED STRAW & SMALL SQUARE BALES 875-897-5572.

Organic rye and barley straw. I have 1500 bale winter rye $10.00/bu and 700 bale barley $.99/bu germination tested. Also 300 large square bales of straw. 608-732-3807.


**FORAGE**


Organic Certified (wheat) Straw 300 large square bale 2015, $100/ton plus shipping. Located near Thief River Falls MN. Thomas Silbernagel, 715-937-0328.

FOR SALE: MOSA CERTIFIED HAY & STRAW, WE HAVE 4X4 BALEAGE, INDIVIDUALLY WRAPPED. SMALL SQUARE BALES FROM 2ND & 3RD CROP. ALL NO RAIN, PLUS 4X5 NET WRAPPED ROUND BALES. HAVE 4X5 NET WRAPPED STRAW & SMALL SQUARE BALES 875-897-5572.

Organic rye and barley straw. I have 1500 bale winter rye $10.00/bu and 700 bale barley $.99/bu germination tested. Also 300 large square bales of straw. 608-732-3807.


Heifer organic hay. RFV 100-140, medium squares and tarped. Call or txt for pricing. Also barley and wheat. 218-790-0236, Lee Thomas, Moorhead MN.

Organic Dry Hay: Alfalfa/clover/grass mix. Tight 4X5 square bales, net wrapped. NO RAIN. Supreme 1st and 2nd crops. Six lots- all FORAGE ANALYZED with great results. Approx 500 ton total. Delivery in WI can be arranged. 715-473-2154 (message line) medow@medowfarmsorganic.com.

Very good quality certified organic hay available in dry 3 x 3 x 8 large squares, small squares and baleage in 3 x 3 x 5 1/2 individually well-wrapped bales. 920-427-6663.

For Sale: Organic hay, 4 x 5 round dry and wet wrapped bales, legume/grass mix, 1st, 2nd and 3rd crops, $45/bale. Dave Minar, New Prague, MN, 952-212-9506 or daveandflo@cedarsummit.com.

Organic Barley-Pea grain and Organic Barley- pea round bales of straw. 763-662-1389.

**FORAGE**


Organic Certified (wheat) Straw 300 large square bale 2015, $100/ton plus shipping. Located near Thief River Falls MN. Thomas Silbernagel, 715-937-0328.

FOR SALE: MOSA CERTIFIED HAY & STRAW, WE HAVE 4X4 BALEAGE, INDIVIDUALLY WRAPPED. SMALL SQUARE BALES FROM 2ND & 3RD CROP. ALL NO RAIN, PLUS 4X5 NET WRAPPED ROUND BALES. HAVE 4X5 NET WRAPPED STRAW & SMALL SQUARE BALES 875-897-5572.

Organic rye and barley straw. I have 1500 bale winter rye $10.00/bu and 700 bale barley $.99/bu germination tested. Also 300 large square bales of straw. 608-732-3807.


Heifer organic hay. RFV 100-140, medium squares and tarped. Call or txt for pricing. Also barley and wheat. 218-790-0236, Lee Thomas, Moorhead MN.

Organic Dry Hay: Alfalfa/clover/grass mix. Tight 4X5 square bales, net wrapped. NO RAIN. Supreme 1st and 2nd crops. Six lots- all FORAGE ANALYZED with great results. Approx 500 ton total. Delivery in WI can be arranged. 715-473-2154 (message line) medow@medowfarmsorganic.com.

Very good quality certified organic hay available in dry 3 x 3 x 8 large squares, small squares and baleage in 3 x 3 x 5 1/2 individually well-wrapped bales. 920-427-6663.

For Sale: Organic hay, 4 x 5 round dry and wet wrapped bales, legume/grass mix, 1st, 2nd and 3rd crops, $45/bale. Dave Minar, New Prague, MN, 952-212-9506 or daveandflo@cedarsummit.com.
The workshop is designed to alleviate some confusion about organic certification and transition process. Topics include the pros and cons of high stock density grazing, methods to monitor success, winter grazing and improving soil health for increased forage production. Learn more and register by contacting Dana Didickson at (218) 689-1480. * $50 for NWSA members

Farminar: Grazing Management for Grass-Finishing Cattle
Nov. 21 | 8 a.m.-10:30 a.m. | Free | Online
Practical Farmers of Iowa present this interactive webinar. Ryan and Kristine Jepson of Grass Run Farms are interviewed by crop farmer and cattleman Daniel Sheetz who is in the process of transitioning his operation to organic and grass-fed. Topics covered revolve around the importance of meeting the nutritional needs of cattle at each stage of life and knowing grain costs.

bit.ly/Farminars

Grazing Management Workshop
Nov. 21 | 8 a.m.-10:30 a.m. | $30* | Thief River Falls, Minn.
The Northwestern Stockmen’s Association (NWSA) hosts this winter workshop featuring Neil Dennis and Gene Goven on improving profits through grazing management. Topics include the pros and cons of high stock density grazing, methods to monitor success, winter grazing and improving soil health for increased forage production. Learn more and register by contacting Dana Didickson at (218) 689-1480. * $50 for NWSA members

communicaTIon CAleNDaR
Find more under Events tab mOsesorganIc.org

The Haney Soil Test and Nutrient Turnover
Dec. 10 | 8 a.m.-3 p.m. | Free | Online
Practical Farmers of Iowa present Sarah Hargreaves and Farminar: The Haney Soil Test and Nutrient Turnover. It can be difficult to decide on the actions to take when reviewing soil tests results without proper context or interpretation. The Haney Test takes a novel approach to determine individualized technical support, an action plan for net land stewardship project. Participants walk away with the Land Stewardship Project offers tools and problem-solving conversations for families planning to transfer their farm to the next generation of operators. The workshop focuses on short and long term goals, solving conversations for families planning to transfer their farm to the next generation of operators. The two share their stories and lessons of beginning farmers. It is offered by the Michael Fields Agricultural Institute. bit.ly/1PT9Q27

Farminar: The Haney Soil Test and Nutrient Turnover
Dec. 1 | Free | Morris, Minn.
Dec. 2 | Free | Lamberton, Minn.
Dec. 3 | Free | Rochester, Minn.
University of Minnesota Extension offers a workshop for grain and forage crop producers seeking more information about organic certification and transition process. The workshop is designed to alleviate some confusion offer answers while giving attendees additional resources for the future. Learn more by contacting Jill Sackett at sacket032@umn.edu or 507-389-5541.

Succession Planning: Building Your Blueprint for a Successful Farm Transition
Dec. 9 | 9 a.m.-12 p.m. | Free | Online
PFI present Andy Lenssen, researcher and professor at Iowa State University, and Nathan Anderson, forage and beef producer, in this interactive webinar. The two share research delving into 16 fall-seeded cover crops following a soybean harvest. They also share experiences growing small grains and mustards into the fall. bit.ly/Farminars

CommunicaTIon CAleNDaR
Find more under Events tab mOsesorganIc.org

Farminar: Alternatives to Cereal Rye and the Benefits of Grazing Covers
Dec. 8 | 7-8:30 p.m. | Free | Online
PFI present Andy Lenssen, researcher and professor at Iowa State University, and Nathan Anderson, forage and beef producer, in this interactive webinar. The two share experiences growing cover crops beyond rye and share research delving into 16 fall-seeded cover crops following a soybean harvest. They also share experiences growing small grains and mustards into the fall. bit.ly/Farminars

Great Lakes Fruit, Vegetable and Farm Market Expo
Organic Day is on Thursday at the Great Lakes Fruit, Vegetable and Farm Market Expo (GLFEXPO). Michigan's biggest conference and trade show for farmers offers educational sessions all three days. glexpo.com

Farminar: A Simple Recordkeeping System for Fruit and Vegetable Production
Dec. 13 | 7-8:30 p.m. | Free | Online
Practical Farmers of Iowa present Rick and Stacy Hartman of Small Potatoes Farm and Daniel Helted, a produce farmer near Johnston, Iowa, in this interactive webinar. Rick shares how he and Stacy manage produce and financial record-keeping and how this data impacts decisions made for their farm and family. Daniel will ask questions and be advised by Rick on how to begin record-keeping for his farm. bit.ly/Farminars

Roots and Roles of Community Land Trusts
Dec. 16 | 6 p.m. | Free | Madison, Wis.
Greg Rosenburg, Principal of Rosenberg and Associates discusses the history, current positioning, and value of the land trust model. bit.ly/1LEIOYp

Transplanting to Organic Grains
Jan. 12 | 8 a.m.-4 p.m. | $49 | Clinton, Iowa
The Land Connection presents this organic field crop production and marketing seminar devoted to grains. Experts will focus on selecting ideal alternative grains, crop plans for soil fertility and pest management, and navigate organic transition and certification. bit.ly/1Sj5Cze

Wis. Local Food Summit: Digging into Local Food
Jan. 14-15 | $ | Sheboygan, Wis.
Hosted by the Wisconsin Local Food Network, celebrate and learn about the Local Food System Development with breakout sessions, workshops, presentations, and Sheboygan-based farm and faculty tours. Keynote speaker, Wiona LaDuke, examines how local food systems strengthen communities. bit.ly/1IP04Ya

Flower Farming
Jan. 23 | 9 a.m.-12 p.m. | $40 | East Troy, Wis.
Join Andrea Clemens of Lovelight Flowers and the Michigan Fields Agricultural Institute for a day of learning about flowers. michaelfields.org/events/flower-farming

Whole Farm Management
Jan. 30 | 10 a.m.-2 p.m. | Free | East Troy, Wis.

High Tunnels and Hoophouse Management
Feb. 1 | 9 a.m.-12 p.m. | $40 | East Troy, Wis.
Peter Seely of Springdale Farm shares his knowledge of season extension structure management with support from the Michael Fields Agricultural Institute. bit.ly/1H766S