

# The Land Stewardship



LAND  
STEWARDSHIP  
PROJECT

35 Years of Keeping the Land & People Together

## Letter

Volume 35

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Number 4, 2017



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  - ‘Our Farm Bill’ Goes to Washington*—
  - A New Vision for Our Communities*—
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All inquiries pertaining to the content of the *Land Stewardship Letter* should be addressed to the editor, Brian DeVore, 821 East 35<sup>th</sup> Street, Suite 200, Minneapolis, MN 55407-2102; phone: 612-722-6377; e-mail: bdevore@landstewardshipproject.org.

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#### STAFF

##### Southeastern Minnesota

180 E. Main St., P.O. Box 130, Lewiston,  
MN 55952; phone: 507-523-3366; fax: 2729;  
e-mail: karenb@landstewardshipproject.org  
Karen Benson, Dori Eder, Sarah Fillius,  
Doug Nopar, Johanna Rupprecht,  
Shona Snater, Karen Stettler

##### Western Minnesota

117 South 1<sup>st</sup> Street, Montevideo, MN 56265;  
phone: 320-269-2105; fax: 2190;  
e-mail: lspwest@landstewardshipproject.org  
Amy Bacigalupo, Scott DeMuth,  
Robin Moore, Nick Olson,  
Bryan Simon, Terry VanDerPol

##### Twin Cities/Policy

821 East 35<sup>th</sup> St., Suite 200  
Minneapolis, MN 55407;  
phone: 612-722-6377; fax: 6474;  
e-mail: info@landstewardshipproject.org  
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## Quick Wits, Grit, Guns 'N Roses

### Lou Anne Kling's Legacy of Saved Farms & Saved Lives

By Brian DeVore

One day several years ago, western Minnesota farmer Lou Anne Kling was helping a financially-distressed chicken producer who was at risk of losing his operation. This was sometime in the 1980s or 1990s, and Kling had already spent countless hours on the telephone, in the car, in rural government offices and at her own kitchen table helping farmers who were threatened with foreclosure, often as a result of incompetent, and sometimes illegal, actions on the part of the federal government's Farmers Home Administration (FmHA), which at the time provided loans to farmers and other rural residents. Kling had a reputation for being a tough, no-nonsense negotiator and fighter for the rights of farmers, one who often knew regulations as they pertained to agricultural lending better than the government's own experts.

But on this particular day, Kling was in a bit of a panic. She knew something wasn't fair about this particular case, but she just couldn't put her finger on it. So, she called a friend of hers, Jim Massey, an attorney who was key in founding Farmers' Legal Action Group (FLAG), a nonprofit law center that provides legal services to family farmers. Massey told Kling that if the poultry firm the farmer was raising chickens for owned the birds, then the company had a fiduciary responsibility to make sure the farmer was financially successful.

"I didn't even graduate from high school—I'd never heard the word 'fiduciary,'" recalled Kling several years later while sitting at the kitchen table of she and her husband Wayne's farmhouse outside Granite Falls. "So, as we were driving along, I kept saying to myself 'fi-du-ci-ary.' I had to get that word in my head. I felt like a lawyer saying, 'You have a fiduciary responsibility.' Apparently, that word has some power, because it worked."

That story, in a nutshell, describes why Kling was so effective at helping save family farms: she wasn't intimidated by government officials or corporate lawyers, knew

when to ask for help, and could think fast on her feet. And she really, really cared for people, especially family farmers.

"I like people and I have a sympathy for people who are hurting," she told me on a rainy autumn afternoon in the midst of harvest season. I feel fortunate to have had this conversation with Lou Anne. She died a few months later at age 77, leaving behind



**"You see someone hurting or someone needing help, and you gotta go there,"** said Lou Anne Kling. (LSP Photo)

a four-decade legacy of activism and public service. When reporting Lou Anne's passing in the last issue of the *Land Stewardship Letter*, we wrote that she had saved "perhaps thousands" of family farms. Upon further review, it's no exaggeration that directly and indirectly, Kling's actions resulted in at least 10,000 Minnesota family farms not going under in the 1980s, 1990s and 2000s.

She did this by discovering that the FmHA was not informing farmers of their legal options to stay in business. While digging through regulations and files, she also figured out FmHA staffers in rural offices were not even following basic guidelines, putting farmers in such severe dire straits financially that some took their own lives (the FmHA was rolled into the Farm Service Agency in 1994). Kling and veteran farm activist Anne Kanten went on to launch the Farm Advocates Program, a Minnesota Department of Agriculture initiative which provides one-on-one assistance to farmers who face crisis situations caused by financial

problems and natural disasters. The program ([www.mda.state.mn.us/about/commissionersoffice/farmadvocates.aspx](http://www.mda.state.mn.us/about/commissionersoffice/farmadvocates.aspx)) has become a model for similar initiatives in other states, as well as internationally.

Kling later spent a short time as the state director of Minnesota FmHA's office and for eight years was in Washington, D.C., under the Clinton Administration, where, among other things she developed a Farm Service Agency outreach program focused on minority farmers and ranchers. Lou Anne was particularly proud that while in Washington she was able to set up an Advocacy Program for Native American tribes and that she helped change the law so that when reservation land was foreclosed on, it couldn't be sold outside the tribe.

Over the years, Lou Anne worked with numerous Land Stewardship Project members and staff. In particular, she and LSP organizer Paul Sobocinski were deeply involved with the family farm advocacy group Groundswell. More recently, she served as a "transitions coach" for families LSP was working with who were transferring their farms to the next generation. Overall, the kind of activism people like Kling participated in served as an inspiration for LSP's grassroots organizing efforts to develop leaders in rural communities through neighbor-to-neighbor connections.

Nearly to the end of her life, Lou Anne was fighting for the survival of family farms. When I sat down to talk to her, she was working with a Wisconsin dairy farmer who was having problems with the Farm Service Agency. She was almost giddy over the fact that this work had prompted a member of Congress to get involved, and that while working on this case she had come across some helpful regulatory language that had somehow been overlooked previously.

"After all these years, why had I not seen this regulation? I was just dumbfounded when I read it," Lou Anne said.

Despite her failing health, Kling spent over three and a half hours talking to me about the 1980s "farm crisis," government policy, her own struggles and what gives her hope. In fact, as the conversation stretched toward late afternoon, she seemed to actually become increasingly energized. Here are a few highlights of that discussion:

#### Public Actions-Private Talks

Lou Anne believed in cutting through the rhetoric, and getting at the heart of what the problem was. She also learned early that public actions can prompt people to share

Lou Anne Kling, see page 4...

private problems and concerns.

On July 4, 1980, she and Wayne plowed down an acre of small grains on their farm in front of the media to make a point: with grain prices where they were, they were better off financially destroying the crop than trying to sell it for rock bottom prices. The “plow-down” gained national media attention and helped publicize the plight of farmers as a result of government policy and corporate control of the markets.

But just as importantly, Kling was suddenly seen as a leader locally and regionally in a budding movement to fight against the demise of the family farmer. Soon, a local farmer approached her quietly to talk about his financial problems as a result of a loan the FmHA was calling in.

“I said, ‘I don’t know FmHA rules, but it doesn’t sound right to me.’” she recalled. “So, I drove up to the local FmHA office and the loan officer had gone home for dinner and the secretary said, ‘I’m probably not supposed to do this, but I can let you look at the file.’ So, she laid that file out in front of me. Inside I found the banker’s letter and all these other letters. I found a copy of the check. I found a copy of the endorsement. I found all this stuff. ‘Well,’ I thought, ‘there’s a little hay to make here and I used that material to make a case.’ That loan officer did not dare move on the farmer after that.”

As Lou Anne puts it, things “snowballed” from there after that, and she ended up helping countless farmers in a similar fashion.

## Overcoming Obstacles

Lou Anne left high school without a diploma, got married at 17 and had five children before a divorce. She remarried and had two more children with Wayne. She said she regretted not finishing high school, and that’s why she always pushed her children so hard to get as much education as possible.

But she never felt a lack of schooling held her back, even when she was in Washington, D.C., surrounded by officials that were walking around with impressive academic and professional credentials. Kling claimed she wasn’t good at math but learned how to decipher complicated financial statements. She also seemed to have a natural knack for reading through the densest regulatory language and interpreting it. Lou Anne had something that compensated for her lack of fancy diplomas: a passion for helping people get a fair shake.

“My sympathy for people comes from the help I was shown when I was trying to get out of that awful marriage. My daughter gave me a card, and it said, ‘From where

you came, to where you’ve gone, is remarkable.’ And so, I think that had a lot to do with what drove me—you see someone hurting or someone needing help, and you gotta go there.”

## Teaching Anyone About Ag

Kling had always felt that the general public didn’t know enough about the critical role family farmers play in our communities and the economy. That’s why she believed in undertaking actions that would get the media’s attention, like the July 4 “plow-down.”

In 1985, her ability to explain the ins and outs of agriculture was put to a real test. That year, musician Willie Nelson held his first Farm Aid concert in Champaign, Ill., to raise funds for initiatives that supported family farmers (initial funding for FLAG came out of that concert). Prior to the event, Lou Anne and others rode on a train with Nelson from Sioux City, Iowa, to Champaign. She later gave a press conference with one of the groups performing at the concert: the rock band Guns ‘N Roses.

“I had to explain to them all this farm stuff and what to say, and then I appeared with them,” she recalled with a laugh. “They were really good listeners.”

## Pushing the Pencil

Kling said that no matter what the circumstances—helping farmers negotiate with government loan officers, giving advice to a neighbor or coaching families that were transitioning to the next generation—one thing always remained crystal clear to her: the value of good record keeping. Kling said she had repeatedly seen the benefits of writing things down and tracking expenses and income, especially when financial difficulties began to emerge.

“It goes back to my grandpa. I found his old box of receipts—it was just little folded up pieces of paper,” she said. “Bad record keeping is a huge problem because farmers just want to farm, and not write anything down. Farmers get a little upset with me when I say that, but it’s true. That’s why it’s important programs like LSP’s Farm Beginnings got started. Somebody’s got to teach them this stuff—I don’t have time!”

## What Gives Her Hope

Kling said she wouldn’t have worked so hard to help family farmers if she didn’t still see opportunities in agriculture. The increasing control of our food system by corporations is troubling, she said. But she sees hopeful signs that more non-farmers are realizing that supporting more family farmers on the land is important for the land and communities, as well as our food system.

“A lot of the stuff Land Stewardship is doing is hopeful—preserving the lands and helping small farmers get started and educating everybody in alternatives,” she said. “People are becoming a lot more aware of the land and that we can’t keep abusing it.”

## 2 Lives Saved in One Night

Kling was the first to admit that her passion for saving family farms took a toll. Before the Advocacy Program was made a part of the Minnesota Department of Agriculture, she was traveling around helping farmers pretty much on her own dime—a significant burden for her and Wayne since their farm was also being impacted by the bad agricultural economy. It also exacted a physical and emotional price.

“It was so much emotion,” she recalled of those meetings in farmhouse kitchens and government offices. “My first heart trouble was from that because I lived on cigarettes, Coke and hamburgers. I didn’t have time to stop and eat.”

But she had few regrets, especially given that there were times those sacrifices literally saved lives. Once Kling was meeting with a financially troubled couple in her home. The husband was crying, and was so upset that he was wondering out loud if things would be easier if he no longer was alive.

As if things weren’t stressful enough, the telephone rang. It was a neighboring farmer Lou Anne had helped out of a bind in the past. He was struggling again, and wanted to thank Kling for her past help. But, he said, he couldn’t fight anymore. He was going to take his own life that evening. She had seen enough farmers follow through on threats to know such talk couldn’t be taken lightly. While Lou Anne kept the distraught farmer on the telephone telling him why life was worth living, she wrote a note to Wayne telling him to go to the farmer’s house and take the local pastor with him.

“And I kept him on the telephone as long as I could, and he finally said, ‘Now I know why you’re talking so much—your damned husband just showed up,’” recalled Lou Anne. “And so, I turned back to this couple in my house, and the guy’s smiling. And he said, ‘I knew I was here for a reason. I heard your conversation and of course that’s me. I’m not that stupid that I’m going to die.’ He went the next day and sat down with his banker. He got everything worked out. They’re still farming.” □

*Brian DeVore is the editor of the Land Stewardship Letter. Lou Anne Kling is featured in the recent Farm Aid documentary Homeplace Under Fire ([www.homeplaceunderfire.org](http://www.homeplaceunderfire.org)).*



# Myth Buster Box

## An Ongoing Series on Ag Myths & Ways of Deflating Them

### → Myth: The Land Will Quickly Become Carbon Saturated

#### → Fact:

Since agriculture began on this planet, cultivation has destroyed at least half of the carbon we have in our soils. This is the result of the breakdown and loss of organic matter, the energy-rich portion of the soil profile that's made up of plant and animal residue, along with the tissues of living and dead microorganisms. Organic matter is made up of about 58 percent carbon, so for every percentage decrease in organic matter, there is a corresponding loss of carbon. Unbroken prairie soils can have as much as 10 percent to 15 percent organic matter. But because of intensive tillage, Midwestern soil organic matter levels have plummeted to below 2 percent, in many cases.

Why is this important? The presence of soil organic matter/carbon plays a critical role in everything from the ability of soils to manage water to the biological activities that create long-term fertility. Soil high in organic matter is also less erosive. In recent years, scientists have been paying attention to the loss of soil carbon for another reason: it is a major cause of climate change. Soil organic carbon can sequester carbon dioxide, a potent greenhouse gas, through the action of plant photosynthesis. One estimate is that 5 percent to 15 percent of our annual greenhouse gas emissions could be sequestered by farming methods that build, rather than destroy, organic matter. That upper level of sequestration could be enough to head off climate catastrophe, say researchers. It's important to note that, as a strategy for addressing climate change, sequestering carbon in our soil cannot replace reduction of greenhouse gas emissions through conservation and the use of alternative energy. But without carbon sequestration, we will never reach the goals scientists say we must meet if we are to maintain a sustainable climate situation.

And as the Land Stewardship Project describes in its publication, *Soil Health, Water & Climate Change: A Pocket Guide to What You Need to Know*, farmers and researchers are already showing that soil organic carbon can be increased in a matter of a few short years. Scientists had long main-

tained that such a change in a soil's makeup would take decades, or even longer.

But some experts have expressed concern that even if we adopt climate smart farming practices on a wide scale basis, the ability of the land to sequester carbon is relatively limited. Our topsoil will become quickly saturated with carbon and be unable to absorb more.

However, if one thing is certain in today's fast changing world of soil health research, it's that the science is constantly shifting beneath our feet, so to speak. For example, papers published this fall in the journals *Biogeochemistry Letters* and the *Annual Review of Ecology, Evolution, and Systematics* indicate that the terrestrial Earth has much greater capacity to store carbon than we thought. In fact, concludes this research, the Earth's soils hold about three times the carbon currently in the atmosphere—a decade ago the estimate was that soil held twice the amount of carbon that the atmosphere does.

Why is the estimated size of that carbon pool growing? It's because scientists are increasingly looking beyond the first couple feet of topsoil. It was long thought that the majority of the carbon was present basically in that zone we directly till to produce crops.

This recent research shows that the Earth can stow away carbon far deeper than we ever thought. Carbon sequestration research conducted in Australia at depths of nearly 130 feet shows that we may have just barely tapped the potential for storing greenhouse gases deep underground. That's like coming home from the store with too much food to fit in your kitchen cupboards and then discovering an extra pantry in the basement.

There's more good news: carbon found beyond the one-foot mark tends to form stronger chemical bonds than it does when found in the topsoil. That, in effect, makes it much more stable and resistant to being broken down and released. Just because it's below the layer of topsoil we normally interact with via land use practices such as farming, doesn't mean we can't have an impact on that deeper carbon storage pool. Scientists say plants that suck greenhouse gases out of the atmosphere via photosynthesis and have roots that extend several feet through the soil profile play a role in sequestering carbon deep beneath topsoil. In fact, the *Annual Review of*

*Ecology, Evolution, and Systematics* paper reported that roots are approximately five times more likely than an equivalent mass of litter—leaves, dead vegetation, etc.—to turn into soil organic matter. When one considers that prairie roots can extend anywhere from eight to 14 feet below the surface, the potential for soil organic matter development in grasslands is astounding.

That's why it's so important to keep living roots in the soil 365-days-a-year through the use of continuous living cover like pasture grasses and cover crops. Another paper published this fall in the journal *Global Change Biology* identified the critical role farming methods that rely on well-managed grasslands, cover crops, no-till and diverse rotations can play in sequestering carbon. Farmers are finding that they can raise organic matter levels significantly in three to 10 years. In fact, a 2015 paper published in *Nature Communications* reported managed rotational grazing of dairy cattle raised carbon amounts in formerly row-cropped fields to levels normally found in native forest soils.

Such research results reinforce the critical need to keep pushing the envelope when it comes to researching soil health, an area where new discoveries are constantly emerging from farm fields and test plots. As the saying goes, we are constantly learning just how little we really know.

#### More Information

- “Depth Trends of Soil Organic Matter C:N and 15N Natural Abundance Controlled by Association with Minerals” is in *Biogeochemistry Letters*, [www.springer.com](http://www.springer.com).

- “The Ecology of Soil Carbon: Pools, Vulnerabilities, and Biotic and Abiotic Controls” is in the *Annual Review of Ecology, Evolution, and Systematics*, [www.annualreviews.org/journal/ecolsys](http://www.annualreviews.org/journal/ecolsys).

- “Emerging Land Use Practices Rapidly Increase Soil Organic Matter” is in the publication *Nature Communications*, [www.nature.com/articles/ncomms7995](http://www.nature.com/articles/ncomms7995).

- For more on LSP's new pocket guide, *Soil Health, Water & Climate Change*, see page 15.

## LSP Delegates Headed to Mexico in 2018

The Land Stewardship Project is inviting members to participate in an LSP-Witness for Peace delegation to Oaxaca, Mexico, February 4-13. This will be the second LSP-Witness for Peace trip to the region.

Mexico has been the target of major foreign investment and transnational corporations since the North American Free Trade Agreement (NAFTA) went into effect in 1994, and more recently since constitutional reforms in that country were passed in 2014. This has had a devastating effect on the Mexican countryside. As the LSP delegation witnessed firsthand in March 2016, small farmers' holdings are targeted for purchase for industrial agriculture use or tourist development, support for small farms is almost non-existent, communal lands are up for sale, and mega-projects have proliferated, polluting the land and off-shoring the profits. U.S. foreign policy plays a big role in this story through trade agreements, militarization and the lack of insistence on human rights improvements.

LSP members participating in the 2018 delegation to Mexico will investigate firsthand the effects of NAFTA over the past two decades, particularly on Mexican small farmers and communities. Trip participants

will stay in a community with high rates of out-migration and learn about the effects on family, community life and farming. They will also meet with Mexican farmers working on reforestation efforts, protection of native crops and promotion of local markets and food consumption. This is an opportunity to compare the impacts of large-scale farming in Mexico and the U.S. while strengthening a global grassroots movement for sustainability, food sovereignty, migrant rights and land rights.

For more information or to register for the delegation, see [www.landstewardship-project.org/events/item/1117](http://www.landstewardship-project.org/events/item/1117). Details are also available by contacting LSP's Aaron Blyth at 651-253-7268 or [ablyth@landstewardshipproject.org](mailto:ablyth@landstewardshipproject.org). □

### Give it a Listen

On episode 184 of the Land Stewardship Project's *Ear to the Ground* podcast, participants in the 2016 LSP-Witness for Peace trip to Mexico talk about how farmers and other rural residents in that country are using their connections to the land to fight the corporate takeover of agriculture: [www.landstewardshipproject.org/posts/podcast/883](http://www.landstewardshipproject.org/posts/podcast/883).



Participants in the 2016 LSP-Witness for Peace trip to Mexico saw firsthand how farmers are using innovative production and marketing efforts to preserve the economic, environmental and social health of their communities. (Photo by Eric Nelson)

## Bruce Bacon: 1940-2017 Ralph Lentz: 1929-2017

Two pioneers in Minnesota's sustainable agriculture movement passed away this fall.

**Bruce Bacon** died Oct. 3 at Garden Farme, in Ramsey, Minn. He was 76. After attending college, Bacon returned to his family's land in 1970, and began slowly rebuilding the soil, which had previously been used to raise corn and other crops. Over the years, the 90-acre farm became known for its innovative methods of producing fruit, vegetables, herbs, nuts, mushrooms and honey. Bacon sold his production to co-ops and restaurants, and helped prove there was a market available in the Twin Cities region for food raised utilizing sustainable methods. Garden Farme was using organic methods long before the term "organic" was commonly known. The farm was certified organic in 1977 and Bacon was an early promoter of building soil health utilizing various innovative methods.

He also hosted visitors and researchers interested in learning more about sustainable agriculture, and numerous beginning farmers got their start thanks to Bacon's internships. **Ralph Lentz** passed away Oct. 1 in Lake City, Minn. He was 88. Lentz was a pioneering grass-based livestock farmer, and over the years hosted numerous field days and research projects on his southeastern Minnesota beef operation. He also traveled as far away as Russia to share information about sustainable agriculture.

In the late 1980s and early 1990s, Lentz played a key role in founding the Sustainable Farming Association of Minnesota, a spin-off organization of the Land Stewardship Project. He was also a member of the influential Monitoring Project, an initiative coordinated by LSP that brought farmers, researchers and environmental experts together to develop ways of gauging the sustainability of grass-based farming methods. □



Bruce Bacon



Ralph Lentz



# Staff Changes at the Land Stewardship Project

**C**aroline van Schaik has left the Land Stewardship Project's staff after nearly two decades of working with farmers through various initiatives. Van Schaik joined LSP as an organizer in 1998, when she was hired to coordinate the Sustainable Farming Systems Project in the Sand Creek watershed near the Twin Cities. She also introduced on-farm monitoring and whole farm planning to farmers participating in the Green Corridor Project.



**Caroline van Schaik**

More recently, van Schaik's work was focused in southeastern Minnesota, where she coordinated initiatives related to getting more locally produced foods in school cafeterias, helping women landowners get conservation farming methods established and supporting farmers who were interested in establishing cover cropping, managed rotational grazing and other soil-friendly practices in the Root River watershed. Through that latter initiative, van Schaik spearheaded the use of the Haney Test for monitoring the impact various farming practices have on soil health.

Over the years, van Schaik organized dozens of field days and authored numerous publications, fact sheets and articles. She and her husband Christopher Iremonger, along with their daughter Emma, make their home on a farm near La Crescent in southeastern Minnesota.

**Katie Doody** has departed LSP's staff to move to the East Coast and be closer to her family. Since 2016, Doody has been a member of LSP's Policy and Organizing Program team, through which she has done community organizing around state policy and factory farm issues. Doody spent much of 2017 working with a group of farmers and other rural citizens in southeastern Minnesota's Goodhue County. They are



**Katie Doody**

fighting the construction of a 4,700-hog factory farm in their community (see the No. 3, 2017, Land Stewardship Letter, page 8).

**Sarah Fillius** has joined LSP's Bridge to Soil Health team. Fillius has a bachelor's degree in biology from Drake University and worked as a farm manager/apprentice instructor at Urbandale Farm in Michigan and as the CSA coordinator and education director at Philadelphia Community Farm in Wisconsin. She has also been an Outward Bound instructor, as well as an outdoor science teacher and field science instructor. In 2007, Fillius was named the "Educator of the Year" by the Association for Environmental and Outdoor Education. She farms with her family in Fillmore County, Minn.



**Sarah Fillius**

At LSP, Fillius is helping farmers in the southeastern Minnesota region monitor and adopt practices that build soil health profitably. She can be contacted in the Lewiston office at 507-523-3366 or [sfillius@landstewardshipproject.org](mailto:sfillius@landstewardshipproject.org). For more on LSP's soil health work, see page 12.

**Amanda Babcock** has joined LSP's Policy and Organizing Program team. Babcock has a bachelor's degree in environmental science from Bethel University. She has worked as the coordinator of the Conservation Leadership Corps of the Minnesota Conservation Federation, and was an outreach intern and volunteer coordinator for the Sierra Club.



**Amanda Babcock**

At LSP, Babcock focuses on state policy issues and is based in the organization's Twin Cities office. She can be contacted at [ababcock@landstewardshipproject.org](mailto:ababcock@landstewardshipproject.org) or 612-722-6377.

**Aaron Blyth** has been named the coordinator of LSP's U.S.-Mexico Solidarity Delegation to Oaxaca, Mexico, in February. Blyth has extensive produce farming experience, and from 2003-2004 he studied and

worked at the Center for Agroecology and Sustainable Food Systems at the University of California-Santa Cruz.

For six years, he was the farm manager at the Minnesota Food Association, where he ran a 200-member Community Supported Agriculture farm and helped train a diverse group of immigrant farmers in organic vegetable production.

Blyth is currently the general manager at Shared Ground Farmers' Cooperative (<https://sharedground-coop.com>), a Minnesota marketing co-op consisting of seven Latino-owned farms and one Anglo-owned operation. Shared Ground is working to provide direct access to local produce markets for Latino and immigrant farmers.



**Aaron Blyth**

For information on signing up to participate in the U.S.-Mexico Solidarity Delegation, see page 6. □

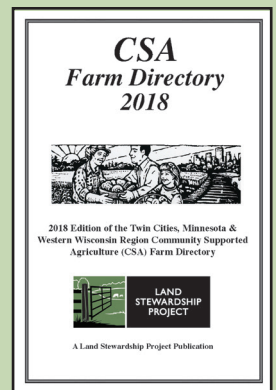
## CSA Farmers: Time to Sign-up for the Directory

If you are a Community Supported Agriculture (CSA) farmer operating in Minnesota or western Wisconsin, the Land Stewardship Project invites you to be listed in the 2018 edition of LSP's *Twin Cities, Minnesota & Western Wisconsin Region CSA Farm Directory*.

An online version of the *CSA Farm Directory* will be available by Feb. 1 at [www.landstewardshipproject.org/stewardshipfood/findingjustfood/csa](http://www.landstewardshipproject.org/stewardshipfood/findingjustfood/csa).

The deadline for submitting listings is Monday, Jan. 8. The listing fee is \$15 for LSP members and \$20 for non-members. There is a 250-word limit for listings.

For information on having your farm listed, contact LSP's Brian DeVore at [bdevore@landstewardshipproject.org](mailto:bdevore@landstewardshipproject.org) or 612-722-6377.



### Farm Bill 2018

## Beginning Farmer & Rancher Act Introduced

The Beginning Farmer and Rancher Opportunity Act (BFROA) of 2017 was introduced Nov. 8 by U.S. Representatives Tim Walz (D-MN) and Jeff Fortenberry (R-NE). Their bipartisan legislation is aimed at recruiting and supporting the next generation of American farmers.

“We must provide young Americans with the training and tools they need to take up and keep up farms of their own,” said Rep. Walz. “We need to do everything we can to promote access to land, help make credit readily available, and fund world-class research and education programs for the next generation of farmers.”

The introduction of the bill came a little over a week after members of the Land Stewardship Project met with Walz on the farm of LSP organizer Tom Nuessmeier in southern Minnesota’s Le Sueur County. The Congressman met with the farmers to discuss priorities for the 2018 Farm Bill, which he and other Congressional agriculture leaders are beginning to draft this fall. Throughout 2017, LSP members have been giving input to lawmakers about the need for a Farm Bill that supports family farmers, rural communities and stewardship of the land.

The BFROA lays out a national beginning farmer strategy that breaks down barriers to entry and gives support to the next generation. This legislation addresses the critical issues new and aspiring farmers face in accessing land, building skills, managing risk and investing in conservation.

The BFROA aims to build upon the policies championed by Walz and LSP in previous Farm Bills that have helped support innovative, community-based beginning farmer initiatives in dozens of communities across the U.S., including in Minnesota.

For example, the Farm Bill’s original Beginning Farmer and Rancher Development Program was modeled after the Farm Beginnings course, which was developed by LSP two decades ago (see page 19). The proposed Beginning Farmer and Rancher Opportunity Act creates dedicated fund-



LSP organizer Tom Nuessmeier described to Minnesota U.S. Rep. Tim Walz how he builds soil health on his Le Sueur County farm. (Photo by Ben Anderson)

ing for the Beginning Farmer and Rancher Development Program.

“There are so many barriers facing beginning farmers,” Betsy Allister, a Northfield, Minn., farmer and Farm Beginnings graduate, told Walz during his Le Sueur County farm visit. “LSP’s Farm Beginnings program helped us create a solid business plan and network with established farmers. Now we’ve been farming for eight years and we’re able to support our family without off-farm jobs. Plus, we love what we do. We need more farmers on the land, which means we need long-term dedicated funding for community-based programs like the Farm Beginnings course.”

The proposed legislation would also launch a national matched savings asset-building and financial training program for beginning farmers. LSP has implemented a similar matched savings account program for beginning farmers through its Journey-person Course.

“The matched savings account is a huge help for beginning farmers who want to build long-term financial viability,” Pete Skold, a beginning farmer from Webster, Minn., and a graduate of the Land Stewardship Project’s Journey-person Course, told Walz. “It allowed us to be able to save and buy a new mulch layer and planter for our vegetables without piling up debt.”

### Boosting Conservation

During the on-farm meeting, LSP members also discussed the need for federal programs that support farmers’ efforts to build soil health and establish various conservation practices. Such practices have positive impacts beyond the farm field, they said.

“Farmers need Farm Bill support to plant cover crops and put in place more diverse crop rotations that will build the health of their soil. By helping to keep our waters clean, healthy soil has environmental benefits for everyone in the state,” said Nuessmeier, who utilizes cover cropping and other methods on his crop and livestock operation near Le Sueur.

Rep. Walz agreed to work with the Land Stewardship Project in championing soil health by supporting working lands conservation initiatives like the Conservation Stewardship Program.

“Farmers are some of our best conservationists; it just makes good business sense,” he said. □

### ‘Our Farm Bill’ Message Goes to D.C.

In early November, Land Stewardship Project farmer-members, along with LSP staff, delivered over 1,000 postcards to lawmakers in Washington, D.C. The postcards were from residents in rural Minnesota and Wisconsin asking for a Farm Bill that supports the people and the land and stops funding factory farms. LSP was in D.C. as part of a fly-in with allied organizations that belong to the Campaign for Family Farms and the Environment: Iowa Citizens for Community Improvement, Missouri Rural Crisis Center, Dakota Rural Action, Food & Water Watch, and the Institute for Agriculture and Trade Policy.

Congressional agriculture leaders are currently working on drafting the 2018 Farm Bill. To read LSP’s position paper, “Our Farm Bill: A Farm Bill for the People & the Land,” see [www.landstewardshipproject.org/organizingforchange/federalpolicy](http://www.landstewardshipproject.org/organizingforchange/federalpolicy). To sign the “Our Farm Bill” petition, see [www.landstewardshipproject.org/farmbillpetition1017](http://www.landstewardshipproject.org/farmbillpetition1017).

For more information on LSP’s work related to federal policy, contact Ben Anderson at 612-722-6377 or [banderson@landstewardshipproject.org](mailto:banderson@landstewardshipproject.org), or Tom Nuessmeier at [tomn@landstewardshipproject.org](mailto:tomn@landstewardshipproject.org) or 507-995-3541.



# Winona County Frac Sand Ban Upheld by District Court

Minnesota District Court Judge Mary Leahy on Nov. 17 dismissed pro-frac sand interests' attempts to undo the precedent-setting Winona County frac sand ban. The judge ruled that the county acted fully within its authority in passing this ordinance to protect public health, safety and general welfare from industrial mining operations.

The Winona County Board of Commissioners voted in November 2016 to pass a ban on any new frac sand mining, processing, storage or transportation operations in the southeastern Minnesota county's jurisdiction. This step came after a 17-month grassroots organizing campaign by county residents calling for a ban, led by members of the Land Stewardship Project.

For years, Winona County has been heavily targeted by the oil, gas and frac sand industry's attempts to extract silica sand for use in hydraulic fracturing. Thousands of residents have opposed frac sand development due to its harmful impacts on the land, as well as on public health, safety and quality of life in local communities.

In June 2015, LSP members and supporters from across the county, many from neighborhoods that began fighting frac sand proposals several years earlier, set a goal of banning the industry outright, and began working to get Winona County to become the first county to do so. In March 2016, LSP released a legal analysis showing Minnesota law does not prevent imposing a total ban on frac sand mining, processing and transportation operations in Winona County. The analysis was written by attorney Leili Fatehi and documented why a ban on any new frac sand mining, processing and transportation operations was an appropriate policy for Winona County to adopt. During Winona County's process of considering the ban in 2016, an average of 80 percent of public comments received were in favor of the ban.

The County Board passed the ban by a 3-2 vote in the form of an amendment to Winona County's existing zoning ordinance.

It prohibits any new operations for the mining, transloading or processing of industrial minerals, including the silica sand used in hydraulic fracturing. The ban does not affect mining for sands used in construction.

In 2016, elected officials listened to the will of the public, who called for this corporate exploitation to be prevented, and then acted decisively to protect the common good for both people and the land. The hills, bluffs, farms and waters of Winona County were made safe from industrial frac sand mining, thanks to the bold leadership of the people who love them.

But while the overwhelming majority of public input from Winona County residents consistently favored the ban, the measure was fiercely opposed by the Minnesota Industrial Sand Council and other represen-

Environmental Quality Board report that showed frac sand mining tends to be larger in scale and may involve blasting or the use of chemicals in processing.

"Winona County examined studies from other Wisconsin communities that experienced industrial silica sand mining operations," wrote Leahy in her judgement. "These studies showed Winona County that industrial mining routinely drained local resources, negatively impacted existing industries, and caused a downturn in the local economy due to boom/bust cycles that would require immediate, intense excavation, before shutting down soon after due to demand drying up. These boom/bust cycles are unique to industrial silica sand excavation. Persons from these counties also testified as to the same as well. Based on this

evidence, Winona County found that industrial mining could also pose a problem to the welfare of the county." (The full ruling is available at [www.landstewardshipproject.org](http://www.landstewardshipproject.org).)

Winona County Attorney Karin Sonneman, who wrote the ban for the county, told the *Rochester Post Bulletin* that the ruling supports not only the legislative rights of the County Board, but recognizes its unique position to craft legislation tailored to its area of jurisdiction.

This county-wide ban is the first of its kind in Minnesota, and there are indications it may be unique on a nationwide basis. With the ban being fortified by the courts, this could serve as a catalyst for other counties to consider similar restrictions. □

*For more information on LSP's local organizing work in Winona County, contact Johanna Rupprecht at 507-523-3366 or [jrupprecht@landstewardshipproject.org](mailto:jrupprecht@landstewardshipproject.org). To read an in-depth description of the grassroots campaign that brought about the frac sand mining ban in Winona County, see the No. 1, 2017, Land Stewardship Letter, pages 12-15.*



**Frac sand mining operations like this one in western Wisconsin rely on removing topsoil—called “overburden” by the industry—to get access to the silica sand. The Minnesota District Court agreed with Winona County’s argument that problems caused by frac sand mining in Wisconsin justified a ban. (LSP Photo)**

tatives of the frac sand industry.

Earlier this year, two of the largest law firms in Minnesota brought a lawsuit attempting to strike down the ban. Originally, two lawsuits were filed on behalf of Roger Dablstien, Southeast Minnesota Property Owners and Minnesota Sands, LLC. In July, the two lawsuits were joined into one case.

The District Court's ruling confirms that in passing the ban, the Winona County Board was acting precisely as government should. Judge Leahy agreed with Winona County's argument that there was evidence that frac sand mining is substantively different from construction sand mining. Evidence was presented based on a Minnesota

## Mapping ‘Our Minnesota Future’

The Land Stewardship Project launched its involvement in the “Our Minnesota Future” campaign with two November meetings: one in Maynard (in partnership with Clean Up the River Environment), and the other in Hutchinson.

“Our Minnesota Future” is a long-term strategy to build the power to govern in Minnesota, and LSP is taking it on in partnership with some of the strongest people’s organizations in the state. They represent faith and environmental groups, organizations that work in communities of color and immigrant communities, as well as labor unions and progressive organizations.

The goal is to build governing power — the ability to set the agenda of state government and achieve the kind of major changes we need for people and communities around Minnesota.

During the November meetings, citizens got together to talk about how we can achieve the type of change we need: more family farmers taking care of the land; strong, vibrant communities with the resources and decision-making power to shape our own destinies; and policies that put people, not corporate interests, first.

On Dec. 3, LSP members from across the state participated in the “Our Minnesota Future” People’s Assembly in Brooklyn Center, Minn. During the meeting (*see photos on page 11*), LSP leaders joined representatives of 16 other organizations to strategize ways of building power for change. The Land Stewardship Project’s representatives emphasized in particular ways we can effectively advance the priorities of rural communities.

Over the next year, LSP and its various allies will be talking about key values with people running for leadership positions in Minnesota. A recent LSP blog has more background on the “Our Minnesota Future” campaign: [www.landstewardshipproject.org/posts/1015](http://www.landstewardshipproject.org/posts/1015).

### What’s Your Vision?

So, what is your vision for rural Minnesota? On pages 9 and 10 of the No. 3, 2017, issue of the *Land Stewardship Letter*, we included space for you to write down some of your thoughts. You can mail your ideas to us, or share them by contacting the Land Stewardship Project’s Jonathan Maurer-Jones at 218-213-4008 or [jmaurer-jones@landstewardshipproject.org](mailto:jmaurer-jones@landstewardshipproject.org). □

## Organizing & Social Change Leadership Cohort



The Land Stewardship Project launched its first Organizing and Social Change Leadership Cohort in November. This group of over two dozen LSP members and staff, mostly farmers and other rural residents, had their initial meeting in Farmington, Minn., and will be getting together once-a-month throughout the winter to grow their community organizing skills in order to be more powerful leaders for economic, racial and social justice. For more information, contact LSP’s Ben Anderson at 612-722-6377 or [banderson@landstewardshipproject.org](mailto:banderson@landstewardshipproject.org). (*LSP Photo*)

## LSP Fact Sheets

The Land Stewardship Project has created a series of fact sheets that cover everything from methods for fighting factory farms to the relationship between sustainable farming and cleaner water. They are available at [www.landstewardshipproject.org/about/libraryresources/factsheets](http://www.landstewardshipproject.org/about/libraryresources/factsheets). For paper copies, contact LSP’s Brian DeVore at 612-722-6377 or [bdevore@landstewardshipproject.org](mailto:bdevore@landstewardshipproject.org). Here is a partial list of fact sheet topics:

- ◆ Hometown Factory Farm Fighting: How rural Minnesotans are using local democracy to control factory livestock operations.
- ◆ Hydrogen Sulfide & Factory Farms: How a group of rural residents made Minnesota hog factories accountable for the hydrogen sulfide gas they produce.
- ◆ How Farms Can Improve Water Quality: Minnesota studies show how working farmland can have a positive impact on water resources.
- ◆ 1 Storm — 2 Outcomes: Why did one field lose a truckload of soil during a heavy rain storm, while just up the road another lost only a bucket’s worth?

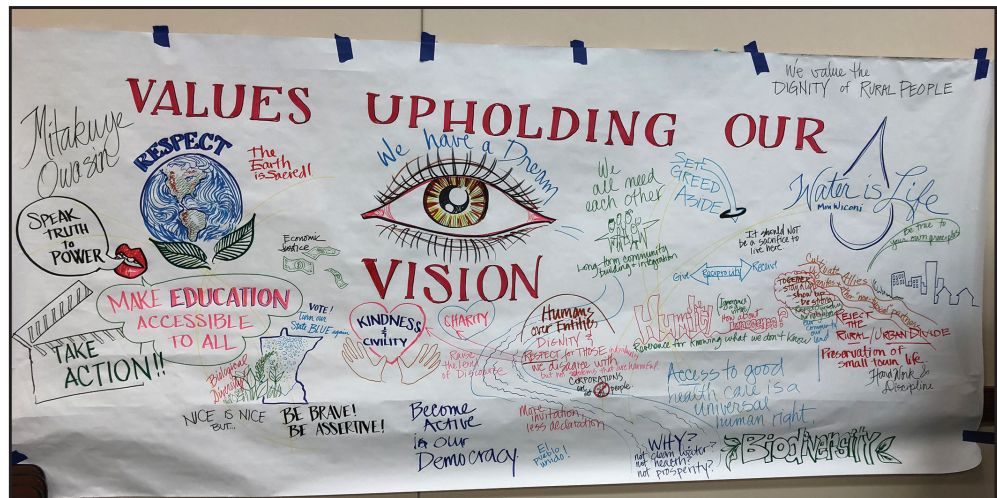
- ◆ Pollinators in Peril: Diverse farms can help key beneficial insects.
- ◆ Writing a Letter to Your Newspaper: Putting pen to paper can be a powerful media tool.
- ◆ Racking up the Food Miles: Why the distance between the field and the table is important.
- ◆ How U.S. Cities are Using Zoning to Support Urban Ag.
- ◆ Frac Sand Mining: A Threat to the Land, People & Communities.
- ◆ Improving Riparian Areas with Livestock Grazing.
- ◆ MNsure & ACA: Helpful Hints & Useful Definitions.
- ◆ Continuous Living Cover & Clean Water.
- ◆ The Chippewa 10% Project.
- ◆ Including Stewardship in Lease Agreements.
- ◆ The Cropping Systems Calculator.
- ◆ Minn. Beginning Farmer Tax Credit. □





More than 1,000 people representing 17 Minnesota organizations gathered in Brooklyn Center, Minn., Dec. 3 for the “Our Minnesota Future” People’s Assembly. Faith and environmental groups, organizations that work in communities of color and immigrant communities, as well as labor unions and progressive organizations, were represented. (Photo by Ben Anderson)

During two November Land Stewardship Project meetings in rural Minnesota, citizens brainstormed how we can achieve the type of change we need: more family farmers taking care of the land; strong, vibrant communities with the resources and decision-making power to shape our own destinies; and policies that put people, not corporate interests, first. (Photo by Jonathan Maurer-Jones)



Land Stewardship Project members traveled from across the state to participate in the “Our Minnesota Future” People’s Assembly and talk about ways to build power for positive change. (Photo by Josh Journey-Heinz)



# Rotating in a New Generation

*Building Soil Biology Can Make Room for Perenniality, Profits & People*

When Kaleb Anderson was growing up on his family's farm in southeastern Minnesota's Goodhue County, he made a vow that someday cattle would be removed from the land.

"I told my dad several times, 'When I get involved with the farm, the first thing I'm going to do is sell the cows, let all the pastures grow up and start a game farm,'" said Anderson as he stood on his family's land on a muggy day in mid-September. Over the years, the steep hills that make up the Anderson operation suffered greatly as cattle overgrazed pastures, creating gullies and washouts.

But on this particular day, as he recalled this promise, Anderson laughed at the irony of his wish to ban bovines. To one side of the farmstead, an eight-acre field of sorghum and other cover crops extended above his head. He had just turned a herd of beef cows, with calves at their side, out into the field, and they were busy mowing it down. On the other side of the farmstead was a hillside pasture that was lush with the growth of perennial grasses, despite being grazed regularly.

"I realize now it wasn't the cattle I didn't like, it was the management,"

said Anderson. Namely, breaking up bigger pastures into smaller paddocks and rotationally grazing them, combined with utilizing cover crops to build soil health, can help build the kind of resiliency this land hasn't seen since before Anderson's grandfather got a good deal on a rundown farm in 1945.

It turns out managing livestock in a way



**Kaleb Anderson in a cover-cropped field he recently turned cattle out into. "I have no interest in just sustaining this farm, he said. "I want to regenerate it." (LSP Photo)**

that the landscape benefits has provided Kaleb an opening into agriculture as well. The Anderson farm was one stop on a Land Stewardship Project Soil Builders' Network field day tour that was showcasing how building biology not only protects and improves the soil, but injects a little human resiliency into communities by providing an entry for beginning farmers wishing to return to the land.

### Regenerating vs. Sustaining

During his stop on the tour, Anderson showed how he is using a combination of cover cropping and rotational grazing to build soil organic matter. Soil organic matter is the energy-rich portion of the soil profile that's made up of plant and animal residue,

along with the tissues of living and dead microorganisms. Organic matter drives soil's water-retention capacity, structure and fertility. Anderson made it clear he feels it also drives his farm's profitability.

"I believe that there's a direct relationship between farm profitability and your available soil organic matter," he said. "It's an investment in the soil that will pay me dividends every year. I have no interest in just sustaining this farm. I want to regenerate it."

Anderson showed off thriving stands of corn and soybeans during the field day. His father Marshall, who focuses on the cropping aspects of the operation, transitioned to no-till production this year, which is further saving soil and building organic matter.

The pay-offs to this strategy came almost immediately — when driving rains hit the area earlier in the summer, the Andersons' soil stayed put, despite severe erosion in the area.

Kaleb has visited innovative farms in North Dakota, Wisconsin and Ohio that are making soil health a focus of their business plans, and invariably livestock are integrated into these operations in some way. Those observations, along with his own initial experience, has convinced him cattle can provide a chance to carve out his own niche on the Anderson family's farm.

"This year, we're making more on our pasture ground than we are on no-till corn," said Kaleb while he watched his herd making their way through the cocktail mix of cover crops, eating plenty, but also stamping vegetation down

to feed the soil. "Instead of relying on an International Harvester out there harvesting, I have the cattle."

### Profitable Productivity

Integrating livestock into practices that build soil health has also opened a door for Jared Luhman. He farms with his father Jon a few miles from the Anderson operation, and said when he graduated from college in 2015 and showed an interest in going into farming, he got the message that the only way to make it was by cropping a thousand acres or more.

"I feel fortunate we've been able to do that differently," said Jared during the second stop of the Soil Builders' Network

### Soil Builder Videos

The Land Stewardship Project's Soil Builders' Network is producing a series of short videos featuring farmers who are utilizing various innovative methods to build soil health profitably.

Recent videos feature Kaleb Anderson (see story on this page) demonstrating how he uses grazing of cover crops to build soil and produce income, and Tom Pyfferoen explaining how he is incorporating cover crops into his no-till system to improve soil health on his farm. You can find these and other videos at [www.landstewardship-project.org/soilbuildervideos](http://www.landstewardship-project.org/soilbuildervideos).

**Soil Health, see page 13...**



September tour. “There are different ways to bring multiple generations onto a smaller operation.”

In this case, livestock hold the key as well. The Luhman’s raise 175 cow-calf pairs as well as row crops, including black beans. Of their 720 acres, 250 are certified organic. Jon Luhman says that in a sense, Jared is just filling a void left when his father, David, retired from active farming. But the Luhmans also say they have made room for the next generation by focusing more on profitability than all-out productivity.

“We talk about sustainable agriculture, but if it’s not profitable, it’s not going to sustain itself,” said Jon.

Such thinking is executed on the Luhman farm in a couple of ways. For example, it would seem to make sense to produce beef animals that are as big possible—they compare it to producing bigger ears of corn.

“But what did you have to put into that?” Jared asked rhetorically.

Plenty, it turns out, and pumping inputs into producing top yields, whether it be in terms of pounds of beef or bushels of corn, can be expensive. The Luhmans feel smaller sized cattle are better at making use of forage as their main source of nutrition. Bigger cattle require higher quality, and often more expensive, sources of feed.

“You need to be really looking at profit per acre, and for us, that means smaller cattle, and more of them, producing more calves,” said Jon.

The Luhmans have also decided not to produce hay for sale anymore. Selling hay off the farm was profitable, but by raising forage for their own use exclusively, they don’t have to focus as much on quality.

“We weren’t losing money selling hay, but when we looked at all the costs of it and what it was doing to our soil to sell all those nutrients off, it wasn’t worth the effort,” said Jon, adding that it also became a quality of life issue, with haymaking requiring a significant amount of time and labor at key times of the growing season.

And although raising organic crops is lucrative, the Luhmans do not automatically plant their flatter, more tillage-friendly fields to annual row crops these days. Sometimes

### Give it a Listen

On episode 201 of the Land Stewardship Project’s *Ear to the Ground* podcast, Kaleb Anderson describes how he is trying to make a direct connection between soil health and profitability: [www.landstewardshipproject.org/posts/1021](http://www.landstewardshipproject.org/posts/1021).

## Join the Soil Builders’ Network

If you are a crop or livestock farmer in southeastern Minnesota, the Land Stewardship Project invites you to join the Soil Builders’ Network to receive regular updates on workshops, field days and on-farm demonstrations related to the latest in soil health and cover cropping.

The Soil Builders’ Network was launched to establish an extensive network of farmers interested in building back their soil using innovative crop and livestock systems. To join the free network, sign up at [www.landstewardshipproject.org/stewardshipfood/lspsoilbuilders](http://www.landstewardshipproject.org/stewardshipfood/lspsoilbuilders), or contact LSP’s Shona Snater at 507-523-3366 or [ssnater@landstewardshipproject.org](mailto:ssnater@landstewardshipproject.org).



Jared (left) and Jon Luhman see integrating livestock into their farming operation as a key way to make room for multiple generations on the operation while protecting and improving the soil. “There are different ways to bring multiple generations onto a smaller operation,” said Jared. (LSP Photo)

growing forage or cover crops that are grazed is more profitable when one considers the inputs needed to grow a cash crop. And even on flatter ground, row crops can take a toll on soil in the form of erosion.

Field day participants walked a 16-acre field that had been planted to sorghum and sunflowers. Cattle had recently grazed it, and, just as it was on Kaleb Anderson’s farm, around half of the vegetation was uneaten—instead it had been trampled into the soil. Rye that had been no-tilled into the field after the cattle were pulled off was already a few inches high.

“Even though they didn’t eat all this, it’s not wasted,” said Jared, gesturing to the downed vegetation. “What they trampled down will feed the underground livestock, so to speak. On a crop farm, integration of livestock is so key, because you get that added benefit from the cover crops.”

That, said Jon, means producing economic value from this cheap source of feed, as well as making an ongoing investment in the health of the soil.

“My goal is to keep it vegetated throughout the season,” said the elder Luhman. “I want to leave my soil better for my grandkids.” □

### Soil Health Experts Coming to SE MN

The Land Stewardship Project’s Soil Builders’ Network will be sponsoring a day of soil biology and microscope demonstrations with internationally known microbiologist **Dr. Elaine Ingham** in Rochester, Minn., on Feb. 10. For more information and to register for this workshop, see [www.landstewardshipproject.org/events/item/1116](http://www.landstewardshipproject.org/events/item/1116) or contact LSP’s Shona Snater at 507-523-3366 or [ssnater@landstewardshipproject.org](mailto:ssnater@landstewardshipproject.org).

The highly energetic soil health guru **Ray Archuleta** will be in southeastern Minnesota March 27-29 for a series of workshops. The Archuleta events will be held in: Lewiston (March 27); Austin and Faribault (March 28); and Kasson (March 29). They are being co-sponsored by LSP, along with local Soil and Water Conservation Districts. To get a taste of Archuleta’s engaging presentation style, check out episode 154 of LSP’s *Ear to the Ground* podcast: [www.landstewardshipproject.org/podcasts/podcast/618](http://www.landstewardshipproject.org/podcasts/podcast/618).

Please register for the Archuleta workshops before March 24 by contacting LSP’s Sarah Fillius at 507-523-3366 or [sfillius@landstewardshipproject.org](mailto:sfillius@landstewardshipproject.org).

## Giving Soil the Rock Star Treatment

*Extreme Conditions Call for Extreme Attention to Life Beneath the Surface*

**S**outheastern Minnesota farmer Rory Beyer was shocked by the erosion he saw on his land in 2008, when 17 inches of rain was dumped on that part of Winona County in under 24 hours.

“The erosion was ridiculous,” he recalled during a Land Stewardship Project Soil Builders’ Network field day he hosted in late July. “That set me on a crusade to figure out how to make my soil healthy.”

Beyer was concerned that if he didn’t take significant steps, he wouldn’t have any topsoil left to plant crops in. After that wake-up call, he started using cover crops on his corn ground. Beyer also now uses managed rotational grazing of perennial pastures to produce milk and beef, and adds biological amendments to his soil.

It has paid off: not too long before the July field day, a heavy rainstorm caused devastating erosion in Beyer’s neighborhood, despite the fact that it was late summer and growing corn and soybean plants were well on their way toward providing a protective canopy for the soil. In fact, corn planted in a field down the road from Beyer’s farm was inundated with black soil that had washed off the slope above. This wasn’t the first erosive storm in southeastern Minnesota during the summer of 2017; many farmers attending the field day shared stories about pounding rains washing soil on even relatively flat ground that was being no-tilled.

“It’s the new normal—it’s changing fast,” said one farmer of how climate change has brought about increasingly intense weather events. He and other farmers made it clear a new way of managing soil was needed to grapple with the moving target that climate has morphed into.

But Beyer’s fields were holding up well in the face of these heavy rains. It isn’t just the soil’s surface that has benefited from his use of continuous living cover. At one point Justin Morris, a soil health expert with the USDA’s Natural Resources Conservation Service (NRCS), walked into one of Beyer’s rotationally grazed pastures and spaded up a clump of soil. The root-filled mass was fragrant and dark. The pasture plants were thriving as a result of all that biological activity underneath. This good soil structure was no accident. Beyer said managed rotational grazing has helped increase organic

matter from 1.7 percent to 4.4 percent in approximately seven years.

“That is pretty astronomical to increase that amount of organic matter in that number of years,” said Beyer. “You can do it, and it can be done fast. We’re living proof.”

Morris agreed and was excited to see such a well-functioning system in a year when heavy precipitation has taken a toll on soils so lacking in biological activity that they are impervious to soaking up moisture. He’s seen how focusing on building the living portion of the soil ecosystem—the place where all those microbes and invertebrates reside—can in a sense turn back the clock, and help just about any farm that’s been damaged by intensive row-cropping or over-grazing reclaim its biological health. He said livestock are particularly good at providing the kind of disturbance and nutrient cycling needed to cook up organic matter.

“Livestock are the rock stars of building soil health,” he said while standing in the

### Give it a Listen

On episode 196 of the Land Stewardship Project’s *Ear to the Ground* podcast, farmer Rory Beyer and soil health expert Justin Morris talk about using cover crops, livestock and rotational grazing to give damaged soils a second chance: [www.landstewardshipproject.org/posts/podcast/1007](http://www.landstewardshipproject.org/posts/podcast/1007).



NRCS soil health expert Justin Morris (in green shirt) talks about water infiltration while standing in a rotationally grazed pasture on the Rory Beyer farm. “Livestock are the rock stars of building soil health,” says Morris. (LSP Photo)

pasture with Beyer’s dairy herd grazing just up the hill. “Nothing else quite compares to four hooves and manure.”

Beyer isn’t completely satisfied with the state of his soils. Despite all he’s done since the catastrophic flooding of 2008 to make his fields and pastures more resilient, he still experiences more erosion than he’d like. This is a particular problem when row crops protect the soil’s surface for less than half the year. That’s why Beyer is more committed than ever to utilizing cover crops to fill in the gaps during those periods when fields are normally bare.

“I feel we have to decide that the cost of putting in cover crops might have more value from the perspective of holding the ground where it is, because as soon as that ground washes away, due to these climate events that are out of control, you can’t get that ground back,” said Beyer. “I do feel like we have to step up our game a little bit.” □

### Cover Crops? Grazing? Rotations? Give the Calculator a Try

The Chippewa 10% Project has developed the Cropping Systems Calculator, a tool for estimating the costs and benefits of adopting various cropping and grazing systems, including those involving cover crops. It’s at [www.landstewardshipproject.org/chippewa10croppingsystemscalculator](http://www.landstewardshipproject.org/chippewa10croppingsystemscalculator). Give it a test drive—we welcome feedback.



# A Pocket Guide to the Power of Soil

## LSP Resource Outlines How Farming Can Help Clean Up Our Water & Head Off Climate Catastrophe

At a time of skyrocketing water pollution levels and increasing climate-related calamities, a resource released this fall describes how farmers can play a key role in helping fix these serious environmental problems. The Land Stewardship Project's *Soil Health, Water & Climate Change: A Pocket Guide to What You Need to Know* provides an introduction to the latest innovations in science and farming related to building soil health, and how implementing such practices on a wide-scale basis can make agriculture a powerful force for creating a landscape that is good for our water and our climate.

The pocket guide includes mini-profiles of farmers in the region who are utilizing cover cropping, managed rotational grazing of livestock, no-till and other methods to protect the landscape's surface while increasing biological activity below, thus creating a resilient, "soil smart" type of agriculture.

The key to these farmers' success is their ability to build a resource that can sequester an immense amount of carbon while increasing the land's ability to efficiently manage precipitation and runoff. It turns out the twin problems of polluted water and climate change share a common solution: the building of soil organic matter, which makes up just 5 percent of the soil profile but controls 90 percent of its functions.

Utilizing easy-to-understand graphics and summaries, this pocket guide shows how building soil organic matter can sequester massive amounts of greenhouse gases. Combined with energy conservation and alternative energy sources, making agricultural soils a net carbon sink could play a major role in helping prevent disastrous changes to the climate. In addition, healthy, biologically active soil has been shown to dramatically

cut erosion levels, as well as the amount of farmland fertilizer and other chemicals flowing into our rivers, streams and lakes.

As the articles on pages 12-14 of this *Land Stewardship Letter* show, there are farmers proving you can build organic matter in a matter of years using practical, financially viable methods. □

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*The most important characteristic of an organism is that capacity for internal self-renewal known as health.* — Aldo Leopold

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## Get Your Copy of the Pocket Guide

*Soil Health, Water & Climate Change: A Pocket Guide to What You Need to Know* is available as a pdf and online mobile app at [www.landstewardshipproject.org/smartsoil](http://www.landstewardshipproject.org/smartsoil). Paper copies are available from the Land Stewardship Project's offices in Lewiston (507-523-3366), Montevideo (320-269-2105) or Minneapolis (612-722-6377).

## Talking Smart Soil

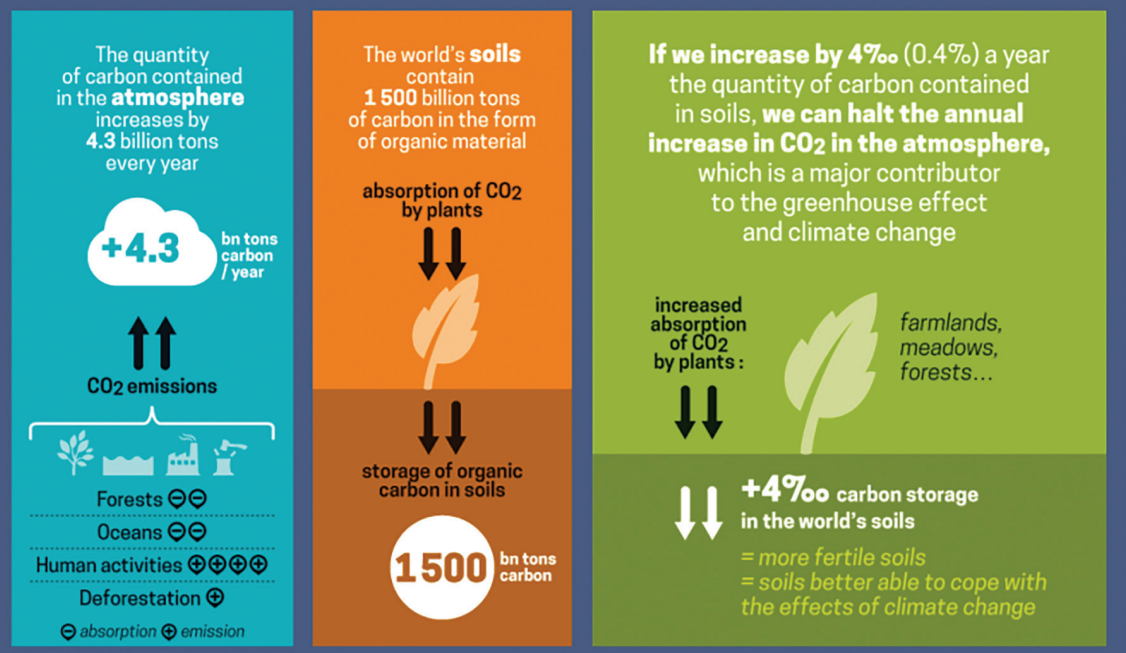
The Land Stewardship Project has produced a series of podcasts featuring the voices of farmers, researchers and conservationists who are on the cutting edge of building soil health. Check them out at [www.landstewardshipproject.org/talkingsmartsoil](http://www.landstewardshipproject.org/talkingsmartsoil).

### From the pocket guide:

According to the French Agriculture Ministry, a 0.4 percent annual growth rate in soil carbon content would make it possible to stop the present increase in atmospheric carbon dioxide and achieve the long-term objective of limiting the average global temperature increase to the 1.5°C to 2°C threshold beyond which the Intergovernmental Panel on Climate Change says would lead to a climate disaster. The French government's "4 per 1000 Initiative: Soils for Food Security and Climate" is focusing on the role agricultural soils can play in storing carbon.

## 4 PER 1000

### CARBON SEQUESTRATION IN SOILS FOR FOOD SECURITY AND THE CLIMATE



Source: French Ministry of Agriculture, Agrifood and Forestry, "The 4 per 1000 Initiative: Soils for Food Security and Climate," [www.4p1000.org](http://www.4p1000.org)

# Farming on Shifting Sands

## Barriers Remain to Making Ag a Permanent Fixture in Our Cities

By Anna Kleven

A sand mandala is an elaborate geometric figure made of colored sand. It takes a group of 20 Tibetan Buddhist monks more than two weeks to create one mandala by painstakingly placing each grain of sand. Once completed, the design is ceremoniously wiped away. The ritual honors the transience of material life.

One young urban farmer, Iman Mefleh, compares raising food in the city to building a sand mandala.

In recent years, there has been a lot of excitement around the potential of urban agriculture to play a major role in the local food movement. But in places like Minnesota's Twin Cities, growers are struggling to acquire and secure a resource so critical to giving urban farming permanence: land where they can work the soil and develop the infrastructure necessary for an agricultural enterprise that's viable long into the future.

Recent interviews with urban farmers unearth just how big a challenge it can be to lack a permanent land base.

### Feeling Rootless

Mefleh and her partner, Joe Silberschmidt, graduated from the Land Stewardship Project's Farm Beginnings course (*see page 19*) in 2013 and began farming on land they leased from the late Bruce Bacon of Garden Farme in Ramsey, Minn. In 2014, they had an opportunity to buy Growing Lots, an urban farm that, as its name implies, produces vegetables in places like abandoned parking lots. When they took over Growing Lots, Mefleh and Silberschmidt were no strangers to entrepreneurial start-ups—they were already a year into a food venture centered around making and marketing kimchi, a traditional Korean side dish made from salted and fermented vegetables. Their business, You Betcha Kimchi, started out on a small scale—they were growing much of the produce themselves and selling at the Northeast Minneapolis Farmers' Market under a home processor food license. Today, Mefleh and Silberschmidt buy cab-

bage, hot chili peppers and ginger from local farmers and sell their processed kimchi in 30 stores spread across five states.

The previous owners of Growing Lots had leased the land through Seward Redesign, a nonprofit development organization in South Minneapolis. Mefleh and Silberschmidt purchased the right to lease one lot



Urban farmer Iman Mefleh: “What’s the incentive to build soil health, if you’re only going to be around for a year?” (LSP Photo)

at a low cost, and another lot rent-free from Coastal Seafoods, a local business in South Minneapolis. By the time Mefleh and Silberschmidt took over Growing Lots, it had been around for five years, and the former owners had already been forced to relocate twice when the land was put to other uses.

Although the couple inherited a well-established farm, every new investment was made with trepidation. They rented a third lot and eventually were juggling three landlords, painfully aware that they could lose a plot at any time if the owners decided to redevelop a site. Mefleh says it was always made clear to she and Silberschmidt that this was not a permanent arrangement, and they were very aware of the risks.

“It was fair,” she says of this understanding they had with landlords. “We saw it as giving us enough time from year-to-year to make a game plan or move on.”

But long-term successful farming is dependent upon on-site infrastructure, such

as access to running water and electricity. Mefleh and Silberschmidt had to seek their landlords' approval before changing or adding to the existing structures. In addition, that most basic of farming elements, soil, demanded their time and attention as they built its functionality—a process that can extend over several seasons. Overall, they found it difficult to feel ownership after investing so much sweat equity and personal resources in their farm.

“You may not even produce the first year, but instead break in sod and sink money into inputs and compost,” says Mefleh.

And once the farmers finally had bacterial life squirming under their feet, it dawned on them that if they were forced to move, transporting their soil would be more expensive than purchasing new soil.

“What’s the incentive to build soil health, if you’re only going to be around for a year?” Mefleh asks.

Each of she and Silberschmidt's three parcels was zoned differently, but none of them came close in size to the seven acres needed to qualify them for agricultural zoning, and the corresponding .5 percent property tax rate. On one 6,000-square-foot site that they were paying the 1.5 percent commercial tax rate on, the result was a \$320 monthly bill for what turned out to be the smallest lot they were farming. That narrowed their potential for profits significantly.

“And then we brought in \$5,000 worth of soil and rented machinery to make it farmable,” says Mefleh. “So, we didn't make any money on that lot. I would like to see the city institute an agricultural zoning rate for market gardens.”

**Shifting Sands, see page 17...**



Not far away from Growing Lots in South Minneapolis, Jeremy McAdams was experiencing a different set of challenges. In 2008, the architect and hobbyist forager began experimenting with mushroom farming in his backyard. That spring he inoculated 100 logs with shiitake mushroom spores. With a yield of four or five pounds per log, he produced just enough for his personal mushroom consumption, with a little extra he could sell.

In preparation for his second season, McAdams moved some of the logs into the yards of consenting neighbors. He also bought a livestock watering tank to serve as a cold-water shock facility. Dunking the shiitake organism (mycelium) in icy water jolts it into popping out fistfuls of mushrooms. McAdams doubled the number of logs, and added shade structures to accommodate them.

That's when the frustrations began. He received several calls from the city about his "improperly stacked firewood." The tickets accumulated. McAdams rang his city council member, who told him that the city would normally not prosecute such minor code violations unless the neighbors were calling in complaints.

"I was getting closed down because people cared about the aesthetics of my yard," says McAdams.

### Seeking Stability

Mefleh has stayed in the city, but has stepped away from owning a farm for now. She and Silberschmidt's last season running Growing Lots was in 2016. With a child on the way, they decided they needed more stability and Mefleh accepted a paying position as farm manager at Frogtown Farm, a nonprofit operation that was created in 2013 by a partnership involving the Trust for Public Land, the City of St. Paul and the Wilder Foundation. The 5-acre enterprise is one of the largest contiguous urban farms in the country.

Mefleh appreciates the 24-year agreement with the city that shields the farm from juggling leases and grants the luxury of long-term thinking. She can now turn her full attention to priming the soil using raised beds and rotations of cover crops. That's a far cry from having to literally haul soil from location-to-location. "It's fun to look at things long-term," she says.

Hillview Urban Agriculture Center, another nonprofit, has also finessed a long-term lease arrangement in its home city of La Crosse, Wis. The Mayo Clinic Health System, which saw the growing operation as

a public health benefit, paired up with a local foundation and paid Hillview's mortgage on an old greenhouse site. In 2015, a partnership of the Mayo Clinic Health System—Franciscan Healthcare and Western Technical College, with support from the La Crosse Community Foundation, made it possible for Hillview's growing facilities to move into a new state-of-the-art greenhouse located on the college's campus.

This arrangement frees the nonprofit up to put its capital towards a wide array of projects, including a seed library shelved in the city's actual public library. Hillview gifts crock pots and other small kitchen appliances to residents who are living in areas of La Crosse considered food deserts—areas where access to healthy food is limited. Residents are then given training on cooking with fresh produce. Hillview also sells



**Lack of a stable land base forced mushroom producer Jerry McAdams to move his operation to a location that's a 90-minute drive from his South Minneapolis home. (LSP Photo)**

micro-greens directly out of the greenhouse to five local restaurants, a farmers' market and the local food co-op. It also donates produce and plants to local charities.

Some commercial farmers express concerns about nonprofit agricultural enterprises like Hillview, which depend on grants and volunteers, competing with them on the open market. Hillview's director, Pam Hartwell, counters that, following a model pioneered by the acclaimed Milwaukee-based nonprofit Growing Power, Hillview teaches people how to run their own farm business. The best way to do this, she argues, is by giving people a sheltered opportunity to farm within an actual business entity.

A job at a nonprofit farm promises a more stable income. Mefleh and Hartwell are able to bring farming and food to their communities without the uncertainty inherent in small-scale commercial farming.

Not all of the inconveniences of urban farming are solved by a nonprofit model. Hartwell, who is also a Farm Beginnings graduate, says that utilizing volunteer labor is not completely cost free.

"There are times when seeds get destroyed because somebody doesn't have the physical ability to care for them... we lose a lot because we don't always have skilled people working on our product," she says.

Like most urban farmers, Mefleh does not live on-site. This presents challenges when using infrastructure that requires monitoring. For example, hoop houses have to be ventilated at regular intervals, and failure to do so can result in major plant loss. She also points out that the grants that support nonprofit ventures like Frogtown can at times be unstable. A tricky balancing act must be struck between staying viable enough to keep attracting grant funding, but not competing with commercial operations.

### Outgrowing the Backyard

McAdams, devoted to making commercial farming work for him, took a different approach to long-term land security. After about a year of citations and difficulty finding suitable urban spaces for keeping logs, he resettled on a 13-acre farm on the edge of the Twin Cities that was managed by a four-farmer cooperative. He was the only fungus grower at the site, and with a much larger area to work in was able to centralize his mushroom operation into an efficient space that included an incubation area, a shade structure and fruiting tents.

But the day after Thanksgiving at the end of the second growing season, the landlords announced that all the growers had to be off the cooperative site by the end of the year.

"Things were still in the ground," lamented McAdams.

He quickly outgrew his next site near Ham Lake, Minn. — McAdams was inoculating nearly 2,500 logs per season at the time. This move had to be his last, he thought, as he transported his shade structure, hoop house and tractor once more. How much farther from the city must he go?

In 2015, McAdams obtained a USDA Farm Service Agency loan and bought a 40-acre farm that's a 90-minute drive from the Twin Cities in northern Wisconsin, the current and hopefully final home of Cherry Tree House Mushrooms. This new location

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### ...Shifting Sands, from page 17

is serving the operation well — it's now inoculating around 5,000 logs annually and McAdams' roster includes several varieties of mushrooms. He is selling fresh and dried mushrooms, as well as spreads and butters, through distributors and farmers' markets. McAdams makes a twice-weekly drive between the farm and his home in South Minneapolis.

### Planting Seeds for the Future

It's become clear in recent years that urban farming isn't just about raising food — it's also spawning a generation of activists who could help clear the way for more of this kind of production in the future. Nonprofit farms, like Hillview, train people how to farm and cook, and also orient them

to their food system, encouraging them to play an active role in shaping it. In one case, Hillview successfully mobilized a group of residents that pushed for an ordinance legalizing urban beekeeping. They have also successfully advocated for the introduction of urban farming guidelines that don't just list illegal practices, but also suggest the most environmentally sound way to comply with the rules.

A group of farmers working with the Land Stewardship Project in 2013 helped get established the Urban Ag Text Amendments, which eventually made zoning rules in Minneapolis more farm-friendly. Among other things, the measures legalized the sale of produce on-site for a certain number of days per year, and eased restrictions related to hoop-house sizes.

Seeds of another sort have also been planted. For farmers like Mefleh and Mc-

Adams, the urban setting has provided an opportunity to get their feet wet in raising food while sticking close to home. Far from making them cynical about the future of urban farming, the adversity they faced has made them passionate advocates of land policy change.

Mefleh is particularly vocal about reforming the city's Garden Lease Program, which rents out parcels of land to food producers. The lots available through the leasing program are constantly being assessed for redevelopment, and Mefleh would like to see the program offer longer lease terms, disputing the idea, evident in Minneapolis official city language, that land parcels with gardens and farms are just vacant lots waiting to be developed.

"Any chance to talk about this, I take it," she says. □

*Anna Kleven, who served an LSP journalism internship last summer, is studying food, agriculture and society at Macalester College in St. Paul, Minn.*

## Seeding Social Capital Via Urban Ag

Two-thirds of urban farmers in the U.S. have a social mission that goes beyond food production and profits, according to a 2016 study by New York University.

Stone's Throw Urban Farm is no exception. Until last year, that operation was cultivating 15 lots on both sides of the Mississippi River in the Twin Cities. As land prices recovered after the recession, the accelerating development pressure threatened some of their parcels. In 2016, Stone's Throw farmer Caroline Devany led a series of emergency actions to hold onto land until the end of that year, when the operation officially disbanded.

As one of the largest urban farms in the state, Stone's Throw's dismantling may seem like a death knell for the movement. But the story is more complicated. The farmers cite economic challenges and lease-fatigue as reasons for leaving, but also a desire to use their social capital to support other farmers and place their parcels of land in neighborhood control.

Devany and Iman Mefleh of Frogtown Farm (*see story above*) both heartily acknowledge the role that their personal social capital has played in their success in the farming world. Social capital as they define it includes whiteness, a college degree, good credit, fluency in English (including a familiarity with formal, bureaucratic

language), and comfort in leadership positions. They recognize that all these traits have helped them win buy-in from city officials, as well as the co-ops, restaurants and individual eaters they market to. For example, social capital gave Stone's Throw farmers some assurance while navigating murky lease terms, and they were able to fight city eviction multiple times.

Mefleh has a vision of investing her social capital in the community by providing jobs on urban farms that not only provide hands-on production experience, but entrepreneurial skills.

"I hope in the future I can play a role in transferring my social capital to others," she says. "Urban farming should provide jobs, but not just as field hands. What's the use of training people to just be field hands, if they can't get a good paying job? Such farms should be able to provide experience with business, marketing and other skills."

Neighborhoods with many vacant lots and low development pressure are the safest bets for urban farmers seeking land tenure. At the same time, the residents in these communities are generally least equipped to buy the fresh food that's grown there.

This reality doesn't fit with the Stone's Throw farmers' vision of an ethical local food system. So, while they could sell their land and equipment as a package deal, they're tackling this issue by transitioning individual lots to the Twin Cities Agricultural Land Trust (TCALT).

The organization, founded in 2013, acquires land and preserves community-managed agricultural spaces, specifically to address the problem of accessibility.

A Stone's Throw parcel on Dale Street in St. Paul is TCALT's first land transition, and the initiative is just getting off the ground. While the land trust convened a series of neighborhood cookouts to discuss the future of the lot with neighbors, one resident is already making good use of the infrastructure left on the site by growing tomatoes and watercress in the high tunnels. TCALT is hoping that other neighborhood residents will join this farmer in the future.

Devany knows of an elderly Hmong woman whose daughter drives her every week to a parcel of land in Wisconsin, where she has been farming for years. Someone that committed to food production, says Devany, deserves access to farmable city land.

When a land trust buys a parcel and shields it from development, it tends to increase the market value of the remaining area properties. Therefore, some see urban farming and affordable housing as natural opponents. However, Devany maintains that this is a false dichotomy. As housing density increases, permanent green space can help maintain quality of life.

"Housing development and designation of green space can happen in tandem, to the benefit of everyone," she says.



# Applications Open for 2018-2019 FB Course

## Minnesota-Wisconsin Region Class to Begin in Fall 2018

The Land Stewardship Project's Farm Beginnings Program is accepting applications for its 2018-2019 class session. The location of the class will be determined in coming months.

LSP's Farm Beginnings program is marking its second decade of providing firsthand training in low-cost, sustainable methods of farming. The course is for people of all ages just getting started in farming, as well as established farmers looking to make changes in their operations. Farm Beginnings participants learn goal setting, financial and enterprise planning, marketing and

innovative production techniques.

This 12-month course provides training and hands-on learning opportunities in the form of classroom sessions, farm tours, field days, workshops and access to an extensive farmer network. Classes are led by farmers and other agricultural professionals from the

region. The classes, which meet approximately twice-a-month beginning in the fall of 2018, run until March 2019, followed by an on-farm education component that includes farm tours and skills sessions.

Over the years, more than 750 people have graduated from the Minnesota-Wisconsin region Farm Beginnings course. Graduates are involved in a wide-range of agricultural enterprises, including grass-based livestock, organic vegetables, Community Supported Agriculture and specialty products.

The Farm Beginnings class fee is \$1,500, which covers one "farm unit"—either one farmer or two farming partners who are on the same farm. A \$200 deposit is required

with an application and will be put towards the final fee. Payment plans are available, as well as a limited number of scholarships. For application materials or more information, see [www.farmbeginnings.org](http://www.farmbeginnings.org). You can also contact the Land Stewardship Project's Karen Benson at 507-523-3366 or [karenb@landstewardshipproject.org](mailto:karenb@landstewardshipproject.org). □

### Farm Beginnings in Other Regions

Besides Minnesota and Wisconsin, Farm Beginnings classes have been held in Illinois, Nebraska and North Dakota. Local community-based organizations have also launched Farm Beginnings courses in South Dakota, Missouri, Kentucky, Indiana, New York and Maine.

For information on Farm Beginnings courses in other parts of the country, see the Farm Beginnings Collaborative website at [www.farmbeginningscollaborative.org](http://www.farmbeginningscollaborative.org). More information is also available by contacting LSP's Amy Bacigalupo at 320-269-2105 or [amyb@landstewardshipproject.org](mailto:amyb@landstewardshipproject.org).

## LSP's in-the-field Beginning Farmer Training



Paul and Sara Freid described their system of raising pork utilizing the grazing of cover crops during a Farm Beginnings field day in July. Besides pork, the Freids raise fruits and vegetables near Lake City in southeastern Minnesota. They have also built a deep winter greenhouse. "Every new venture adds complexity," said Paul at one point during the field day, stacking his hands one on top of the other. On-farm field days and workshops are a focus of the Land Stewardship Project's Farm Beginnings course, which is marking its second decade of providing firsthand training in low-cost, sustainable methods of farming. For details on applying for the 2018-2019 class, see the article above. (LSP Photo)

Anne & Peter Schwagerl

# Running it Through the Mill

On an afternoon in late June, west-central Minnesota farmers Anne and Peter Schwagerl walk out of the bright sun into the deep shade of an old granary that has six separate storage areas for various kinds of harvested crops—a throwback to an era when most Midwestern farms produced more than corn and soybeans. On many farms, old buildings like this fall into disrepair, or at best are used as storage for odds and ends. But standing in the middle of this particular granary is a tall, year-old piece of equipment that houses a hammer mill and tumble mixer. It's a feed mill, and it represents an attempt on the part of the young farmers to make raising a diversity of grains pay off financially by forging a critical link between their cropping and livestock enterprises.

The planning and pencil-pushing that went into making this feed mill a reality also represents another important step for the Schwagerls' budding farm business: they are learning to, as they put it, "channel" their enthusiasm, something the young couple—they are both 32—concede is not always easy, since they are passionate about everything from good food and community involvement to experimenting with sustainable farming methods.

"There are always new things, so many neat ideas, out there," says Peter. "So, trying to find out how to work those great ideas into your farm requires constant experimentation and taking that feedback and coming up with the next step forward. It really makes it rewarding and exciting."

The Schwagerls feel better equipped to channel all those passions into practical, profit-making enterprises thanks to the nuts-and-bolts basics of enterprise analysis and business planning they received through the Land Stewardship Project's Farm Beginnings course a few years ago. And such skills will come in handy as they further pursue creating a farm that is a fully integrated "seed-to-finish" business consisting of a greater diversity of crops, as well as livestock.

## A Moving Feast

Anne likes to joke that their life goal is to "eat like kings," but a certain meal

played a serious role in the couple choosing their current profession. Peter grew up on a crop farm near Browns Valley, and for a time Anne's family ran a pick-your-own strawberry farm in Rice County, near the Twin Cities. But immediately after high school, neither seriously considered farming as a career. They met while attending college in Minnesota, and Anne later worked for the National Geographic Society in Washington, D.C. In 2010, while Peter was getting his master's degree in kinesiology at Kansas State University, the couple attended a farm-to-table dinner—one of those events where a chef teams up with a farmer to present a locally-sourced, multi-course meal.

"At that point in my life, that was probably the top meal that I had ever eaten,"



The Schwagerls have set up a mill to process their own crops into feed for their hogs, allowing them to blend enterprises. "Farm Beginnings was great for teaching ways to make different enterprises on the farm work in synergy," says Anne. (LSP Photo)



recalls Peter.

Later, the Schwagerls carried that pleasant mealtime memory with them while living in north-central Florida, where Peter was pursuing a doctorate in applied physiology. They frequented the local farmers' market, and through that connection ended up working during the summer on a local pasture-based multi-species livestock farm. That experience quickly evolved from a way to bring in extra cash while getting a break from the classroom, research lab and office, to a peek into how farming could be done in a way that connected stewardship of the land and people's supper tables. That summer, the Schwagerls also learned they could work together as a team.

"That was huge," says Peter.

Overall, that experience helped Peter decide that the research/academic path was not for him, and he decided to leave graduate school. Anne, for her part, was ready to leave office work and connect with a rural community. During the winter of 2012, they moved to Browns Valley, and by spring were farming with Peter's father, Jerry, who had been looking for help on the farm he produces crops on. Jerry raises non-GMO crops and had an interest in producing organically, but found it difficult to do it on his own.

Peter and Anne admit that they thought crop farming would be relatively straightforward, and that they would be able to simply plug in other innovative enterprises they were interested in during their "spare time." Easier said than done.

"We thought the crops would pay the bills and then we could experiment on the livestock and other enterprises we had interest in," says Peter. "But we found out crop farming was more time consuming than we thought."

On top of that, their first child, Nora, was born that year (they also have a 1-year-old, Ben), stretching them thinner and leaving less time to pursue new farm ideas. It became clear they needed a healthy dose of training in enterprise analysis and business planning.

"Enthusiasm will only carry you for so long," says Anne. "At the end of the day, this is our job and we've got to be able to

Fresh Faces, see page 21...



keep our lights on and pay our bills and feed our kids. We needed to figure out how to make a living doing this.”

After that first growing season, the Schwagerls enrolled in LSP’s Farm Beginnings course (see page 19). During the winter of 2013-2014, they and other participants in the course learned from established farmers and other agricultural professionals about business planning, goal setting and analyzing the viability of various enterprises and how they could mesh with each other in the bigger picture. Through the course, the Schwagerls were able to network with other beginning, as well as long-established, farmers who were doing the kind of agriculture they were interested in: organic cropping and pasture-based livestock production.

Farm Beginnings also introduced them to a practical way to keep their financial house in order long after finishing the course. Through the class, the Schwagerls enrolled in the Farm Business Management Program, which is operated by the Minnesota State Colleges and Universities system. Through that program, they work with an instructor who helps them manage their finances utilizing accounting tools such as QuickBooks. That experience has introduced them to the world of balance sheets and cash flows.

“Farm Beginnings was great for teaching ways to make different enterprises on the farm work in synergy with each other, and not just being siloed, to use the farm metaphor,” says Anne.

The importance of such synergy became evident soon after the Schwagerls began raising hogs a few years ago. Since they planned to direct-market the pork, they wanted to give the animals high-quality feed free of GMOs, hormones and antibiotics. The Schwagerls rent 300 acres from Peter’s parents, Jerry and Renee. In exchange for the use of Jerry’s machinery, Peter and Anne also help Peter’s father farm an additional 540 acres. They grow wheat, corn, soybeans, barley, alfalfa, oats and barley. Half their acreage is either certified organic or in transition to being certified.

But they were frustrated that they were shipping their crop production off to outside markets, and then turning around and spending money to buy high quality feed for their hogs. The Schwagerls feel particularly strongly about adding economic value to some of the small grains and forages they raise—crops that may

not have a high value in the marketplace but are good for the soil. Livestock can provide a financial justification for keeping such plants in the rotation.

“We can turn around and pay ourselves a living wage for those crops by feeding them to our animals,” says Anne.

So, in 2014 Peter and Anne began investigating the feasibility of installing a feed mill on their farm as a way to process their own crop production. They developed a business plan that made a winning argument: it just didn’t make sense to bring purchased feed onto the farm when they were already raising much of it on their own land. They just needed a way to fill in the gaps by processing it. They received financial assistance through the Lakewinds Co-op Organic Field Fund, as well as the Minnesota Department of Agriculture’s Livestock Investment Grant. Those grants were critical, since they helped prime the pump and gave them leverage to approach the USDA’s Farm Service Agency about receiving a loan to cover the rest of the \$32,000 price tag.

That’s a significant investment, but it penciled out when compared to not only the cost of purchasing the feed, but the time and fuel spent transporting it.

“Being able to go through on the spreadsheet and map it out, that really helped show how we can make it pay,” says Peter.

The feed mill, which was installed in 2016, is located on Peter’s parents’ farm, just a mile down the road from where the Schwagerls live and where their operation, Prairie Point Farm ([www.prairiepoint-farmmn.com](http://www.prairiepoint-farmmn.com)) produces around 40 hogs a year for direct-to-consumer sales and a food



**Peter and Anne Schwagerl raise hogs and market them directly, as well as through a local food co-op. Enterprise analysis has taught them to channel their tendency for taking on as many projects as possible. “You have to do the analysis, pencil everything out, make sure that it’s going to be a successful enterprise,” says Peter. (LSP Photo)**

## Give it a Listen

On episode 199 of the Land Stewardship Project’s *Ear to the Ground* podcast, Anne and Peter Schwagerl talk about “channeling their enthusiasm” with enterprise analysis: [www.landstewardship-project.org/posts/podcast/1019](http://www.landstewardship-project.org/posts/podcast/1019).

co-op in Ortonville, Minn.

## Confidence Builder

As they stand next to a pen full of pigs that are fast approaching market weight as a result of a feeding regimen consisting of a mix of grain and diverse patches of cover crops—radish, sun hemp, sorghum Sudan grass, field peas, barley and wheat—that the animals are rotated through, the Schwagerls talk about how the process of planning, financing and installing the feed mill has given them the confidence to pursue some of the other enterprises they’re enthusiastic about. For one, they’d like to expand their certified organic cropping acres enough so that the hogs could qualify for organic meat markets. They estimate they will reach that threshold of organic acres within two years.

The Schwagerls raise a few chickens now as basically a hobby, and they would like to make that into a money-making enterprise. The young farmers are also interested in adding other livestock, such as cattle and sheep. That would require investing in fencing and watering systems to set up an extensive managed rotational grazing infrastructure. Such a step means another, as they put it, “education project,” as well as some more financial investments.

“It would just fit in so nice,” Peter says of adding ruminants to the mix. “You start adding some of those layers and some of that diversity into the farm, and once you get to a certain level it just works so nicely. Like, we’re trying to grow alfalfa because it’s good for our soil. Why in the heck don’t we have an animal that can eat it and recycle it back onto our own land, instead of shipping all our nutrients off as hay to wherever?”

Closing some economic, agronomic and environmental gaps on the farm is key, says Anne. But, she adds, let’s not forget another major reason adding new species of livestock is important: it’s another chance to produce a good tasting product.

“We joke that our children are food motivated,” she says. “Well, I am food motivated. Everybody ought to be.” □

# Seeking Farmers-Seeking Land Clearinghouse

Are you a beginning farmer looking to rent or purchase farmland in the Midwest? Or are you an established farmer/landowner in the Midwest who is seeking a beginning farmer to purchase or rent your land, or to work with in a partnership/employee situation? Then consider having your information circulated via the Land Stewardship Project's *Seeking Farmers-Seeking Land Clearinghouse*. To fill out an online form and for more information, see [www.landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse](http://www.landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse). You can also obtain forms by e-mailing LSP's Dori Eder at [dori@landstewardshipproject.org](mailto:dori@landstewardshipproject.org), or by calling her at 612-578-4497. Below are excerpts of recent listings. For the full listings, see [www.landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse](http://www.landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse).

## Farmland Available

◆ Jack McCann has for sale or rent an operating 23-acre pasture-based livestock farm in *east-central Minnesota's Wright County (30 minutes west of the Twin Cities, near Montrose)*. The land is certifiable organic and includes an option of continuing farming for TC Farm with guaranteed sales. TC Farm is one of the largest CSA operations in the state and supports a number of small local farms. All equipment needed for a livestock operation is also an option as part of the sales or rental agreement. There is a 55 x 60 pole barn with stalls, electricity and water. The 3,000 square-foot house was built in 2001. Space to add vegetable production is available. There is an additional 60 acres available for rent nearby, if desired. Pricing, photos and more information on the property are available at <https://tc.farm/lsp>. The asking price is \$500,000; or a comparable rental fee. Contact: Jack McCann, 612-217-1770, [Jack@tc.farm](mailto:Jack@tc.farm).

◆ Therese Manggaard has for rent 150 tillable certified organic acres in *southern Minnesota's Mower County (near Sargeant)*. The land was previously planted to oats, corn and vegetables. Manggaard would consider splitting the land for vegetable businesses. No house is available. Contact: Therese Manggaard, 507-440-4391, [tmanggaard@yahoo.com](mailto:tmanggaard@yahoo.com).

◆ Gary Brever has for sale or rent a 160-acre certified organic farm in *west-central Minnesota's Douglas County (near Alexandria)*. There are 25 tillable acres and 30 pasture acres. The soil is fertile and irrigation lines run throughout all the fields. There is a barn, cabin and processing kitchen, as well as a three-bedroom house. The sale price is \$485,000; the rental fee is \$1,800 per month, which includes the house. The farm is available in May. Contact: Gary Brever, 320-304-0918, [organicploughshare@gmail.com](mailto:organicploughshare@gmail.com).

◆ Peter Kastler has for rent 5+ tillable acres in *Washington County near Minnesota's Twin Cities (near Lake Elmo)*. There are 5 transitional acres ready for lease, possibly more. The land has not been sprayed for two seasons. There is access to water, and potentially buildings, depending on need. The price range is \$150-\$200 per

acre. Contact: Pater Kastler, 612-382-9385, [peter.kastler@gmail.com](mailto:peter.kastler@gmail.com).

◆ Laura Fair has for rent 30 acres of farmland in *south-central Michigan's Eaton County*. There are 5 tillable acres, 10 pasture acres and 20 forest acres. The land has not been sprayed for several years and 4 acres are fenced, with a winterized watering system on 1 acre. There is a house, two-bedroom apartment, a garage and a small attached barn. Contact: Laura Fair, [blueheronacresmi@gmail.com](mailto:blueheronacresmi@gmail.com).

◆ Mao Kue has for rent 5-10 acres of farmland in *Minnesota*. There are 5 acres of pasture and 5 tillable acres. The price range is \$100 to \$300. Contact: Mao Kue, 651-410-8539, [levelqi16@gmail.com](mailto:levelqi16@gmail.com).

◆ James Orr has for rent 300 acres of tillable farmland in southern *Ohio's Highland County (near Greenfield)*. The land has been in pasture and has not been sprayed for 20 years; it is eligible to be certified organic. The rental price is \$200 per acre. Contact: James Orr, 937-981-7666, [jamesworr@gmail.com](mailto:jamesworr@gmail.com).

## Seeking Farmland

◆ Roberto Beltran is seeking to purchase 2-15 acres of farmland in *Minnesota*. Land with 5-10 tillable acres and 1-2 pasture acres is preferred. Land that has water and that has not been sprayed for several years is preferred. Contact: Roberto Beltran, 507-461-2174, [Lafafabeltran@gmail.com](mailto:Lafafabeltran@gmail.com).

◆ Kevin Campbell is seeking to purchase 5+ tillable acres of farmland in *Minnesota or Wisconsin*. Land with water and electricity is preferred. Contact: Kevin Campbell, 754-244-7960, [Kevincampbell58@gmail.com](mailto:Kevincampbell58@gmail.com).

◆ Shawn Speidel is seeking to purchase 5 tillable acres of farmland in *Indiana* for a market garden. Land that has not been exposed to a lot of chemicals and that has good drainage and sun exposure is preferred. Outbuildings that can house a wash station and cooler are preferred. Contact: Shawn Speidel, 719-377-1740, [shawn.speidel@gmail.com](mailto:shawn.speidel@gmail.com).

◆ Jacquie Redlin is seeking to purchase 10-20 acres of farmland in *Minnesota*. Land that has not been sprayed for several years and that includes 2 acres tillable, 5 acres pasture and 2 acres forest is preferred. A house and outbuildings such as a barn and hoop house are also preferred. Contact: Jacquie Redlin,

612-558-7948, [jacquieredlin@icloud.com](mailto:jacquieredlin@icloud.com).

◆ Bonnie Warndahl is seeking to purchase 20-60 acres of farmland in *western Wisconsin or eastern Minnesota* (must be within 70 minutes of Maplewood, Minn.). Land that has 5+/- pastured acres, 20 +/- forested acres and 2-5 tillable acres is preferred. A house is necessary. A barn/pole building, shed, hoop house or high tunnel is preferred, but not necessary. Land that has not been sprayed for several years is preferred. Land with a pond or creek would be a bonus. Owner financing or willingness to work with the USDA Farm Service Agency is preferred. Contact: Bonnie Warndahl, 612-462-9311, [winnowburrow@gmail.com](mailto:winnowburrow@gmail.com).

◆ Hannah Anders is seeking to purchase 5 acres of tillable farmland in *North Dakota or Tennessee*. A house is required. Contact: Hannah Anders, 615-430-9533.

◆ Tim Haynes is seeking to purchase .5 to 1 acre of tillable farmland in *central Indiana (near Indianapolis)*. Haynes would like to grow using organic methods; a small shed for tools is preferred. Contact: Tim Haynes, 260-515-7532, [timoshi2k@gmail.com](mailto:timoshi2k@gmail.com).

## Seeking Farmer

◆ Winnowburrow Farm in *western Wisconsin (north of Menomonie)* is seeking a farmer interested in gaining experience as a produce manager. Winnowburrow's production is focused on rare and endangered heirlooms, and a component of its enterprise is seed-saving. The owners are seeking someone who can expand vegetable production. Applicants must have a minimum of three years of experience in growing produce. They must commit to working at least three days per week. Contact: Bonnie Warndahl, 612-462-9311, [winnowburrow@gmail.com](mailto:winnowburrow@gmail.com).

◆ Terry Cunningham is seeking a farmer to join a 109-acre operation in *southern Minnesota's Freeborn County (near Twin Lakes)*. The operation is a certified organic grain and hay farm. Cunningham is looking for higher value crop use for about 10 acres of slopes in permanent hay. Cunningham is seeking someone with knowledge of in-demand medicinal or dried herb crops to grow and market. Contact: Terry Cunningham, 507-852-3465, [tcfarm@wctatel.net](mailto:tcfarm@wctatel.net).



### Thinking About the Future of Your Farm? Sign-up for LSP's Transition Workshop

- Are you a farm family or landowner thinking about the future of your farm?
- Are you interested in planning for the next generation on your land?
- Do you have a spouse/partner helping to make these decisions? Are you both on the same page?
- Are you ready to begin the planning process but don't know where to start?

The Land Stewardship Project will be holding a workshop series this winter on transitioning farms to the next generation. The series will take place on three Saturdays—Jan. 20, Feb. 10 and March 3—in Northfield, Minn. Participants must sign-up for all three sessions.

There will be a chance to network with other farmers who are at various stages of going through the transition planning process. Topics include goal setting and financial planning, as well as legal, tax and healthcare implications of transitioning a farm to the next generation. The fee per family is \$200. For details or to reserve a spot, contact LSP's Karen Stettler at 507-523-3366 or [stettler@landstewardshipproject.org](mailto:stettler@landstewardshipproject.org). □

### Tax Credit Now Available for Passing on Assets to Minnesota Beginning Farmers

The new Minnesota Beginning Farmer Tax Credit (see the No. 3, 2017, Land Stewardship Letter) will go into effect January 1, 2018. The Minnesota Rural Finance Authority will approve and certify tax credits on a first come first served basis. There is \$5 million available in 2018.

Under this initiative, there is now a Minnesota state tax credit for owners of agricultural assets—land, livestock, facilities, buildings or machinery used for farming—who agree to sell or rent those assets to a beginning farmer who is not a family member. There is also a Minnesota state tax credit available for beginning farmers who participate in a financial management program.

#### Asset Owners

If you are selling an agricultural asset, the credit covers 5 percent of the sale price or fair market value (whichever is less) of the asset, up to \$32,000. If you are renting an agricultural asset, the credit covers 10 percent of the gross rental income in each of the first three years of a rental agreement, up to \$7,000 per year. It also covers 15 percent of the cash equivalent of the gross rental income of the first three years of a share-rent

#### More Information

For details on the Minnesota Beginning Farmer Tax Credit initiative and to sign up for the Land Stewardship Project's Tax Credit Update List, see [www.landstewardshipproject.org/beginningfarmertaxcredit](http://www.landstewardshipproject.org/beginningfarmertaxcredit). More information is also available by contacting LSP Farm Beginnings Program organizer Karen Stettler at 507-523-3366 or [stettler@landstewardshipproject.org](mailto:stettler@landstewardshipproject.org).

#### Tax Break Workshop Jan. 11

The Land Stewardship Project has invited the Minnesota Rural Finance Authority to a meeting to discuss the Beginning Farmer Tax Credit's details and to answer questions. The workshop will be Thursday, Jan. 11, in Northfield, Minn.

For more information, contact Karen Stettler at 507-523-3366 or [stettler@landstewardshipproject.org](mailto:stettler@landstewardshipproject.org).

agreement, up to \$10,000 per year.

The agricultural asset must be rented at the prevailing community rates as determined by the Rural Finance Authority. If the amount of the credit exceeds tax liability, the excess may be carried forward 15 years. Only one of the tax credit categories above can be accessed in any single year.

#### Beginning Farmers

Beginning farmers are eligible for a tax credit to help cover the cost of participating in an approved financial management program. The financial management credit need not be tied to an asset sale or rental.

The Rural Finance Authority has developed a list ([www.mda.state.mn.us/grants/fbmprograms.aspx](http://www.mda.state.mn.us/grants/fbmprograms.aspx)) of financial management programs that are eligible for the credit. For example, the Minnesota Farm Business Management Program qualifies, and the Land Stewardship Project expects the Farm Beginnings and Journeyperson courses to be added to the approved list in the future. For beginning farmers enrolled in a financial management program, the credit is equal to 100 percent of the cost of participating in a financial management program (up to \$1,500 per year for up to three years). □

### Passing On the Farm? Check out the *Farm Transitions Toolkit*

Owners of farmland who are looking to transition their enterprise to the next generation of farmers can turn to the *Farm Transitions Toolkit*, a comprehensive Land Stewardship Project/Minnesota Institute for Sustainable Agriculture resource. The *Toolkit* is for those people who want to pass their farm on in a way that supports healthy rural communities, strong local economies and

sustainable land stewardship.

The *Toolkit* contains resources, links to services and practical calculation tables to help landowners establish a commonsense plan. It also features user-friendly resources on the economic, legal, governmental, agronomic, ecological and even social issues that must be considered in order to ensure a successful farm transition. It is rounded out

with profiles of farmers who are in various stages of transitioning their enterprises to the next generation. An online version of the *Toolkit* is at [www.landstewardshipproject.org/morefarmers/farmtransitiontools/farmtransitiontoolkit](http://www.landstewardshipproject.org/morefarmers/farmtransitiontools/farmtransitiontoolkit); paper versions can be purchased by calling 800-909-6472.

# The Sign of the Bobolink

*A Farmer & an Ecologist Team Up in Search of an Ecosystem Indicator*

**EDITOR'S NOTE:** The *Land Stewardship Letter* is running an occasional series of articles on “ecological agrarians”—farmers who are integrating the principles of ecology into their agricultural operations. To read earlier installments in this series, see the No. 1, 2 and 3, 2017, editions of the *Land Stewardship Letter*.

By Brian DeVore

**A**void looking to the west, where lies an apocalyptic vision of what is and what could have been.

Rather, look to the east, where there's ecological potential and a reminder of why it's worth connecting birds, bovines and biologically healthy soil. That's the version of a mantra Mary Damm recites to herself each time she pulls into the driveway of the farm she owns in the Driftless Region of north-eastern Iowa, bleary-eyed from a 475-mile road trip that begins at her home in Indiana.

Damm purchased these 120 acres in 2014—the previous owner, Dan Specht, had been killed in a haying accident the summer before and Mary had spent much of the previous decade wandering this mix of grass, trees and restored prairie, helping Dan tabulate all the birds and plants the farmer had nurtured on the land while raising crops and livestock.

So, when the property came up for sale after Specht's death, she couldn't bear to see it bought up and plowed down for corn and soybeans. Damm's fears were warranted: she had lost a bid to purchase an additional 20 acres of Dan's land immediately west and across the road from the main farmstead. The first time she visited her farm after the auction, the acrid odor of smoldering slash piles hung in the air—the new owner of the 20 acres had bulldozed a quarter-mile line of trees and piled them up for burning; the pasture that had bordered the trees was being prepared for row crops.

“I cried, and I told Dan I was really sorry that I couldn't buy that land,” Damm recalls one summer afternoon as she stands in her driveway, looking at those 20 acres,

which were growing corn from fenceline-to-fenceline. Then she turned east to look at the 120 acres she had saved from the dozer and the plow. The grasslands that made up most of those rescued acres were speckled with small flags and crisscrossed with portable electric fencing—the former marked research plots, the latter rotationally grazed pasture paddocks. The flags and the fencing represented a possible way to not only maintain the legacy of Dan's farm as a home to a healthy ecosystem, but give other farmers and the rest of society a reason for not always seeing a stand of grass or trees

4<sup>th</sup> in a series



**On her farm in northeastern Iowa, Mary Damm talks to Phil Specht about ways of researching the relationship between grazing, bobolink populations and plant diversity. (LSP Photo)**

as unproductive until it's dozed, burned and plowed.

Before his untimely death, Dan Specht made it his mission to show, in his own quiet way, that through “wildly successful farming” productive agriculture and healthy ecosystems can coexist. As a member of the Land Stewardship Project's board of directors and the organization's Federal Policy

Committee, as well as groups like the Practical Farmers of Iowa, Specht also advocated for policy reforms that supported an ecologically balanced form of agriculture.

When Damm took over the land, she not only wanted to protect it from the plow and the dozer, but put her scientific background as a prairie ecologist to work and show that a working farm and a functional ecosystem can go hand-in-hand. So, a few years ago she joined forces with Dan's older brother, Phil Specht, on a research collaborative.

Phil farms virtually next door to Mary—land controlled by another landowner separates the two. Their research project, which is trying to strike a balance involving scientific veracity, environmental sustainability and agricultural profitability, represents on a micro-scale a question that vexes our entire food and farming system: how do we develop an indicator, a kind of label, that communicates a clear message about the impact a farming method is having on ecosystem health and at the same time gives the public a helpful clue about what it can do to support ecologically-based agriculture?

## Prairie Partners

This collaboration has its roots in a chance meeting Mary had with Dan at the 2004 North American Prairie Conference in Wisconsin. As part of her graduate school research at Indiana University, Damm was comparing the ecosystem health of native remnant prairies and their restored counterparts. After the meeting in Madison, Dan invited her to study prairies in Iowa. They became romantically involved and soon Mary was regularly making trips from Indiana to gather samples for her research. While using Dan's farm in northeastern Iowa as a home base, Damm had her eyes opened to how agriculture could relate to nature in a positive way.

“I actually did not know much about Midwestern agriculture,” recalls Damm, who, before attending graduate school, worked for The Nature Conservancy and the National Park Service in Colorado.

Even when she first started visiting Dan's farm and saw how, for example, he had replaced some of his annual row cropped acres with perennial pastures so he could produce beef cattle on grass, Mary was drawn more to the stands of oak and other hardwoods that made up portions of the property. However, she eventually noticed that Dan's rotationally

**Ecological Agrarians, see page 25...**



grazed pastures were home to an impressive number of avian species usually associated with prairie habitats: various kinds of sparrows, as well as meadowlarks, dickcissels, and, perhaps the most noticeable of them all, “skunk birds,” otherwise known as bobolinks. Dan had been into birds since he was a kid, even making up comic strips about them and other wildlife. He always seemed to have binoculars on-hand, and bought Mary her first pair. Chore time on Dan’s farm was often not a straightforward affair.

“We’d be driving along and, ‘Oh, oh, there’s a bird!’ And then we’d drive along some more and, ‘Oh, oh!’ So eventually we’d get back to what we were supposed to be doing, which was checking Dan’s cows,” recalls Damm with a laugh. “The birds, we’d always look at the birds.”

Mary and Dan soon became a kind of team—attending prairie and sustainable agriculture conferences, they would participate in different sessions, comparing notes afterward. Mary would accompany Dan on his cow chore/birding outings in the field and Dan, in turn, would help Mary do research in her prairie plots; he even used electric fence posts to jury-rig a height-adjustable plant sampling frame.

Dan bought Phil Specht his first pair of binoculars as well. Like Dan, Phil inherited their family’s passion for the out-of-doors. Phil, who is in his late 60s, has a degree in social work with a minor in chemistry from Wartburg College. Dan studied wildlife biology at Iowa State University before he decided, as Mary puts it, “I can go be a wildlife biologist at home.” (In the 1990s, he went back to school and got his biology degree at the University of Northern Iowa.)

The brothers ended up farming, and both decided they were not going to raise food dependent upon a conventional chemical- and energy-intensive system. In the 1970s, Phil started producing milk using managed rotational grazing. This type of livestock production regimen relies on breaking open pastures up into smaller paddocks using portable fencing and moving the cows frequently—sometimes as much as once-or twice-a-day. As a result, the animals don’t overgraze, allowing the grasses and forbs to recover and develop deep root systems.

The urine and manure produced by the bovines is spread evenly over the landscape, feeding the soil’s biology without overwhelming the land’s ability to make use of the fertility. Phil and other farmers utilizing this system are able to extend their use of low-cost feed in the form of forages while raising animals without an investment in expensive confinement facilities. Today, Specht has 250 acres of rotationally grazed pasture, and has not raised a significant



Phil Specht says his late brother Dan was fond of saying, “If you see bobolinks, three little words: It’s. All. Working. You have a working ecosystem.” (Photo by Alexandre Nicole; used with permission of the Cornell Lab of Ornithology)

amount of corn in a quarter-century. Dan eventually adopted managed rotational grazing on his own land to produce beef cattle.

### Bobolink Battle

One summer afternoon, Phil and Mary sit in the yard next to Dan’s abandoned house talking about everything from agriculture policy and water quality to research methods and how to utilize various government farm conservation programs. The conversation eventually makes it way around to Phil’s approach to farming. “It should mimic nature,” he says simply.

That statement prompts Mary to share her own philosophy on how she can contribute to protecting and supporting the environment. “I became an ecologist because I wanted to protect these natural areas and my personality isn’t that of a tree hugger who goes to meetings and expresses myself that way,” she concedes. “So, I felt if I had the science knowledge, that would be my way to contribute.”

At one point during the discussion, the farmer grabs a camera from his van and tries to snap photos of an uncooperative butterfly that is fluttering a few yards away.

“A female black morphed swallowtail,” Phil announces. He takes a lot of photos of the birds, plants and insects he sees on his farm and posts them to his Facebook page.

Specht talks about how he is hoping his telephoto lens can help him differentiate between two male bobolinks he has been watching.

“Did you name them, Phil?” Mary teases.

“Well, I could’ve,” says Phil, without missing a beat.

Pretty photos aren’t just a distraction for Phil. Conventional farmers have a relatively easy gauge of success—how many bushels harvested off an acre of land, or the number of pounds of milk sitting in the bulk tank at the end of the week, for example. But when a farm is viewed through the lens of ecological health, it gets trickier. Whatever farming methods they used, the Specht brothers were constantly on the lookout for indicators that they were in sync with nature. Over the years, grassland songbirds literally flocking to the farmers’ pastures turned out to be the easiest, not to mention fun, measurement of ecosystem health.

Others recognize this positive connection between birds, bovines and grass. While doing cerulean warbler research along nearby Bloody Run Creek a few years ago, natural resource scientist Paul Skrade would take shortcuts through Phil’s farm. He was, in his words, “blown away” by all the grassland birds he was seeing. Skrade, an assistant professor of biology at Upper Iowa University, says birds such as bobolinks are “obligate species,” meaning they rely almost 100 percent on a certain kind of habitat—grasslands, in this case. Finding such habitat when they return to the Midwest each spring is critical to the bobolink’s survival.

They winter in South America and make a jaw-dropping 12,500-mile round-trip migration flight each year. The males arrive in Iowa ahead of time, and tend to return to the same nesting areas year-after-year. They forage for insects and spiders found around forbs, grasses and sedges.

One afternoon when Skrade is visiting Mary’s farm as part of a Practical Farmers of Iowa field day, he explains that just having lots of grass isn’t enough—grassland song-

birds rely on a heterogeneous habitat, both in terms of the height of vegetation and the number of species present. Skrade likes that Phil does not have a uniform way of grazing his paddocks. Depending on conditions and time of year, sometimes the farmer leaves the cattle on the same spot for a couple days and they are allowed to eat the forage down relatively short. Other times, the cattle may be moved more frequently, leaving behind a fair amount of standing vegetation. Thus, the heterogeneity of the habitat.

"Agriculture and biodiversity can go together—we're seeing that here," says Skrade excitedly.

When Dan got Phil those binoculars, it spawned a bit of sibling rivalry. They began competing to see which farm could produce the most bobolinks in a given year. After all, the skunk bird's role as an obligate species makes it an excellent indicator of how the pasture habitat is doing. And by the way, a bobolink is easy to identify while mowing hay or moving fence.

"Dan's statement was, 'If you see bobolinks, three little words: It's. All. Working.' You have a working ecosystem," Phil says emphatically. "Anyway, the bobolink is just something you can take field glasses and see. It's a real handy indicator and a flashy one. Henslow's sparrows are more threatened than bobolinks, but frankly aren't as charismatic."

Phil estimates that of the 250 acres of pasture on his place, about 100 acres are prime bobolink habitat; there are some 30 nesting pairs of bobolinks on his farm alone. This isn't an assessment based on off-the-cuff observations made from a tractor seat—he believes in the power of empirical science. Besides having academic training in chemistry, Phil is a member of the American Association for the Advancement of Science, which publishes the journal *Science*. One of his "hobbies" is reading scientific abstracts.

"He's a weirdo," says Mary with a deep-throated laugh.

Specht is a big believer in recording data and adapting his management style as a result. He makes sure the information gathered is randomized. "Because your eyes will

always go to the exception," he says. Such an observe-and-adjust way of doing things is relatively common among farmers who are undertaking innovative practices that require replacing chemical inputs, fossil fuels and machinery with intensive management. Managed rotational grazing, like diverse crop rotations or cover cropping, is not a cookie cutter way of managing the land that lends itself to computerized calibrations.

"My number one rule for graziers: observe and adapt, observe and adapt," Phil says.

The farmer has set up rectangular study plots on his and Mary's pastures. Each spring, Phil and whoever he can get to help him will regularly walk back and forth past the plots, lightly dragging a rope over the tops of the vegetation. The farmer notes whenever a female bobolink is flushed off its nest by the rope. He also records grass height at various times during the study period using a measuring tape attached to a five-gallon bucket. Specht's ultimate goal is to figure out at what point forage produc-



**"I became an ecologist because I wanted to protect these natural areas," says Mary Damm, referring to habitats such as grasslands. Now she is trying to figure out how to use that scientific background to maintain, build and measure a functioning ecosystem on working farmland. (LSP Photo)**

tivity and bobolink productivity begin to intersect, or collide, depending on how you look at it.

Damm's research on her farm is going deeper, so to speak. Along 100-foot transects set up in the grazed pastures as well as in 10 acres of prairie Dan restored on a back part of the farm in the late 2000s, she records how many plant species are present and their individual abundance, thus developing a picture of how much diversity there is. She also takes soil samples, sending them off to a laboratory to be tested using a sophisticated method called the Haney Soil Health Test. Such testing goes beyond the traditional

measurement of basic nutrients like nitrogen, phosphorus and potassium (N-P-K), which is popular among crop farmers trying to determine their fertilizer needs. Measuring overall soil health provides insights into not just a field's fertility, but its ability to, among other things, build soil organic matter. High organic matter levels can provide numerous ecosystem services such as cleaner water and less flooding and runoff, as well as sequestration of greenhouse gases.

### Pasture vs. Prairie

One late July day, Mary and Phil walk into one of her pastures to get a firsthand look. There are 16 rotational paddocks on 100 acres, and they are standing in a spot that had been grazed a month previous by a local grass-based beef farmer who Mary is renting the pasture out to. It appears to be a well managed grassland: good regrowth, no exposed soil. Flags mark where Mary has been sampling vegetation and soil. A few female bobolinks flutter about. They are

buff-colored, a sharp contrast to the breeding males, which, with their feather color mix of black below and white above, suggest "a dress suit on backward," writes birding legend Roger Tory Peterson.

The pasture has some good forage in it from a livestock producer's perspective: timothy grass, orchard grass, bromegrass, red clover and white clover. There are also stands of giant ragweed and goldenrod, which are not such good livestock feed. In fact, brome is one of Phil's favorite forages, but prairie enthusiasts consider it an invasive. Phil and Mary assess the pasture from their various points of view.

"If you were looking at grazing management, this is under grazed," says Phil, pointing out that since most of the bobolinks have fledged for the season, this pasture could now be grazed more heavily.

Mary concedes she doesn't have the eye for pasture that she does for prairie.

"Look! Goldenrod! Look! Milkweed!" Phil shouts, voicing what he guesses the prairie ecologist is thinking, a reminder that even though a plant like goldenrod is a valuable part of the natural habitat—it's a source of food for pollinators during the fall, for example—it's not well-loved by cattle.

"Actually yes, I do see the diversity of plants. Just on the other side of the fence where I sampled one bird plot, there were 13 species of plants," she says, pointing



at a spot a few hundred feet away. “There is diversity—it’s not as diverse as a native prairie or maybe even a restored prairie, but in terms of what plants are out here and how many there are, and the cover too, it’s good. One other thing I notice here—I know this is a cool season grassland that this time of year has dead seed heads. And straight up ahead of us is the prairie.”

As she makes this last point, Damm gestures toward the 10-acre restored prairie a couple hundred yards away. The difference is striking: its warm season natives are green and vibrant, and various flowering plants are just coming into their own in the high heat. Here in late summer are two grassland habitats headed in opposite directions.

After Phil heads back home to do the evening milking, Mary walks to the 10 acres of restored prairie. As she wades into the waist-deep vegetation, more bobolinks, mostly females, flash about, giving out their soft “chuk” call when perched and emitting a more musical “bink” call in flight. (Paul Skrade, the bird expert from Upper Iowa University, compares the latter song to the noises R2-D2 makes in the *Star Wars* movies.) As evening approaches and the sun wanes, the temperature cools and the birds become more active. At one point, three noisy females appear at once, clinging to grass stems or perched on fence posts.

It’s clear Mary is in her element. All of the talk about government programs, pounds-of-bovines-per-acre and fencing systems represent a steep learning curve for her. She relies heavily on Phil and other farmers in the area for advice on what to do with the agricultural part of the farm. But here, among the native grasses and forbs, she is in charge.

As she walks to the back of the prairie, Mary talks about an idea for formally studying how grazing and native plant species interact. This prairie has been grazed in the past, but she would like to do it in a way where she can scientifically measure the impacts cattle are having on plant health and diversity. Some farmers are also interested in the answer to that question as they investigate, for example, integrating more warm season prairie species into their tamed pastures to make them hot weather hardy. Seeing how these native grasses and forbs are thriving at the height of summer, even as their pasture counterparts fade, makes such hybridizing of the two ecosystems attractive.

Restoration ecologists are also interested in such research, since an increasing number of natural resource agencies and even groups

like The Nature Conservancy are utilizing livestock to control invasives in natural grassland habitats.

### Seal of Approval

Mary is aware that no matter what she does on this farm, or what Phil does on his, they are just two of many in the region—islands in the stream, or, more accurately, islands in a roaring river that frequently leaves its banks. All she has to do is look across the road at that 20 acres of former timber and pasture to be reminded of that.

There’s a reason the majority of farms in her community and beyond raise corn and soybeans: government programs and the markets pay them to do that. Although Damm is using various USDA conservation programs to support improvement of the rotational grazing system, establish pollina-



Phil Specht talks about pasture-based livestock production during a field day on Mary Damm’s farm. “My number one rule for graziers: observe and adapt, observe and adapt,” Phil says, adding that farming should “mimic nature.” (LSP Photo)

tor habitat, conduct soil health sampling and grow edible nut trees on her farm, such government initiatives are no substitute for long-term financial sustainability.

Consistent market support for wildly successful farming practices is difficult to maintain as well. Over the years, Dan worked hard to try and get rewarded for his ecological farming methods through sustainable and organic meat labels, but had mixed results. Dan and Phil talked frequently about developing a sustainable grassland “stamp” featuring a singing songbird that could be placed on livestock products originating from farms that are doing the right thing when it comes to natural habitat. Phil would like to see the bobolink used as a poster child for such a stamp, at least in the Midwest where its habitat has been so decimated by industrial farming.

Any time we choose to focus on promoting one resource, there’s the danger of

excluding other pieces of the puzzle that are key to the workings of the whole. But the bobolink is so dependent on a healthy grassland ecosystem that using it as a biological barometer isn’t such a bad idea. With its black-and-white flashiness, coupled with a name that tends to trip off the tongue, it truly is charismatic and easy for even non-bird nerds to recognize and remember. Its presence, or absence, tells us a lot about what else finds that particular habitat attractive: other grassland songbirds and pollinators, as well as the kind of deep-rooted perennials that can keep our water clean and sequester greenhouse gases.

And Phil said something once that provides hope that whether or not a special “Bobolink Beef” label is created or enough respected science emerges from his and Mary’s plots to gain the attention of govern-

ment agencies and policy-makers, one fact remains: the farmer and the ecologist are going to do their utmost far into the future to maintain an ecosystem that Dan Specht would have recognized as healthy. Phil’s reassuring statement came when asked, almost half jokingly, who was winning the brotherly battle of the bobolink. “Me, this year,” he said. “Last year, it was Dan.”

The farmer then went on to describe ways he could tweak his grazing system, tilting the odds even more in his favor. □

### Give it a Listen

On episode 200 of the Land Stewardship Project’s *Ear to the Ground* podcast, farmer Phil Specht and biologist Paul Skrade talk about blending bovines, biodiversity and bobolinks: [www.landstewardshipproject.org/posts/1020](http://www.landstewardshipproject.org/posts/1020).

# 70 Hours of Keeping an Ear to the Ground

200<sup>th</sup> Episode of LSP's Podcast Marks 12 Years of Stewardship Conversations

On Dec. 5, 2005, the Land Stewardship Project launched its *Ear to the Ground* podcast by featuring author Frances Moore Lappé talking about the need for developing a food and farming system that's truly democratic. On Nov. 18, 2017, the 200<sup>th</sup> episode of *Ear to the Ground* focused on Phil Specht, who is passionate about seeking ways to determine if his farm is operating as a working ecosystem. In the intervening years, *Ear to the Ground* has showcased dozens of voices of those who, each in their own way, are out there working to "keep the land and people together." That 12 years of recordings represents over 70 hours of conversations that are by turns informative, insightful and inspirational. LSP would like to take this opportunity to thank the farmers, organizers, researchers and anyone else who took the time to share their thoughts on everything from soil health to social justice, often while standing in the middle of a field or sitting at a kitchen table. We've listed all 200 episodes here. Feel free to check them out at [www.landstewardshipproject.org/posts/podcast](http://www.landstewardshipproject.org/posts/podcast) or on iTunes under the title "*Land Stewardship Project's Ear to the Ground*."

- ◆ No. 1: First of a three-part series on Frances Moore Lappé and democracy.
- ◆ No. 2: Second of three-part series on Frances Moore Lappé and democracy.
- ◆ No. 3: Third of a three-part series on Frances Moore Lappé and democracy.
- ◆ No. 4: A farm family unearths some unpleasant environmental history, pushing them to work even harder to be good stewards of the land.
- ◆ No. 5: The role of women in agriculture is examined through theatre and film.
- ◆ No. 6: How Farm Beginnings helps new farmers set goals and put tools in their place.
- ◆ No. 7: Launching a financial plan for a new farming operation.
- ◆ No. 8: A tribute to the late Dave Serfling, a farmer, leader, husband, father and steward of the land.
- ◆ No. 9: A research initiative examines how farming can produce multiple benefits for society beyond food and fiber production.
- ◆ No. 10: A scientist working on the Multiple Benefits of Agriculture project talks about how working farms can help reduce fish-killing water pollution.
- ◆ No. 11: A dairy farmer talks about how he has used rotational grazing to improve water quality on his land.
- ◆ No. 12: Fred Kirschenmann talks about the future of agriculture in the first of a two-part series.
- ◆ No. 13: Second of a two-part series on Fred Kirschenmann and his views on the future of agriculture.
- ◆ No. 14: Economist Richard Levins describes how farmers can use market power to get paid a fair price for their production.
- ◆ No. 15: Farmer Audrey Arner talks about her experiences with globalization.
- ◆ No. 16: How Community Supported Agriculture (CSA) brings farmers and consumers together.
- ◆ No. 17: A Farm Beginnings discussion about planning for profit.
- ◆ No. 18: An introduction to innovative direct marketing for beginning farmers.
- ◆ No. 19: Beginning farmers learn how to successfully obtain credit.
- ◆ No. 20: A West African farmer talks about the negative impacts of unlimited U.S. commodity crop subsidies.
- ◆ No. 21: A beginning dairy farmer faces the realities of agriculture.
- ◆ No. 22: LSP's Mark Schultz discusses federal farm policy reform.
- ◆ No. 23: LSP calls for sustainable farm policy at a Congressional hearing.
- ◆ No. 24: A farm family gets rewarded for good stewardship.
- ◆ No. 25: The farm as natural habitat.
- ◆ No. 26: Perennial permaculture gets established on a Midwestern farm.
- ◆ No. 27: A farm makes a waste product into a sustainable input.
- ◆ No. 28: India's top farm journalist talks about an agrarian crisis.
- ◆ No. 29: Raising green vegetables during a Minnesota winter.
- ◆ No. 30: John Ikerd and the true costs of agricultural globalization.
- ◆ No. 31: Healthy food and healthcare.
- ◆ No. 32: The Monitoring Team's agroecological legacy.
- ◆ No. 33: Farm Beginnings grads reflect on a decade of farming.
- ◆ No. 34: Multifunctional farming and biofuels.
- ◆ No. 35: "Keeping the Land & People Together," Wendell Berry (part 1).
- ◆ No. 36: "Keeping the Land & People Together," Mary Rose O'Reilley (part 2).
- ◆ No. 37: "Keeping the Land & People Together," Joe Paddock (part 3).
- ◆ No. 38: "Keeping the Land & People Together," panel discussion (part 4).
- ◆ No. 39: "Keeping the Land & People Together," panel discussion (part 5).
- ◆ No. 40: Organic farming research comes of age.
- ◆ No. 41: Farming in the midst of sprawling development.
- ◆ No. 42: Tyrone Hayes and atrazine (part 1 of 2).
- ◆ No. 43: Atrazine and Paul Wotzka (part 2 of 2).
- ◆ No. 44: Teaching kids about food without dumbing it down.
- ◆ No. 45: How the Frantzen farm dealt with change and became sustainable.
- ◆ No. 46: LSP's organic initiative at the University of Minnesota.
- ◆ No. 47: Organic farming as economic development in Woodbury County.
- ◆ No. 48: A young couple uses Farm Beginnings to get started on the land.
- ◆ No. 49: How Equal Exchange uses Fair Trade to help farmers.
- ◆ No. 50: Why the pond on this dairy farm didn't overflow during a rainstorm.
- ◆ No. 51: Finding food in farm country (part 1).
- ◆ No. 52: Finding food in farm country (part 2).
- ◆ No. 53: Finding food in farm country (part 3).
- ◆ No. 54: Sustainable beekeeping and the importance of pollinators.
- ◆ No. 55: Serving locally-produced food in a rural cafe.
- ◆ No. 56: Using prairies for on-farm energy production.
- ◆ No. 57: A natural resource professional becomes a farmer.
- ◆ No. 58: An introduction to Holistic Management.
- ◆ No. 59: Long term planning for sustainable farming success.
- ◆ No. 60: How small patches of habitat can help pollinators.
- ◆ No. 61: How changes to Minnesota's Green Acres program threaten farmland stewardship.
- ◆ No. 62: Joel Salatin and a sustainable farming business.
- ◆ No. 63: How our dysfunctional healthcare system affects rural citizens.
- ◆ No. 64: Will Allen, Growing Power, and defeating racism in the food system.
- ◆ No. 65: A young family uses grass-based seasonal dairying to cure burn-out.
- ◆ No. 66: A Minnesota farm helps make up

70 Hours, see page 29...



for the loss of prairie (part 1).

- ◆ No. 67: A Minnesota farm helps make up for the loss of prairie (2nd of 2 parts).
- ◆ No. 68: How Farm Beginnings helped one couple make their ag dream a reality.
- ◆ No. 69: A rural healthcare facility works to source its food locally.
- ◆ No. 70: CSA strives to become a social change agent by farming with the wild.
- ◆ No. 71: An organic farming pioneer's sustainable vegetable production system.
- ◆ No. 72: A landmark national beginning farmer program is launched.
- ◆ No. 73: A young farmer seeks sustainability through value-added enterprises.
- ◆ No. 74: LSP's Farm Beginnings helps convert an agricultural doubter.
- ◆ No. 75: A farm-to-school checklist (part 1 of 2).
- ◆ No. 76: A farmer describes his farm-to-school experience (part 2 of 2).
- ◆ No. 77: Ken Meter maps a healthier food system.
- ◆ No. 78: A young couple launches a farming enterprise from afar.
- ◆ No. 79: A small rural school experiments with buying local, sustainable food.
- ◆ No. 80: What happens on the farm is reflected in the water.
- ◆ No. 81: Farmers teach a dairy scientist about a sustainable alternative.
- ◆ No. 82: Profitable farming and good bird habitat aren't mutually exclusive.
- ◆ No. 83: How the Chippewa 10% Project could produce perennial profits.
- ◆ No. 84: What a perennial-based farming system may look like in the Chippewa.
- ◆ No. 85: 1st in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 86: 2nd in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 87: 3rd in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 88: 4th in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 89: 5th in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 90: 6th in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 91: 7th in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 92: 8th in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 93: Final in a series on a Farm Beginnings "decision-making" presentation.
- ◆ No. 94: A play about a retiring couple's

struggle with their farm's future (part 1).

- ◆ No. 95: A play about a retiring couple's struggle with their farm's future (part 2).
- ◆ No. 96: Overcoming challenges to sustainable pork production.
- ◆ No. 97: A young couple works to prove their small farm is a viable business.
- ◆ No. 98: Don Huber describes how Roundup/glyphosate works (part 1 of 5).
- ◆ No. 99: Don Huber describes how Roundup/glyphosate can create virulent diseases in crop fields as well as herbicide-resistant superweeds (part 2 of 5).
- ◆ No. 100: Don Huber describes how Roundup/glyphosate alters soil biology, making crops more susceptible to disease (part 3 of 5).
- ◆ No. 101: Don Huber describes how farmers can recognize field damage caused by Roundup/glyphosate and how abuse of this chemical has undermined the usefulness of this weed control tool (part 4 of 5).



LSP's Brian DeVore conducting a podcast interview with farmer Dan Jenniges (left) and wildlife refuge manager J. B. Bright. (Photo by Rebecca Wasserman-Olin)

- ◆ No. 102: Don Huber describes how Roundup/glyphosate could affect livestock and human health (part 5 of 5).
- ◆ No. 103: Using native prairie strips to make row crop fields more sustainable.
- ◆ No. 104: A farm family relies on business planning to keep their dairy viable.
- ◆ No. 105: Farm banks on biodiversity to manage economic and environmental risk.
- ◆ No. 106: Beginning farmers find a working operation that's intact and ready to produce income.
- ◆ No. 107: How one farmer used innovative grazing and leasing techniques to start a low-cost livestock operation.
- ◆ No. 108: A closed diner serves as the epicenter of a rural community's efforts to make local food an economic driver.
- ◆ No. 109: A land grant professor talks about ensuring the future of organic ag.
- ◆ No. 110: Farm Beginnings graduates

adapt to a new geographic region using low-risk techniques.

- ◆ No. 111: A small town banker talks about the role sustainable farms can play in a community's economy.
- ◆ No. 112: An older farmer considers how to pass on the farm to the next generation.
- ◆ No. 113: A young couple steps back from near burn-out to reconsider their farm's future.
- ◆ No. 114: A pioneering CSA farm transitions to the next generation.
- ◆ No. 115: How a healthcare exchange accountable to the public could help family farmers.
- ◆ No. 116: A young couple emerges from the wilderness to join a farming community.
- ◆ No. 117: Dave and Deb Welsch pass their crop operation on to beginning farmers who are not family members.
- ◆ No. 118: A retiring farmer and beginning farmers share their transition stories.
- ◆ No. 119: A community garden in a low-income neighborhood helps Denise Crews manage her Type 2 diabetes.
- ◆ No. 120: Terrie and Joe Adams work to make Marshwatch Farms into a place where people can learn that profitable food production and environmental health go together, even in a region threatened by sprawling development.
- ◆ No. 121: How farmers, scientists and conservationists have teamed up to revolutionize the relationship between ag and soil health.
- ◆ No. 122: A key relationship developed through LSP's Farmer Network helps a beginning farmer launch his operation with the help of mentors.
- ◆ No. 123: An LSP workshop focuses on how rural townships in Minnesota can use interim ordinances and comprehensive planning to protect the community from unwanted developments.
- ◆ No. 124: Farm Beginnings grads John and Heidi Wise climb out of the "pit of despair."
- ◆ No. 125: BFRDP: A discussion about a precedent-setting federal program for beginning farmers and ranchers.
- ◆ No. 126: A beginning farmer talks about how it can be difficult to get access to land—even in the middle of farm country.
- ◆ No. 127: Farmer Tony Schultz talks about how Community Supported Agriculture can revitalize our food system and rural communities.
- ◆ No. 128: A government conservationist talks about treating soil as a complete ecosystem.

- ◆ No. 129: LSP Farm Beginnings participants talk about “unfair advantages” as they launch an enterprise focusing on mushrooms and CSA vegetables.
- ◆ No. 130: An LSP member-farm helps spawn a CSA movement in China.
- ◆ No. 131: LSP helps launch the Minnesota Farmworker Justice Campaign to spotlight labor violations on industrial farms.
- ◆ No. 132: An innovative grass-based system makes a farm friendly to livestock, wildlife and the bottom line.
- ◆ No. 133: How “Tribally Supported Agriculture” could help a Native American community attain food sovereignty.
- ◆ No. 134: Farm Beginnings applies the brakes to a young couple’s farming plans—in a good way.
- ◆ No. 135: How farmers are improving trout streams with grazing.
- ◆ No. 136: How can we get more farms to integrate prairie into row-cropped fields?
- ◆ No. 137: Two Minnesota farmers experiment with multi-species cover cropping to improve soil health.
- ◆ No. 138: A brother-sister team uses Farm Beginnings and Journeyperson to transition from being landowners to active farmers.
- ◆ No. 139: NRCS staffers from Minnesota’s top Conservation Stewardship Program county talk about how farmers implement CSP on working land.
- ◆ No. 140: New farmers talk about how Farm Beginnings helps them balance demand for their products with keeping their businesses, and lives, sustainable.
- ◆ No. 141: A beginning farmer incubator near Duluth is helping revitalize food and farming in the Lake Superior region.
- ◆ No. 142: LSP Citizens’ Frac Sand Summit (part 1): Tex Hawkins talks about why frac sand mining poses such a risk to the Driftless Region.
- ◆ No. 143: LSP Citizens’ Frac Sand Summit (part 2): Farmer Bob Christie talks about how frac sand mining threatens the farming community.
- ◆ No. 144: LSP Citizens’ Frac Sand Summit (part 3): Scientist Michael McCawley on the health risks posed by surface mining’s production of ultrafine particles.
- ◆ No. 145: LSP Citizens’ Frac Sand Summit (part 4): Scientist Crispin Pierce describes cutting-edge research on silica sand dust in Wisconsin.
- ◆ No. 146: LSP Citizens’ Frac Sand Summit (part 5): The MPCA’s John Linc Stine talks about the role his agency plays in regulating the frac sand industry.
- ◆ No. 147: LSP Citizens’ Frac Sand Summit (part 6): Earth Works’ Jennifer Krill

describes the negative impacts of extreme energy extraction.

- ◆ No. 148: LSP Citizens’ Frac Sand Summit (part 7): LSP’s Bobby King talks about the role of local government and state regulations in controlling frac sand mining.
- ◆ No. 149: Farm Beginnings grads talk about being in the “experimental/making mistakes” stage of their enterprise.
- ◆ No. 150: A community food co-op in a farm town rises from the rubble and begins its next chapter.
- ◆ No. 151: Using conservation grazing to keep wildlife refuges, prairies and other natural areas healthy.
- ◆ No. 152: People share their connections to the land and community at a special LSP storytelling event.
- ◆ No. 153: How the Forever Green Initiative could make Minnesota farming more efficient.
- ◆ No. 154: NRCS soil health evangelist Ray Archuleta shares his passion for “farming in nature’s image.”
- ◆ No. 155: Farm Beginnings farmer-presenter Chris Duke talks about the importance of relationships in direct-marketing.
- ◆ No. 156: An LSP-sponsored “BioBlitz” in Minnesota’s Simon Lake area provides a kick-start for utilizing grazing to revitalize natural habitat.
- ◆ No. 157: What should you do when frac sand mining comes knocking? Get informed, get organized and get connected.
- ◆ No. 158: An Australian ag financial planning expert talks to LSP about creative ways to transition farms to the next generation.
- ◆ No. 159: LSP and Hope Community work to bring racial equity to the Minneapolis Park System’s urban ag initiative.
- ◆ No. 160: Farm Beginnings graduates team up to create an innovative marketing cooperative in the Lake Superior region.
- ◆ No. 161: How women play a major role in the future of farmland and our rural communities.
- ◆ No. 162: How federal crop insurance is harming family farmers, the land and our communities—and why we all have a stake in reforming it.
- ◆ No. 163: Rising from the ashes: Farm Beginnings grads recover from a disaster and launch a dairy farm.
- ◆ No. 164: Farmers, seed dealers and meat firms come together at an LSP meeting to talk about the non-GMO crop market.
- ◆ No. 165: LSP farmer-members honor Wendell Berry with an evening of readings.
- ◆ No. 166: A farmer works with a professor and her students at a local college to study the impacts of cropping on soil health.
- ◆ No. 167: Farm Beginnings grads achieve

a series of “micro-goals” in service of the bigger picture: a successful livestock enterprise.

- ◆ No. 168: Rural residents and naturalists “BioBlitz” grassland and learn about its relationship to clean water and vibrant communities.
- ◆ No. 169: A livestock/crop farmer lends out an “odd corner” on his property as a launching pad for a beginning vegetable operation.
- ◆ No. 170: How a Farm Beginnings field day makes everyone a “consultant.”
- ◆ No. 171: Using conservation grazing to revitalize a prairie.
- ◆ No. 172: With the help of LSP’s Farm Beginnings and Journeyperson, Sara Morrison takes her garden beyond the backyard.
- ◆ No. 173: How Indiana became the king of cover cropping (part 1 of 3).
- ◆ No. 174: A soil scientist compares Indiana’s “bottom up” approach to advancing soil health to Maryland’s “top down” system (part 2 of 3).
- ◆ No. 175: An Indiana farmer describes his experience with cover cropping and how it fits into a bigger goal of improving his land’s soil health (part 3 of 3).
- ◆ No. 176: LSP experiments with a new test that provides deeper insights into soil’s productive potential.
- ◆ No. 177: A farmer and a researcher talk about making cover crops pay.
- ◆ No. 178: The Minnesota Nurses Association’s Rose Roach talks about working with LSP to transform healthcare from a commodity to a human right.
- ◆ No. 179: LSP investigates how innovative farmers manage economic and agronomic risk.
- ◆ No. 180: Using Farm Beginnings and Journeyperson training to make holistic decisions on a community farm.
- ◆ No. 181: How birds, biology and food production blend on one Minnesota dairy farm.
- ◆ No. 182: How rotational grazing on one farm is improving profits, wildlife habitat and community relations.
- ◆ No. 183: Seeing is believing: a rain simulator shows the value of continuous living cover on farm fields.
- ◆ No. 184: LSP members see firsthand how rural Mexicans are using their connections to the land to fight the corporate takeover of agriculture.
- ◆ No. 185: An artist uses her work to introduce people to the wonders of the soil universe.
- ◆ No. 186: George Boody and Mark Schultz discuss their personal passions and



how LSP brings about positive change as the organization prepares for a leadership transition.

◆ No. 187: Allen Williams on soil health, livestock and “compounding, cascading effects.”

◆ No. 188: Autumn Brown talks about how we can counter the myths that lead to racial injustice in rural America and elsewhere.

◆ No. 189: Rick Bieber describes how building soil health saved his farm from financial ruin.

◆ No. 190: Dr. Kristine Nichols describes how we can build agronomic, economic and environmental resiliency in our ag soils.

◆ No. 191: LSP’s George Boody describes what he learned at an international conference on how agriculture can sequester greenhouse gases

◆ No. 192: A dairy farmer finds more microbes in the soil means more money in the bank.

◆ No. 193: A farmer’s wish to not have his land become just one more cornfield provides an opportunity for beginning farmers.

◆ No. 194: Gardening space in the heart of the city brings people together over food, farming and fellowship.

◆ No. 195: Tom Frantzen describes how he is using diversity to make his farm more resilient in the face of extreme weather.

◆ No. 196: A farmer and a soil health expert

talk about how livestock, cover crops and pastures are the “rock stars” of building soil health.

◆ No. 197: A row-cropped field is converted back to prairie, benefiting the environment and livestock.

◆ No. 198: For one beginning organic dairy farmer, the path to affordable land leads through some trees, up a few hills, and over a brook.

◆ No. 199: Farm Beginnings helps the Schwagerls do the kind of enterprise analysis needed to transfer their passions into profits.

◆ No. 200: Birds and other biological indicators provide evidence that an Iowa farm is a “working ecosystem.” □



LAND STEWARDSHIP PROJECT

## Membership Update

### In Memory & in Honor...

The Land Stewardship Project is grateful to have received the following gifts made to honor and remember loved ones and friends:

**In Memory of Joe Morse**

- ◆ Jeanine Thubauville
- ◆ Dale Schauer
- ◆ Joann Thomas & Doug Nopar

For details on donating to LSP in the name of someone, contact Mike McMahon at 612-722-6377 or [mcmahon@landstewardshipproject.org](mailto:mcmahon@landstewardshipproject.org). Donations can be made online at [www.landstewardshipproject.org/home/donate](http://www.landstewardshipproject.org/home/donate).

## Support LSP in Your Workplace

The Land Stewardship Project is a proud member of the Minnesota Environmental Fund, which is a coalition of environmental organizations in Minnesota that offers workplace giving as an option in making our communities better places to live. Together, member organizations of the Minnesota Environmental Fund work to:

- promote the sustainability of our rural communities and family farms;
- protect Minnesotans from health hazards;
- educate citizens and our youth on conservation efforts;
- preserve wilderness areas, parks, wetlands and wildlife habitat.

You can support LSP in your workplace by giving through the Minnesota Environmental Fund. Options include giving a designated amount through payroll deduction, or a single gift. You may also choose to give to the entire coalition or specify the organization of your choice within the coalition, such as the Land Stewardship Project.

If your employer does not provide this opportunity to give through the Minnesota Environmental Fund, ask the person in charge of workplace giving to include it. For details, contact LSP’s Amelia Shoptaugh at [amelias@landstewardshipproject.org](mailto:amelias@landstewardshipproject.org) or 612-722-6377. □



## Volunteer for LSP

A big “thank you” goes out to the volunteers who helped the Land Stewardship Project in all aspects of our work during 2017. LSP literally could not fulfill its mission without the hard work of our volunteers. Volunteers help us do everything from stuff envelopes and make telephone calls to enter data and set up logistics for meetings. If you’d like to volunteer in one of our offices, for an event or at a meeting, contact:

• **Montevideo, Minnesota**  
Terry VanDerPol, 320-269-2105, [tlvdp@landstewardshipproject.org](mailto:tlvdp@landstewardshipproject.org)

• **Lewiston, Minnesota**  
Karen Benson, 507-523-3366, [karenb@landstewardshipproject.org](mailto:karenb@landstewardshipproject.org)

• **Minneapolis, Minnesota**  
Amelia Shoptaugh, 612-722-6377, [amelia@landstewardshipproject.org](mailto:amelia@landstewardshipproject.org)

## Membership Questions?

If you have questions about the status of your Land Stewardship Project membership, give our Individual Giving and Membership Program a call at 612-722-6377, or send an e-mail to [megans@landstewardshipproject.org](mailto:megans@landstewardshipproject.org). □





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## STEWARDSHIP CALENDAR

- **JANUARY—Minn. Beginning Farmer Tax Credit becomes available** (*see page 23*)
- **JAN. 8—Deadline for farmers to submit listings to the LSP CSA Directory** (*see page 7*)
- **JAN. 11—LSP Workshop on the Minnesota Beginning Farmer Incentive Tax Credit**, Northfield, Minn. (*see page 23*)
- **JAN. 11-12—Minn. Organic Conf.**, St. Cloud. Contact: 651-201-6012, [www.mda.state.mn.us/food/organic/conference.aspx](http://www.mda.state.mn.us/food/organic/conference.aspx)
- **JAN. 14—MNsure open enrollment deadline for 2018 insurance plans in Minnesota**. Contact: [www.mnsure.org](http://www.mnsure.org), 1-855-366-7873
- **JAN. 19—“Bringing Livestock Back” LSP-SFA Workshop**, Glenwood, Minn. Contact: Bryan Simon, LSP, 320-492-2526, [bsimon@landstewardshipproject.org](mailto:bsimon@landstewardshipproject.org)
- **JAN. 20—LSP Generational Farm Transitions Workshop**, Northfield, Minn. (*see page 23*)
- **JAN. 19-20—Practical Farmers of Iowa Conf.**, Ames. Contact: [www.practicalfarmers.org](http://www.practicalfarmers.org); 515-232-5661
- **JAN. 25-27—Northern Plains Sustainable Ag Society Conf.**, Aberdeen, S. Dak. Contact: [www.npsas.org](http://www.npsas.org); 701-883-4304
- **JAN. 26-27—13th Emerging Farmers Conf.**, St. Paul, Minn. Contact: Minnesota Food Association, 651-433-3676; [www.mnfoodassociation.org](http://www.mnfoodassociation.org)
- **FEB. 10—LSP Generational Farm Transitions Workshop**, Northfield, Minn. (*see page 23*)
- **FEB. 10—LSP soil biology workshop with Dr. Elaine Ingham**, Rochester, Minn. (*see page 13*)
- **FEB. 10—Sustainable Farming Association of Minn. Conf.**, St. Joseph. Contact: [www.sfa-mn.org](http://www.sfa-mn.org), 844-922-5573
- **FEB. 16—LSP Soil Builders’ Network cover cropping workshop featuring Iowa farmer Loran Steinlage**, Preston, Minn.

### Thinking about Your Farm’s Future?

LSP will be holding a workshop series this winter on transitioning farms to the next generation. The series will take place on three Saturdays—Jan. 20, Feb. 10 and March 3—in Northfield, Minn. Participants must sign-up for all three sessions.

There will be a chance to network with other farmers who are going through various stages of the transition process. Topics include goal setting and financial planning, as well as legal, tax and healthcare implications. Details are on page 23.

Contact: Shona Snater, LSP, 507-523-3366, [ssnater@landstewardshipproject.org](mailto:ssnater@landstewardshipproject.org)  
 → **FEB. 20—2018 Minn. State Legislature convenes**. Contact: Bobby King, LSP, 612-722-6377, [bking@landstewardshipproject.org](mailto:bking@landstewardshipproject.org)  
 → **FEB. 22-24—MOSES Organic**

Check **Upcoming Events** at [www.landstewardshipproject.org](http://www.landstewardshipproject.org) for the latest workshops, classes, field days and deadlines.

- Farming Conf.**, La Crosse, Wis. Contact: <https://mosesorganic.org>; 715-778-5775
- **MARCH 3—LSP Generational Farm Transitions Workshop**, Northfield, Minn. (*see page 23*)
- **MARCH 27—LSP soil health workshop featuring Ray Archuleta**, Lewiston, Minn. (*see page 13*)
- **MARCH 28—LSP soil health workshops featuring Ray Archuleta**, Austin & Faribault, Minn. (*see page 13*)
- **MARCH 29—LSP soil health workshop featuring Ray Archuleta**, Kasson, Minn. (*see page 13*)
- **SEPT. 1—Application Deadline for 2018-2019 LSP Farm Beginnings Course** (*see page 19*)

### Make a Stewardship (Fashion) Statement

In celebration of our 35<sup>th</sup> anniversary year, the Land Stewardship Project has a new t-shirt available. LSP staff member Josh Journey-Heinz has designed a light, comfortable shirt that shows off the wearer’s support of “keeping the land and people together.”

The shirts are “avocado” green, and come in various sizes, with women’s and men’s cuts available. They are ring-spun 100 percent organic cotton and made in the United States.

The price is \$20, and the shirts are available from our offices in Lewiston (507-523-3366), Montevideo (320-269-2105) or Minneapolis (612-722-6377), as well as at LSP events and meetings. Shirts can also be ordered from our online store at [www.landstewardshipproject.org/store](http://www.landstewardshipproject.org/store).

