# Land Stewardship



## LAND **STEWARDSHIP PROJECT**

36 Years of Keeping the Land & People Together Letter

Volume 36

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Number 4, 2018



The tale of the trench: digging deep into soil health (page 16).



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# Land Stewardship

LAND STEWARDSHIP PROJECT

Keeping the Land & People Together

Vol. 36—Number 4, 2018

The Land Stewardship Letter is published by the Land Stewardship Project, a private, nonprofit organization. The Land Stewardship Project's mission is to foster an ethic of stewardship for farmland, to promote sustainable agriculture and to develop healthy communities. Members of the Land Stewardship Project receive this publication as a benefit. Annual membership dues are \$35.

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## Report from the Field

# **Respect Our Mother**

Centering Dakota Notions of Food Sovereignty: Land, Racism & Historical Context

**EDITOR'S NOTE:** In addition to her work as a Land Stewardship Project membership assistant, Elizabeth Makarewicz is wrapping up a master's degree in Sustainable Food Systems through Green Mountain College in Vermont. Makarewicz's graduate studies, along with her involvement in LSP's racial justice cohort two years ago, led her to more carefully examine her role as a white person working for racial justice in the food system. For example, she recently gave a presentation on "Decentering Whiteness in Local Food Systems" at the Future of Food Studies Conference. This essay, where Makarewicz shares some of what she's learned related to racial justice and land ownership, is excerpted from her presentation.

By Elizabeth Makarewicz

s a white person working for a majority white organization, I feel it is particularly important to position myself within work for racial justice. In her foundational article, "If Only They Knew: The Unbearable Whiteness of Alternative Foods," Dr. Julie Guthman reminds us that whiteness, just like blackness or brownness, is a lens that shapes

During the past decade or so that I have been engaged in food systems work, I have noted two perspectives from white farmers when it comes to land: 1) My family has owned this land for generations; we work hard, it belongs to us. 2) I farm on stolen land.

While I would consider the second statement a more nuanced, enlightened view than the first, the conversation usually stops after anyone brings up the issue of "stolen land." Where do we go from here?

land management practices.

#### **Historical Context**

The Dakota call this land "Mni Sota Makoce" — the land where the water reflects the sky. The Dakota homeland is loosely defined by the Minnesota River to the west, the Mississippi River to the east, and the Saint Croix River running right across the top. This land is full of water—rivers, lakes, streams—and also beautiful bluffs, forests and a few prairies. Where the Minnesota and Mississippi Rivers meet is known to the Dakota as the Bdote, understood to be the center of the universe and source of all life. The Dakota consider the Bdote to be their most sacred site.

In 1819, a structure was erected at the Dakota's sacred Bdote. That structure is known to us today as Fort Snelling. This fort was used to house hundreds of displaced Dakota women and children after the Dakota War of 1862. The Native population of this land had coexisted relatively peacefully with the white people—first French fur traders, then Yankees from the Eastern coloniesuntil resources started to get tight. Newer white settlers, from the East, were more problematic. These people were mostly interested in land: occupying it, plowing it up, planting it, owning it. And as the territory edged toward statehood, it quickly became clear in the Europeans' view that the Dakota had to go. Disagreements between white set-



Where the Minnesota and Mississippi Rivers meet is known to the Dakota as the Bdote, understood to be the center of the universe and source of all life. (*Photo by Elizabeth Makarewicz*)

our perspective on food systems work. The Land Stewardship Project's notions of land and agriculture are white-centric—our land access work is almost exclusively geared toward private land ownership. While there is nothing inherently wrong with this work, by prioritizing private land ownership, alternative relationships with the land, especially those espoused by indigenous cultures, are left out.

Perhaps one way to smooth the way for such a difficult discussion is to provide some perspective. Individual, rather than communal land ownership, is the "American Way." Efforts to frame land access and food justice are incomplete without the perspective of indigenous people whose ancestors first managed and cared for the land. And furthermore, we cannot talk about sustainable, local agriculture without talking about

tlers and the Dakota culminated in the War of 1862—a very short conflict that lasted six weeks. After that war, thousands of Dakota were displaced from their homeland. Overwhelmingly out matching their rivals with weapons and manpower, white settlers had succeeded in their vision of clearing the

Respect, see page 4...

#### ...Respect, from page 3

land—first of its native human population, then of its native forests. Minnesota's original Big Woods were largely cleared away for row crop agriculture, livestock and, most significantly, the Twin Cities known as Minneapolis and Saint Paul. The Dakota men and women who did not leave on their own were moved forcibly to remote reservations, and Dakota children were sent to boarding schools to learn "Western" customs while being forced to give up their own food, language and ritual traditions.

The legacy of both physical and cultural displacement continues to disadvantage the Dakota population of Minnesota today. Many descendants of the Dakota displaced after the war reside on under-resourced rural reservations and subsidized housing communities in urban areas. Within those communities, government-issued food commodities have been linked to increased rates of diet-related illnesses, like diabetes and cardiovascular disease.

#### 'The Master'

So when I hear people reference that Minnesota's land was "stolen," this is the story behind that concept. We are all hurt by a system plagued by inequality. How do you and I, along with a small nonprofit organization like the Land Stewardship Project, make this right?

In his landmark book, Pedagogy of the Oppressed, Paulo Freire presented a simple message: the most marginalized members of our society know best how to fight their own struggles. Put another way, as Audre Lorde writes, "The master's tools will never dismantle the master's house." Although Lorde was referring to the racism embedded in the feminism of the 1970s, the sentiment applies to movements for food sovereignty today. Efforts to address native food security by the federal government, which have repeatedly damaged the Dakotas' capacity to feed themselves in a sustainable and culturallyappropriate way, are likely to repeat or reinforce offenses of the past.

Waziyatawin, a Dakota tribal member and scholar, points out that the struggles of indigenous people are often ignored because the public at large does not recognize these struggles as their own. In a world where climate change is an increasing threat and precious resources are rapidly diminishing, Native Americans' warning to "respect our mother" is ever more relevant. In reality, the movement for native food sovereignty intersects with a number of other movements for environmental, economic and social justice. By simultaneously centering Dakota voices

and connecting the work of other activities to indigenous struggles, a sense of solidarity will greatly aid food sovereignty efforts. In light of Freire and Lorde's advice, I'd like to present two native-led solutions to achieving equity in the food system.

Number one is education. Indigenous-led education initiatives are allowing tribes to take matters of health and food security into their own hands. Many native groups, such as Dream of Wild Health in the Twin Cities Metropolitan Area, are bringing awareness back to traditional foodways. These traditional foodways encourage a return to foods that are native to North America, which reduces the risk of diseases so connected to the Western diet.

Sean Sherman, also known as "The Sioux Chef," is advocating a return to indigenous cuisine. Sherman's mission is to educate both Minnesotans and society at large about North America's native food traditions. Currently in the works (scheduled to open in 2019) is a restaurant, nonprofit and education-oriented "Indigenous Food Lab" located at the base of St. Anthony Falls, close to downtown Minneapolis. This site is symbolically significant for two reasons: 1) the Falls mark the site where European settlers first harnessed the power of the Mississippi River and built a slew of grain mills, which would become the bedrock of Minnesota's early economy; and 2) the Falls held spiritual relevance for both Dakota and Ojibwe tribes who historically traveled and lived nearby. An indigenous-centric restaurant at such a historically-significant site will hopefully spark conversations about the legacy of historical injustices toward the Dakota and other indigenous groups.

The second solution I'm going to discuss is far less palatable to a food and farming system dominated by whiteness, and that is reparations. Reparative justice is a key element in the Dakota movement for food sovereignty. Waziyatawin, the same Dakota scholar I mentioned earlier, argues that justice for the native communities of Minnesota

is not possible until reparations have been made. She further proposes the institution of two major forms of reparations: 1) the return of state, federal and municipal public lands to native management; and 2) monetary and infrastructural support to aid the transition of native people back to the land. Radical though these ideas seem to most Minnesotans, such a shifting of government assets would not be unprecedented. Waziyatawin points out that the United States devotes one-third of its foreign aid budget to the country of Israel, because it is deemed a worthy investment by those in power. Policymakers argue that spending public funds on maintaining an Israeli state contributes to Middle Eastern stability, and, in turn, American national security.

In light of that, the rightful return of the millions of acres of land to the Dakota would be a wise investment in resource stewardship, Waziyatawin argues. Indigenous peoples have practiced careful and sustainable land stewardship for thousands of years. Their wisdom is inherently valuable, especially in the age of climate change.

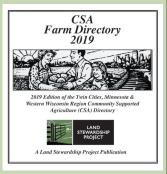
My personal favorite writer and thinker, bell hooks, has some wisdom to shed on our current predicament. In her book *Belonging:* A Culture of Place, she demonstrates how the forces of capitalism alienate us from nature and perpetuate systems of oppression. Our relationships to each other and the land are shaped around themes of scarcity and greed, rather than the abundance of the natural world. Furthermore, hooks argues that a more equitable economy can be created when we reclaim our relationship with the natural world.

For those reasons, I invite you to take a long, deep view of history and acquaint yourself with your natural surroundings back home, wherever that may be. The forces of history will continue to influence our Big Woods, or Mni Sota Makoce, the land where the water reflects the sky. And our own actions will determine how humans fit into that picture.

## Join a CSA Farm in 2019

The 2019 edition of the Land Stewardship Project's Twin Cities, Minnesota & Western Wisconsin Region CSA Farm Directory is now available at https://landstewardship-project.org/stewardshipfood/csa.

The *Directory* lists Community Supported Agriculture (CSA) farms that provide eaters in the Twin Cities, Minnesota and western Wisconsin region an opportunity to buy a share, and in return receive regular deliveries of produce, meat and other food throughout the growing season. Check https://landstewardshipproject.org/stewardshipfood/csa for helpful hints on how to choose the CSA farm that best fits your situation and needs.



# Myth Buster Box

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

## → Myth: 'Farm the Best-Preserve the Rest' Will Prevent Ecological Collapse

→ Fact

How can food production be done in a way that doesn't destroy the environment? When the issue

of mitigating agriculture's negative impact on ecological health is brought up, two opposing strategies are often laid on the table: "land sharing" vs. "land sparing." Under the first system, eco-friendly measures are integrated into existing farm operations. Cover crops are used to build soil organic carbon, or an odd corner of a farm is planted to wildlife habitat, for example. The "land sparing" strategy calls for farming our most fertile agricultural lands intensively, utilizing monocultural, industrialized systems to maximize yields. The wisdom behind that latter approach is that although these industrialized sacrifice zones will be ecologically decimated, they will be productive enough to meet our food needs, leaving room for national parks, wilderness areas and other pieces of natural habitat.

The land sparing approach received a boost in August when a group of scientists published a paper in the journal *Current Biology* that showed the results of measuring carbon storage in agricultural regions in Mexico, Ghana and Poland. Because carbon is a component of greenhouse gases such as carbon dioxide and methane, its release contributes to climate change. Sequestering it in the ground slows the greenhouse effect.

The scientists found that on a per-acre basis, farms that utilize land sharing strategies stored more carbon than their high-yielding, industrialized counterparts. But it wasn't enough to make up for the fact that more of these sustainable operations were needed to produce the same amount of food. Natural lands that were not cultivated stored by far more carbon than any cultivated acres, no matter what production methods were being used, according to the study.

Such research bolsters the argument that we need to focus on strategies that raise yields on fewer acres, leaving more "natural" land available as a carbon sink. But there are a couple of problems with such a conclusion. First, as even the scientists who wrote the *Current Biology* paper concede, they didn't take into consideration the amount of carbon emissions that result from industrialized crop production itself. In other words, all that intensive production on those

sacrifice acres could produce enough carbon emissions to overwhelm the positive benefits of setting aside more land as natural habitat.

The same is true of any wildlife benefits that result from the "farm the best-preserve the rest" strategy. Creating islands of healthy habitat in an industrialized landscape simply won't work, particularly for species that migrate.

"To avoid mass extinction and ecosystem collapse, we must integrate biodiversity conservation into the landscapes we use and not simply relegate nature to a limited number of protected areas that are doomed if left as isolated islands within biological deserts," write conservation biologists Claire Kremen and Adina Merenlender in the journal *Science*.

Their review paper, which was published in October, argues that relying on industrialized sacrifice zones to preserve natural lands will not provide the widespread ecosystem services the planet requires to not only repair itself, but develop more resilience in the face of climate change. They also take on the myth that farming systems that rely more on natural processes are inherently less productive. An increasing body of scientific literature, along with on-farm experience, is showing that, for example, farming systems that rely on carbon-building strategies like cover-cropping can actually out-yield conventional row crop systems once they get established. Farmers are also seeing the benefits of having natural habitat near their fruit, vegetable and even grain operations, since they provide homes for insects that provide pollination services while feeding on pest species.

Kremen and Merenlender's paper cites numerous examples from around the world where agroecological practices on working lands are producing viable yields of foods while providing ecosystem services like wildlife habitat, clean water, carbon sequestration and fewer toxins in the environment. New research is showing that human-dominated landscapes can support more biodiversity than originally thought.

The *Science* paper acknowledges that farmers who have invested heavily in the machinery and other infrastructure associated with industrialized systems are not likely to go "ecological" on a large-scale basis. But there is great potential for these conventional operations to borrow techniques and ideas from their ecological agrarian counterparts, and thus inject a little "naturalness" into their

industrialized systems.

Here in the Midwest, conventional farmers are showing up in droves at workshops put on by the Land Stewardship Project and other groups to learn how they can revitalize their soil biome. They may not buy into agroecology whole hog, but studies show that even if conventional farmers could, for example, increase their soil organic matter by a little bit, there would be tremendous wide-scale environmental benefits.

A paper published in the journal *Science Advances* in November estimated that in the U.S., "natural climate solutions" such as cover cropping, improved grazing, alley cropping with trees, cropland nutrient management, planting legumes in pastures, improved manure management and reforestation could help sequester a significant amount of carbon, while helping to prevent the release of massive amounts of greenhouse gases in the first place. The researchers estimated that in the best-case scenario, such methods could reduce the amount of greenhouse gases in the atmosphere by 21 percent annually.

It turns out that just as they have been major contributors to greenhouse gases, Corn Belt states could play a huge role in turning back the carbon clock while providing the kind of economic vitality that supports rural communities. That's important, because when "experts" argue for a land sparing approach, they often leave one important element out of the picture: people.

#### **More Information**

- The paper "Landscapes that work for biodiversity and people" is at http://science.sciencemag.org/content/362/6412/eaau6020.
- The study "Natural climate solutions for the United States" is at http://advances.sciencemag.org/content/4/11/eaat1869.
- For more about how "ecological agrarians" are working with nature in working landscapes, see page 29 for information on Wildly Successful Farming: Sustainability and the New Agricultural Land Ethic.

#### More Myth Busters

More Land Stewardship Project *Myth Busters* on a variety of topics are available at https://landstewardshipproject.org/about/libraryresources/mythbusters.



# LSP News

## **LSP Staff Changes**

and Stewardship Project membership coordinator **Megan Smith** has been promoted within the organization's Individual Giving and Membership Program. Smith joined LSP's staff as a membership assistant in 2011. Before that, she interned with the organization's Community Based Food Systems Program. During the past seven years, Smith has helped build LSP's membership and has planned and organized numerous events.

In her new position, Smith is overseeing all membership programming, including renewals, new member recruitment and special appeals. She is also working with LSP

membership assistant Clara Sanders Marcus on the management and development of LSP databases. Smith also serves on LSP's social media team.

Smith can be contacted at megans@ landstewardshipproject. org or 612-722-6377.

Amanda Madison Megan Smith has joined LSP's staff as a digital and communications organizer. Madison has a bachelor's degree in nursing from Augsburg College and has worked as a registered nurse in various capacities. She also served



as an intelligence analyst with the U.S. Army in Germany and Iraq. Madison is the founder and former chair of Women and Advocates Minnesota, a women-led organization working for social, racial, economic and environmental justice. Most recently, she was a political digital organizer for



**Amanda Madison** 

the Minnesota Nurses Association.

In her position with LSP's Individual Giving and Membership Program, Madison is working with program directors and staff to assist them in reaching membership basebuilding goals. She is also helping members develop leadership roles in social media.

Madison can be reached at amadison@ landstewardshipproject.org or 612-722-6377. □

## **LSP Youth Summit**

In November, the Land Stewardship Project held its firstever Youth Summit at Gale Woods Farm in Minnetrista, Minn. More than a dozen youth had a chance to connect with peers and plan for how they want to be involved in LSP's work.

They participated in workshops focusing on skill building and hands-on learning, with topics ranging from organizing basics and communications to getting started in farming. The youth also got a chance to harvest carrots being raised by the Gale Woods Youth Farm Program.

LSP is using this event as a launching pad for getting more youth involved in the organization's work. For more information, contact LSP's Amy Bacigalupo at 320-269-2105 or amyb@landstewardshipproject.org. (LSP Photos)





No. 4, 2018 The Land Stewardship Letter

# Fighting for the Land & the Community

Farmers, rural residents and other Land Stewardship Project members concerned about a proposal to build a factory hog farm in southeastern Minnesota's vulnerable "karst country" crowded into two public meetings in recent months to call for the Minnesota Pollution Control Agency to order an Environmental Impact Statement on the project. Shortly after the second meeting in Mabel, Minn. (pictured), the agency announced it was denying a permit for the proposal. See page 9 for details. (Photo by Amanda Babcock) □



### Farm Financial Stress

## LSP Workshop on 'Empowerment During Financially Stressful Times' Feb. 7

The economic crisis in American agriculture is deepening, and it's taking a significant toll on rural communities. According to an analysis from the Federal Reserve Bank of Minneapolis, 84 farms filed for Chapter 12 bankruptcy in Wisconsin, Minnesota, North Dakota, South Dakota and Montana between June 2017 and June 2018. That's more than double the number over the same period in 2013 and 2014; the number of bankruptcies in Minnesota over the past four years increased from eight to 20, according to the *Star Tribune* newspaper. And these statistics don't take into account the number of farm-

ers who have simply walked away from their businesses as the pressures of low commodity prices, lack of affordable healthcare and other issues become too much to bear.

The Land Stewardship Project will hold a workshop on "Empowerment During Financially Stressful Times" Thursday, Feb. 7, at Peace United Church of Christ in Rochester, Minn. (1503 2nd Ave. NE).

Join panelists Jack LaValla of Farm Business Management at Riverland Community College, Tim Gossman of Merchant's Bank in St. Charles, Connie Dykes (a Minnesota Department of Agriculture Farm Advocate), and Stephen Carpenter of Farmers' Legal Action

Group, as well as farmers Martin Larsen and Mary Jore, along with LSP staff, to learn about resources that are helping farmers during these financially stressful times.

During this workshop, participants will also hear stories of how farmers have been affected by stressful situations and what they have learned. After the panel discussion, there will be an opportunity for questions.

For more information and to reserve a spot, contact LSP's Karen Stettler at 507-523-3366 or stettler@landstewardship-project.org.

## **Need Help with Farm Financial Stress? Check Out These Resources**

→ Minnesota Farm Advocates: Farm Advocates, which are located throughout the state, provide one-on-one assistance for Minnesota farmers who face crises caused by either natural disaster or financial problems. To find an advocate near you, see www.mda. state.mn.us/about/commissionersoffice/farmadvocates.aspx. The Advocates hotline is 1-800-967-2474.

→ Minnesota Farm & Rural Helpline: Free, confidential, 24/7. Calls are answered by trained staff and volunteers. If you or someone you know is struggling with stress, anxiety, depression or suicidal thoughts—call. Sometimes it's easier to talk to somebody you don't know. The telephone number is 1-833-600-2670 (extension no. 1).

→ Farmers' Legal Action Group (FLAG): FLAG is a nonprofit law center dedicated to providing legal services and support

to family farmers and their communities in order to help keep farmers on the land. FLAG provides basic advice as well as numerous printed and online resources. Check out FLAG's website at www.flaginc.org, or call 651-223-5400.

#### Give it a Listen

**Episode 210** of the Land Stewardship Project's *Ear to the Ground* podcast features excerpts of a recent farm financial stress panel discussion: https://landstewardshipproject.org/posts/podcast/1077.

→ Minnesota Farm Business Management Program: This program, which is offered through the Minnesota State Colleges and Universities system, offers individualized farm management assistance and access to educational opportunities throughout

the year. Farm Business Management instructors work with farmers to improve record keeping and provide in-depth financial and profitability analysis of agricultural operations. For a list of instructors throughout the state and other details, see www.mda.state.mn.us/grants/fbmprograms.aspx.

- → The Minnesota Farmer-Lender Mediation Program: Contact the program through its website at www.extension.umn. edu/agriculture/farmer-lender-mediation, or at 218-935-5785.
- → University of Minnesota "Dealing with Stress" website: This website contains fact sheets and tips on dealing with stress, as well as links to other resources. For details, see www.extension.umn.edu/family/live-healthy-live-well/healthy-minds/dealing-with-stress.

## Policy & Organizing

## State Legislature

## LSP Sets Priorities for 2019 MN Session

By Amanda Babcock

he Land Stewardship Project's State Policy Steering Committee convened in December to start setting our state policy priorities for the 2019 Minnesota Legislative session, which began Jan. 8. The committee, made up of LSP members who are farmers and leaders in their communities (see sidebar below), directs what LSP supports and champions on the state level. Below are the issues that LSP will be prioritizing during the session. This list is incomplete, as some additional discussions are needed to secure additional ideas.

when faced with foreclosure and other crises (see page 7). LSP will continue to be in active conversations with members to find meaningful ways the state can help family farmers and rural communities thrive.

#### **Beginning Farmer Tax Credit**

Last year, after strong LSP member engagement and active work at the Capitol, the Beginning Farmer Tax Credit passed and became law. This program provides a tax credit to land and asset owners who rent or sell to beginning farmers, as well as provides for beginning farmers to take an approved farm business management course. As of early December 2018, 831 applications for the

program have been approved. However, we have found that adjustments are required to ensure beginning farmers who have already completed an approved farm business management course are eligible for the tax credit. Additionally, the Land Stewardship Project will push for a percentage of the \$6 million pot to be set aside for people of color, indigenous people and women to assist more socially disadvantaged farmers (as defined by federal law).

# WCROC Organic & Grazing Dairy Research

The University of Minnesota's West Central Research and Outreach Center in Morris has long been recognized as a national leader in organic and grazing dairy research. To continue its cutting-edge research helping farmers find profitable ways to get more livestock on the land requires significant facility upgrades. A recent feasibility study showed these upgrades would cost about \$3 million. LSP will be pushing for fully funding these critical upgrades.

#### **Forever Green**

The Forever Green Initiative at the University of Minnesota is employing cutting-edge research to help farmers get more continuous living cover on the land by developing and marketing perennials and cover crops. For the program to be fully funded, it needs \$5 million annually, and LSP has secured \$1 million per year for the program in past legislative sessions. Despite the lack of full funding, Forever Green has developed numerous innovations in recent years. If it was fully funded, it could help the state's farmers take a huge leap in profitably building soil health and cleaning up our water.



LSP member and Goodhue County farmer Frederick Fredrickson discussed factory farm issues during a lobby training session the Land Stewardship Project put on after the 2018 Family Farm Breakfast at the Capitol. (LSP Photo)

# Address the Family Farm & Dairy Crisis

Family farmers, especially dairy farmers, are facing a farm financial crisis after several consecutive years of low prices. LSP will continue pushing for substantial funding increases for Farm Advocates and Farmers' Legal Action Group (FLAG)—two initiatives that assist farmers facing financial stress and which let them know their rights

#### **LSP Minnesota State Policy Steering Committee**

- Dori Eder, Minneapolis, farmer
- Jim Falk, Murdock, farmer
- Dennis Johnson, Morris, retired dairy researcher
- Sr. Kathleen Mary Kiemen, Roseville, Volunteer Ecology & Rural Life Advocate
- Alan Perish, Browerville, dairy farmer
- Kristi Pursell, Northfield, farmer
- Molly Schaus, Minneapolis, farmer
- Ted Winter, Fulda, farmer

#### **Local Control**

The Land Stewardship Project has made it a priority to stop corporate attempts to weaken local control. For example, in 2017, we stopped a bill that would have made it more difficult to enact an interim ordinance in a local community, a tool which has been used by LSP members to stop factory farms and frac sand mines. We will continue to fight to keep local control and democracy strong.

#### **Environmental Review of Proposals**

LSP has also prioritized protecting from corporate attacks the power to conduct environmental review of factory farms and frac sand mines. For example, in 2017 corporate agriculture

interests pushed to double the size factory farms can be before environmental review is required. If passed, this proposal would have meant more and larger factory farms in Minnesota. Environmental review is a key way for neighbors to have a say in what is being proposed for their area, and is critical to the viability of rural communities.

Legislature, see page 9...

...Legislature from page 8

#### **MPCA Citizens' Board**

Between 1968 and 2015, the Minnesota Pollution Control Agency Citizens' Board had served as a testament to our Minnesota value that people deserve a say in the decisions that impact their lives and their communities. However, after the board ordered a full environmental review of a proposed 9,000-cow factory dairy farm, the Legislature abolished it, literally during the final hours of the 2015 Legislative session. Reinstating the board would bring democracy back to the environmental review process.

### **Paid Family Leave**

Allies of the Land Stewardship Project, such as the Main Street Alliance, which organizes small business owners, and the group ISAIAH, which organizes people of faith, are championing the Paid Family and Medical Leave Act. This program would create a state-administered, self-sustaining insurance program providing Minnesota workers with modest but meaningful benefits for parental and medical leave. The employer and employee would each pay 0.27 percent of a worker's wages into an insurance pool to fund it.

LSP's State Policy Steering Committee endorsed this proposal because it recognizes how meaningful it could be for family farmers with employees, family farmers who work off the farm and small business owners—as well as all Minnesotans. The Main Street Alliance will be supporting LSP initiatives during the 2019 Legislative Session as well.

The State Policy Steering Committee also began the process of developing an updated comprehensive State Policy Platform that will inform our policy work on the state level. We are excited to unroll this and welcome feedback from our members.

#### Healthcare & Local Foods

In addition to the work outlined above, LSP's Healthcare Organizing Committee and organizers Johanna Rupprecht and Paul Sobocinski will be championing an ambitious healthcare agenda—see page 11 for details.

LSP member-leaders and organizer Ben Anderson have also launched a new local foods campaign and gathered input via listening sessions and a survey about what policy priorities would support a more sustainable food system (see the No. 3, 2018, Land Stewardship Letter, page 15). Watch future issues of the Land Stewardship Letter for details on that work.  $\square$ 

LSP organizer Amanda Babcock focuses on state policy. For information on LSP's state policy work and how you can get involved, contact her at 612-722-6377 or ababcock@landstewardshipproject.org.

# Family Farm Breakfast at the Capitol Feb. 26

The 14<sup>th</sup> annual Land Stewardship Project Family Farm Breakfast and Day at the Capitol will be Tuesday, Feb. 26, beginning at 7 a.m., at Christ Lutheran Church on Capitol Hill in Saint Paul (105 University Avenue West). There will be a breakfast from 7 a.m. to 9 a.m., with lobby training afterwards. LSP members and friends will then have an opportunity to walk over to the Capitol to meet with lawmakers.

The cost of the breakfast is \$10, which is payable at the door. As in the past, "The Best Breakfast in Town" will feature food grown on the farms of LSP members. It will be prepared by Marshall Paulsen, the executive chef at Birchwood Café in Minneapolis.

Over the years, this event has evolved into an excellent opportunity for citizens and legislators to come together over delicious locally produced food to discuss LSP's legislative priorities.

For details, including information on purchasing an advertisement in the official breakfast program, contact LSP's Laura Schreiber at 612-722-6377 or lschreiber@landstewardshipproject.org.

# MPCA Denies Permit for Southeastern MN Factory Farm

Public Demands Prompt Substantial Setback for Proposed Facility in Vulnerable 'Karst' Region

By Bobby King

fter months of public pressure and in the face of overwhelming scientific evidence, the Minnesota Pollution Control Agency (MPCA) announced in December that it was denying a permit to a controversial factory hog farm proposed by Catalpa Ag in Newburg Township in southeastern Minnesota's Fillmore County. MPCA feedlot permits are rarely denied and this is a substantial setback for the project, which has yet to receive any local or county permits.

Hundreds of local farmers and rural residents, including numerous Land Stewardship Project members, pushed the MPCA to order an in-depth Environmental Impact Statement (EIS) for the proposed project (see the No. 3, 2018, Land Stewardship Letter, page 8). Two public meetings in nearby Mabel, Minn., attracted standing-room only

crowds; John Linc Stine, who was MPCA Commissioner at the time, attended one of the meetings to listen to members of the public directly and the issue attracted statewide media attention.

The MPCA repeatedly postponed making a decision on ordering an EIS and the decision to deny the permit means the project as currently proposed is dead and that a decision on environmental review is no longer relevant. The MPCA denied Catalpa Ag's application for a general National Pollutant Discharge Elimination System (NPDES) permit, but indicated that the company may still apply for a customized permit, known as an "individual permit." If an individual permit is applied for, then a new environmental review process must be considered.

As proposed, the Catalpa Ag factory hog farm would have generated 7.3 million gallons of liquid manure and used 8.8 million gallons of the area's groundwater annually. The hogs would be owned by Holden Farms

of Northfield, Minn., one of the nation's largest pork producers, and managed by Waukon Feed Ranch of Waukon, Iowa. It was proposed to be built in Minnesota's vulnerable "karst" geological region, which is composed of porous limestone that creates sinkholes and disappearing springs. This geology can allow surface pollution to enter the groundwater in a matter of hours. As a result, this part of the state has long had problems with groundwater pollution.

Land Stewardship Project members in the area will continue to stand up for their rural community, the land and family farms. If Catalpa Ag chooses to reapply for a permit, LSP and its members will push for an indepth Environmental Impact Statement.

Bobby King, LSP's Policy and Organizing Program director, can be reached at 612-722-6377 or bking@landstewardshipproject. org.

## Policy & Organizing

## 2018 Farm Bill Signed into Law

### 'Our Farm Bill' Attains Major Wins, but Status Quo Still Rules the Roost

By Ben Anderson & Tom Nuessmeier

he membership of the Land Stewardship Project launched the "Our Farm Bill" campaign in 2016 as a grassroots effort of family farmers, rural communities and urban allies. It was a campaign based on the vision that our public policy should originate from and support family farmers and rural communities, not corporate agriculture and the largest farm operations.

During the LSP campaign, over 615 people attended organizing meetings, actions and events with legislators. There were 78 visits with legislators or their staff, eight flyins to Washington, D.C., and at least 3,273 responses to action alerts or postcard drives. It was one of the largest progressive farmerled grassroots efforts focused on the Farm Bill in the Midwest, if not the country.

The strong work done by LSP members and supporters through our powerful movement for a better Farm Bill achieved concrete outcomes—saving the nation's largest working lands conservation program, for example—and demonstrated clearly the need for much greater reform and a change in direction for federal farm policy.

The 2018 Farm Bill will govern our agricultural programs for the next five years and have a significant impact on people's lives. Unfortunately, when they passed the Farm Bill in December, lawmakers did not embrace the large-scale reform advocated by our members. While we celebrate the victories this bill represents, we know that we face an ever-growing farm crisis that, if left unaddressed, will negatively shape our rural landscapes for generations to come.

#### Saving CSP & Making it Stronger

The most significant victory our grass-roots movement attained was preventing the elimination of the Conservation Stewardship Program (CSP). CSP is the nation's largest working lands conservation program, a nearly \$4 billion investment over the life of the Farm Bill in family farmers, our soil and our water. This is a significant victory and ensures that farmers and ranchers may continue to receive support for working lands-based conservation approaches that they choose to maintain and improve on

their farms during contract periods that last five years or more.

LSP members, through tireless organizing and advocacy, emerged as one of the loudest and clearest voices defending CSP, and played a significant role in stopping this critical program from being eliminated.

Our work not only helped save CSP, but made it stronger. LSP Members were instrumental in the introduction of the SOIL Stewardship Act, which Representative Tim Walz and Senator Tina Smith both championed. Key elements of this bill are in the final Farm Bill, including increasing CSP payments for the most significant conservation practices, like cover crops, resource conserving crop rotations and advanced grazing.

#### Support for Beginning Farmers & Local Food Systems

Two other top LSP priorities made it into the final bill. Reorganization of and increased funding for the Farming Opportunity and Training and Outreach (FOTO) program, and the Local Agriculture Market Program (LAMP) help maintain and ensure effective support for our nation's next generation of farmers, and the emerging local foods system that offers opportunities for their financial success.

Also included are tweaks to the commodity and dairy titles that seek to address the economic crisis many established as well as new farmers are facing. These tweaks are important, but time will tell if they are sufficient to staunch the economic bleeding that threatens the future of farmers and the vitality they contribute to our rural communities.

Changes proposed to the Supplemental Nutrition Assistance Program (SNAP) that would have reduced access to food stamps for more people were not adopted, which is good news for those who need a way to ensure they can feed themselves and their families during tough times.

#### **More Reforms Needed**

The process of hammering out a Farm Bill is made tougher by the push-and-pull of competing priorities and policies that require investment from the public treasury. The 2018 Farm Bill is rightly described as a "status quo Farm Bill." That's a problem. For

too long, policy has been shaped by large corporate interests that seek to increase their power with help from the Farm Bill. That's the status quo we want to change.

Examples of business as usual in this Farm Bill include the increased loopholes that expand the number of non-farming individuals who can receive the kind of commodity payment support that primarily benefits the largest corporate farm entities and agribusinesses. Another example is the continuing flow of public money to factory farms to fund their creation or expansion.

Failure to again place any limit whatsoever on the amount of crop insurance premium subsidies farm businesses can receive serves to increase the leverage and power of the largest and most aggressive segments of agriculture at the expense of rank-and-file family farmers and the next generation.

As a membership organization, LSP's campaign goal was never simply to achieve a set of policy wins. Our goal was to change the way these policies were made and move them toward a transformational vision of a more just food and farming system that serves people and the land. We took steps toward that vision as we pushed beyond the deep and prevailing cynicism that exists around federal policy and engaged thousands of new people in our movement to achieve real outcomes.

We know this isn't enough. Many will see this Farm Bill as "more of the same," and it will only reinforce the cynicism that everyday people have no say in corporate-controlled agriculture policy. We know that the farm crisis is only deepening, and will undoubtedly have to be addressed before the next Farm Bill is created in five years.

While the "Our Farm Bill" campaign concludes for this agricultural policy cycle, LSP will continue our grassroots movement to make sure the 2018 legislation is implemented in a way that it puts people and the land first. We will be vigilantly aware of how to advance opportunities at the state and federal level to address the growing farm financial crisis. As a people-led movement, our members and supporters will continue leading and driving forward our vision of a food and farming system that sustains family farmers and the land and builds strong and healthy rural and urban communities.  $\Box$ 

Ben Anderson (612-722-6377, banderson@ landstewardshipproject.org) and Tom Nuessmeier (507-995-3541, tomn@ landstewardshipproject.org) are LSP organizers who focus on federal policy. More on LSP's federal policy work is available under the **Organizing for Change** tab at https://landstewardshipproject.org.

# A Crisis at Our Doorstep

Grappling with a Healthcare System that Increasingly Makes no Sense

t doesn't take much to find clear-cut evidence that our nation's healthcare system is, as Rose Roach puts it, "upside down": services are more expensive than ever, but we're getting less for our money; the healthcare industry competes based on how much it costs to provide services, rather than whether it's a quality product; even people who have insurance through their employer struggle to get the services they paid for; low-income people

often have the least access to quality health-care, despite the fact that poverty is a major cause of health problems; too often problems like mental illness are not covered by insurance; rural hospitals and clinics are closing, leaving farmers and other rural residents far from access to basic services; and the list goes on.

During a presentation Roach gave at a joint Land Stewardship Project-Minnesota Nurses Association (MNA) meeting in Marshall, Minn., she presented graphic-aftergraphic showing just

how flipped on its head our healthcare system is. At one point, Roach who is MNA's executive director, flashed a chart that she called "stunning." It showed that between 1970 and 2017, there was a 100-percent increase in the number of physicians coming into the healthcare system. During that same period, there was a 3,000 percent increase

in the number of administrators that were employed by the industry.

"Doesn't that seem upside down?" Roach said, adding that it's estimated that 33 cents of every healthcare dollar actually goes to covering some sort of administrative function. She followed up with a chart showing how the CEOs of major healthcare companies are making tens of millions of dollars in annual salaries. "That's a 3,000 percent increase in people just pushing paper and



A group of Land Stewardship Project members and allies recently delivered over 3,200 petitions to the offices of Governor Tim Walz and Lieutenant Governor Peggy Flanagan at the Minnesota Capitol. The petitions, which were collected last fall from around the state, call on the Walz-Flanagan administration to take concrete steps to address the rural healthcare crisis. (LSP Photo)

never healing anybody. When we have this conversation about all this craziness, it's really about people's lives when it's all said and done," said Roach.

LSP organizer and farmer Paul Sobocinski agreed, and encouraged the more than 60 rural residents in attendance to put a human face on the "healthcare crisis" by

sharing their stories whenever possible. During small group discussions, people shared stories about being dropped from plans with little warning, having to make choices between paying for expensive medications or other necessities, paperwork snafus that threatened their ability to get treated, children not receiving adequate coverage, and the dire need to work off the farm in order to qualify for even basic healthcare coverage. One young woman from Poland said she was "scared to death" of breaking a bone or getting sick, for fear that the cost of treatment would bankrupt her.

Participants then talked about common values we should be holding up when talk-

ing about healthcare, such as good healthcare should be a right, not a privilege, and that people deserve to get quality treatment in their own communities.

"We have to have conversations based on shared values," said Sobocinski.

And as he and Roach made clear, those conversations have to take place not just with neighbors and family, but with policy makers. That's why last fall LSP launched a petition drive calling on Minnesota's new Governor, Tim Walz, to take concrete steps to address the rural healthcare crisis. The petition, which was signed by over 3,200

Minnesotans and which was delivered to Walz's office before he officially began his duties as Governor, calls for a moratorium on the closing of rural hospitals and clinics, the establishment of a people-centered Rural Healthcare Access Taskforce, and making MinnesotaCare available as an option for all Minnesotans.

## LSP Healthcare Priorities During the 2019 Legislative Session

During the 2019 session of the Minnesota Legislature, which began Jan. 8, the Land Stewardship Project will be working toward a healthcare system that supports family farmers, small businesses and rural Minnesotans.

LSP will be supporting legislation that allows farmers, business owners and other self-employed people to buy into MinnesotaCare, the state's public healthcare program that currently is available to lower income residents. LSP supports allowing farmers, business owners and other self-employed

people the option of buying into the program at its current value so that they can get access to high-quality, affordable healthcare.

LSP is also supporting legislative action to continue the Healthcare Provider Tax that will be sunsetting in the next year. The Healthcare Provider Tax funds essential healthcare services for over one million Minnesotans and enables critical investments in the health and well-being of Minnesota's communities. Allowing the Healthcare Provider Tax to expire would create an annual revenue shortfall of \$680 million. This loss of funding would

jeopardize healthcare access for thousands of low-income Minnesotans, threaten the stability of the healthcare sector and negatively impact the state budget. LSP supports the healthcare provider tax because it has provided a stable source of income for the healthcare access fund and has historically funded MinnesotaCare.

For details on LSP's **Affordable Healthcare for All** initiative, see https://landstewardshipproject.org, or contact Johanna Rupprecht (jrupprecht@landstewardshipproject.org, 507-523-3366) or Paul Sobocinski (sobopaul@landstewardshipproject.org, 507-342-2323).

## **Hidden Figures-Huge Impacts**

The Women Behind the Soil Health Movement

By Alex Romano & Shona Snater

There's a lot of excitement whirling around soil health these days. At the center of this mini-revolution is a cadre of talented researchers, educators

and speakers who have the ability to pass on valuable information about building soil resiliency in ways that are practical, accessible, and, at times, entertaining. Traditionally, agricultural science has been dominated by men, but it turns out several of the leaders in the soil health field are women. Those of us working in the Land Stewardship Project's Soil Health Program would like to take the time to recognize some of the remarkable women working in the field research- Dr. Elaine Ingham ing, presenting and educating

on healthy soil. There are many leaders in this work, but oftentimes certain individuals receive more attention than others. The next few pages are dedicated to a few of the "hidden figures" behind the soil health movement working tirelessly and passionately for the betterment of our soil and society.

## **Elaine Ingham: The Power** of Rebuilding Microbes

Dr. Elaine Ingham is a world-renowned microbiologist with adept skills in soil microorganism identification and a deep understanding of soil chemistry. At 6-yearsof-age, Ingham was taught by her father to use a microscope and identify a variety of

organisms and their effects on soil ecology. That presentation helped bring about the U.N.'s "Biosafety Protocol," which seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from biotechnology.

The controversy surrounding her U.N.



presentation put Ingham in a tenuous position at Oregon State and led her in 1996 to start her own consulting and education business called Soil Foodweb (www.soilfoodweb.com).

Dr. Ingham's departure from the world of academia brought her to the grassroots level of working directly with producers to enhance their soil microbiology by building and maintaining aerobic composting systems. Soil Foodweb's goal is to promote the growth of beneficial organisms like bacteria, fungi, protozoa, nematodes and microarthropods. Ingham's work with farmers throughout the world shows that a healthy soil ecosystem promotes plant growth, increases

"There is no reason to apply inorganic fertilizers; there is every reason to bring back biology. So stop killing your organisms, because they will do the work for you." — Elaine Ingham

microbes that make up our world. Since that time, she has received her doctorate in microbiology with an emphasis in soil, and has researched and taught at the Rodale Institute and Oregon State University. She has even presented to the United Nations about the potential dangers of genetically modified

nutrient density, and inhibits weed populations while reducing chemical costs for farmers. She is educating producers to not only build back their soil microbes but also handing farmers the tools and knowledge to be the experts on their own soil by sharing her methods for testing for and identifying

"I don't know how far we can take it, but I like the idea of not putting limitations or constraints on a system. Can we take it a little further?" — Kris Nichols

microbes in the soil using a microscope.

Dr. Elaine Ingham's knowledge of soil is as vast and complex as the soil food web itself, which is why she has written "the book"—Soil Biology Primer—on soil microbiology for the USDA Natural Resources Conservation Service (NRCS) and continues to be a top expert in the field.

To check out Elaine Ingham's NRCSrelated work on soil microbiology see www. nrcs.usda.gov/wps/portal/nrcs/main/soils/ health/biology.

#### Kris Nichols: The Glue that Binds

Dr. Kris Nichols has been part of the soil health movement from the beginning, as she worked alongside no-till farmers in Burleigh County, N. Dak., for more than a decade as a research soil microbiologist for the USDA's Agricultural Research Service, Nichols documented the farmers' ability to build back organic matter at a rate never thought possible by combining alternative management practices: no-till, diverse cover crop mixes and livestock integration. To continue her research into soil health, three years ago Nichols took the chief soil scientist position at the Rodale Institute and has now started her own consulting business called KRIS Systems to share what she has learned throughout her 25 years of research.

Growing up on a southwestern Minnesota crop farm, Nichols understands conventional farming and is adept at giving presentations

Hidden Figures, see page 13...



Dr. Kris Nichols

"My vision is to fill rural church pews and school buses by helping farmers diversify their operations, and protect and improve their soil." — Sarah Carlson

that show how the health of the soil, plants, humans and the planet interconnect. Dr. Nichols is most well-known for her work with mycorrhizal fungi, organisms which develop key symbiotic associations with the roots of a plant—the fungi provide micronutrients and water to the plant in exchange for sugars. Nichols has also produced research on glomalin, which is a glue-like substance produced by mycorrhizal fungi. Glomalin is a vital component in having good soil structure because it helps hold soil aggregates together and creates pore space for oxygen and water to move through. Also, glomalin

consists mostly of carbon and is only found in healthy, undisturbed soils. Nichols readily points to the fact that tillage disrupts soil fungi and releases

organic matter into the atmosphere as carbon dioxide, thus upsetting climate stability. To reverse this trend, Nichols insists on rebuilding soils with

regenerative agricultural practices to promote fungi growth and sequester carbon.

For more information and resources related to Kris



**Dr. Christine Jones** 

Nichols, check out: www.kris-systems.com/resources.

#### Christine Jones: Carbon's #1 Advocate

Dr. Christine Jones' initial interest as a young adult was in economics. After studying textiles, specifically product performance, Jones made the connection between wool quality and pasture quality, which is in turn affected by soil quality. This realization quickly drew her into a doctoral program in soil biochemistry to better understand how plants communicate with soil microbial communities.

How has the Australian been applying what she knows to agriculture today? She works with innovative farmers and ranchers implementing regenerative land management practices that enhance biodiversity, nutrient cycling, carbon sequestration, productivity, water quality and community health. In 2001, Jones received a Community Fellowship Award from Land and Water Australia for "mobilizing the community to better manage their land, water and vegeta-

tion." Three years later she founded "Amazing Carbon" to inspire change globally and organized a series of "Managing the Carbon Cycle" forums, in which 11 farmers receive monetary awards for reversing soil deterioration in dryland cropping systems through intercropping with perennial warm season grasses. In recent years, she has gained international recognition as a speaker, presenting to farmers and ranchers in many countries.

To the pressing worldwide challenge of

"We need to measure carbon on-farm where soil-building is occurring and see what the farmers and ranchers are doing to make that happen." — Christine Jones

building topsoil, Jones offers an accessible and hopeful perspective. The soil scientist asserts that a combination of favorable conditions and good management can build several centimeters of topsoil per year. She understands and is concerned by the worldwide trend to use more synthetic chemicals in cropping systems, as well as research that has shown the correlation between chemical and fertilizer over-use and the decline of soil structure and function. Jones challenges producers to look at the whole system to see why crops are becoming more susceptible to disease, pathogens, drought, frost and salinity.

She believes agriculture has a positive future because of the producers across the globe who are gradually reducing their chemical and fertilizer use and, instead, using photosynthesis to enliven the soil biology, restore microbial diversity and utilize the *free* carbon and nitrogen in the atmosphere to rebuild soil and human health.

To check out Christine Jones' work on the process of fixing carbon in the soil, visit www.amazingcarbon.com.

# Sarah Carlson: Empowering Farmers Through Soil Health

Sarah Carlson joined the staff of Practical Farmers of Iowa (PFI) in 2007 as the Strategic Initiatives Director and agronomist. She grew up on a farm near DeKalb, Ill., and co-majored in biology and geography at Augustana College. She then attended Iowa State University, where she earned her degree in agronomy. Upon earning her degree, Carlson joined the Peace Corps as an ag business and ag extension volunteer and relocated to the southern highlands of

Ecuador for 2½ years. In 2004, Carlson returned to the Midwest and in 2008 obtained a master's degree in Sustainable Agriculture and Crop Production/Physiology from Iowa State University.

For the past several years, Carlson's work with Iowa farmers has focused on helping them connect with their peers to share practical advice and knowledge about cover crops and small grains. Carlson is also building partnerships between Practical Farmers

of Iowa and segments of the food and beverage supply chain as part of strategic efforts to grow markets and support research for small grains and cover crops.

Most recently, she co-chaired the Conservation Initiative's Cover Crop Working Group and led the creation of a program that offers Iowa farmers a reduction in their crop insurance premium if they plant cover crops. Her commitment to working on the front lines with farmers transitioning to small grain and cover crop production continues to improve diversity, in addition to weed control and nitrogen management.

The positive impact of Carlson's work is evident when one attends a PFI field day and hears about producers using practices like cover crops to improve fertilizer management and buffer rainfall, thereby empowering them to restore water quality across Iowa. Carlson regularly posts blogs on PFI's website, where it is evident that the power of

Hidden Figures, see page 14...



Sarah Carlson

## Soil Health

...Hidden Figures, from page 13

on-farm research and grassroots knowledge drives her passion to revive rural communities one farmer at a time.

To learn more about Sarah Carlson's on-farm research and supply chain work, see www.practicalfarmers.org/blog/author/sarah.

# Kristin Brennan: The Art of the Underground

At the University of Wisconsin–Stevens Point, Kristin Brennan's love of soil began when she found an outlet for her artistic expression in soil science. It all started when she was invited by a member of the Soil and Water Conservation Society to "dig in the dirt for gummy worms,"— she was hooked. She went on to participate in soil judging contests, where students were required to jump into soil pits and describe different soil properties. Eventually, Brennan applied her skill as an artist to mapping soils and never looked back.

Now with the Minnesota office of the



Kristin Brennan

tion. Brennan puts her soil knowledge to the test when developing ways of measuring and quantifying soil health components and setting up projects to evaluate soil health progress. At the crux of her work is connecting the benefits of on-the-ground soil health practices with producers, consumers, nonoperating landowners, school-aged children and several vested agencies. Anyone who sits through one of her entertaining presentations can't help but be energized about the idea of building soil health.

ran from 2013-2015 and resulted in 105 contracts covering 5,158 acres in Minnesota. Brennan's efforts focused on collecting baseline data on enrolled farms to capture the impacts soil health practices had across different cropping systems, and to track those benefits over time to better inform future management practices.

In our conversation, Kristin Brennan's voice carried the energy of someone who cares about the land and how we will connect with it in generations to come.

"There is no manual that spells out a clear and simple path to success. The farmers are figuring it out through trial by fire and they're making it work and that is what is most inspiring to me." — Kristin Brennan

NRCS, Brennan's role as Assistant State Soil Scientist spans across three areas of concentration: soil science, soil health and natural resources inventory. In the area of soil health, she focuses on training staff and federal, state and nonprofit partners, prioritizing conservation in the five adaptive principles: soil armor, minimizing soil disturbance, plant diversity, continuous living roots in the ground and livestock integra-

Brennan's work with producers has resulted in positive changes in land management practices. For instance, she worked to build off previous efforts with NRCS staff and Minnesota producers through the Environmental Quality Incentives Program (EQIP) Cover Crop Soil Health Initiative. The initiative required participants to plant multi-species cover crop mixes on the same acres for five years. The program sign-up

To learn more about her soil health research and outreach work, see www.nrcs. usda.gov/wps/portal/nrcs/main/national/soils/health.  $\square$ 

Soil Health Program organizers Alex Romano and Shona Snater are based in LSP's Lewiston, Minn., office. For more information on LSP's Soil Builders' Network, see page 16.

## LSP's Pocket Guide to the Power of Soil

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.

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.

An online app or pdf version of the guide can be accessed at https://landsteward-shipproject.org/smartsoil. Paper copies of the 50-page guide can be purchased for \$5 from LSP's online store at https://landstewardshipproject.org/store, or by calling 612-722-6377.

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No. 4, 2018 The Land Stewardship Letter

# When the Neighbors Take Notice

Cover Cropping Success Transitions Teasing to Curiosity

**EDITOR'S NOTE:** Land Stewardship Project Soil Builders' Network member Willie Erdmann raises corn, soybeans, cover crops, hay, small grains, beef steers and beef cows on 300 acres near Ridgeway in southeastern Minnesota. On cropland, Willie is now almost entirely no-till, and has been using cover crops steadily since 2013. Here he shares his thoughts on the benefits he's seen from utilizing cover crops and no-till to build soil health.

For more information on the Land Stewardship Project's Soil Builders' Network and how you can join, see page 16. For more information on upcoming LSP soil health workshops, see page 17.

By Willie Erdmann

have been no-tilling for five or six years now and I know my soil is getting better. It's like planting in a compost bed; it is getting soft and not crusting behind the corn planter anymore. I have earthworm castings now like crazy. Where people till on a corn-soybean rotation, their ground is tight, there's not much for earthworms, and there's a lot of runoff.

The cover cropping actually began in 2009. I started with one field of hay that didn't turn out very well. So I hauled some manure on it and on July 20 planted sorghum Sudan grass. The next spring, I tilled it under and right next to that field was a corn-on-corn field and you could see right to the line how much darker the soil was where I had cover-cropped. That was an eye opener for me

I got back into old habits again—no cover crops—for a few years until 2013, when it was so wet and we couldn't put corn and soybeans in on time. In fact, we couldn't plant at all. With the "Prevent Plant" program, the government said, "You'll still get crop insurance, but you have to plant cover crops." I ended up planting cover crops on Aug. 1; it was a tillage radish and crimson clover mix. And when that seed ran out I switched over to planting some winter rye I had just harvested.

In the spring of 2014, I could see again where I ran out of the radish/clover seed in one field. All summer long the corn where the radish clover mix had been, we had taller, darker, thicker cornstalks. And come harvest time, the yield also showed better on the cover crop mix side. I learned to plant cover crops based on what the next crop is



Willie Erdmann

going to be — clovers for corn, winter rye for soybeans. I try to plant some cover crop mix every year now, and I no-till almost everything — anything I can do to keep cover on the ground. As a result, I don't have ditches like the neighbor either.

In August, I'll sometimes put in tillage radish and crimson clover — in my opinion, they're actually superior to rye. Based on previous experience, doing this allows for

better corn: color, health and yield are all improved. I've also no-tilled barley and red clover into soybean stubble in the spring and then harvested the barley. The clover grew all fall and was beautiful. I've put corn right into it and sprayed the clover off two days later. The corn has been just as good-looking as my neighbors', plus I've had huge cobs and loads of earthworm activity.

In 2017, I did have one problem — there was too much snow cover for the turnips to freeze off, so I sprayed them off in the spring. The turnips were so thick and were dying as I planted corn into them, but again, the corn ended up looking good.

Once I worked with the USDA Natural Resources Conservation Service to get a cover crop mix that I thought was more appropriate for this farm. But ultimately, it wasn't worth sacrificing what I knew would work best on my farm in order to do what the government wanted me to do. I think the cover crop incentive program would be better if the government wouldn't be so picky about the seeding rates. When you're buying certified seed at \$30 an acre, that's just too expensive to be seeding at such high rates.

Cover-cropping is great during heavy rains. In 2017, I found that my neighbors were asking me more about how I do what I do. In fact, neighbors who used to tease me are now coming over to talk and ask questions, clearly seeing some success and better soil health. I've even planted corn directly into a living cover of red clover about a foot tall and sprayed it off a couple days later. Some people thought I was crazy, but that ended up being 190- to 200-bushel per-acre corn. It's a learning curve, but it's fun to see what a guy can do to make healthy soil and still keep a "normal" yield.

I really don't want to see erosion or washouts. I've got a strong sense of keeping the farm in the family. It was my great uncle's farm and I really hope that one of our two daughters will run it one day.

## **Give the Cropping Systems Calculator a Try**

What cropping or grazing system can help your farming operation reach its economic and soil health goals? The Land Stewardship Project has developed a "Cropping Systems Calculator" to help farmers plug in various cover crop and grazing scenarios. To download the Calculator as an Excel spreadsheet, see <a href="https://landstewardshipproject.org/chippewa10croppingsystemscalculator">https://landstewardshipproject.org/chippewa10croppingsystemscalculator</a>. You can use the recently updated Cropping Systems Calculator to compare the financial pluses and minuses of various crop rotations. It includes expanded crop options and recent figures for various regions, and it has organic and non-organic options. A companion version has also been released specifically for Illinois figures, including defaults for the northern, central and southern portions of that state. A soil erosion calculator component was recently added to the tool, and LSP has developed versions that can be used on Microsoft Windows or Macintosh operating systems.

By the way, a recent report from the Union of Concerned Scientists, "Reintegrating Land and Livestock," uses the Cropping Systems Calculator to look at the potential economic and environmental benefits of grazing, including, "increased soil carbon, reduced on-farm emissions from fertilizers, and reduced water footprints." Read the whole "Reintegrating Land and Livestock" report at www.ucsusa.org.

## The Tale of the Trench

Cover Crops, No-till, Livestock & the 'Growing Way of Things'

n an overcast July day, Steve Lawler climbed down into a four-foot deep trench that had been dug into a 22-acre field north of Austin in southeastern Minnesota and provided a little subterranean history lesson. Lawler, who is resource specialist for the Mower County Soil and Water Conservation District, described how this area is dominated by soils that were left behind by the ancient floodplain of the Cedar River, which flows nearby. Crop fields around here are generally compacted more than a foot beneath the surface as a result of decades of heavy

pools up on the surface, creating flooding and runoff problems. And that runoff is a wider environmental problem, since it can send any eroded soil or chemical contaminants into local lakes, rivers and streams. In addition, compacted soil leaves little room for roots to make their way beneath the surface, where they can gain access to nutrients and moisture. Soil scientists have described soil demonstration trenches that reveal how corn roots literally take a 90-degree turn as they hit a field's hardpan. And since compacted soil lacks aggregate structure—the crumbly texture that allows air, moisture,



Soil expert Steve Lawler shows how cover cropping is starting to build good soil aggregate structure in one of Tom Cotter's fields. "Compaction is not going to go away unless we change our strategies," said Lawler.  $(LSP\ Photo)$ 

equipment use and tillage that destroys the soil's natural structure. This is not a unique situation: compaction has become a major problem in Midwestern crop fields in general. It can make the surface of these fields almost impervious to soaking up moisture, which means the majority of precipitation

microbes and invertebrates to thrive—it is virtually dead, making it more reliant than ever on artificial inputs of chemical fertilizers to grow a decent crop.

"Compaction is not going to go away unless we change our strategies," said Lawler, who added that as a result of compaction,

## Join the Soil Builders' Network

The Land Stewardship Project invites crop and livestock farmers to join the southeastern Minnesota-based Soil Builders' Network to get regular updates on workshops, field days and on-farm demonstrations, as well as soil health and cover crop research. For more information, see https://landstewardshipproject.org/lspsoilbuilders or call 507-523-3366.



Tom Cotter: "Everything I do now I think six-seven steps ahead...I'm after the growing way of things, rather than the killing way of things." (LSP Photo)

some farmers are discovering they have to submerge new tile lines between existing tile

lines in order to get the kind of drainage they want.

But Lawler also pointed out to the dozens of farmers who had gathered around the soil trench that sometimes history can be reversed. For the past few years, the owner of this field, Tom Cotter, has been using a combination of no-till and cover cropping to build the biology of this soil. And it is starting to show results, producing a soil that is "nice and granular," said Lawler. As the trench revealed, the "biodrilling" services provided by the cover crop roots have already reduced compaction in the first four inches of soil, and are starting to work on the next four to eight inches. Cotter wouldn't be getting such results if he continued to simply raise crops like soybeans on these acres without planting cover crops between the regular growing seasons.

"The key is to keep roots in the ground," said Lawler. "Cover crops can help you with a lot of agronomic issues."

During the field day, which was co-sponsored by the Land Stewardship Project's Soil Builders' Network and the Iowa Organic Association, Cotter explained that strategies like cover crops are utilized to do more than deal with one issue, like compaction.

"I want roots in the ground all yearround," said Cotter, who raises field corn, soybeans, sweet corn and beef cattle.

As a result, Cotter has been experimenting with growing cover crops between the regular corn and soybean growing seasons.

**Trench,** see page 17...

## **Holistic Management Class March 13-15 in SE MN**

Finding the Right Balance: Managing Land, Finances & People for Success" is the title of a three-day Holistic Management class the Land Stewardship Project is sponsoring March 13-15 in Stewartville, Minn. It will feature Joshua and Tara Dukart of Seek First Ranch (www.seekfirstranch.com). This class is for people

hoping to develop a system to get their farm financially healthy and highly productive now and for the next generation.

The class will introduce participants to a planning process called Holistic Management, which is used to make everyday decisions on farms and ranches. Participants will get an opportunity to look outside the box for opportunities that will:

- Improve profitability.
- Improve health of the soil and land.
- Improve quality of life.

The cost is \$300 (each additional family member is \$200). There is a \$50 discount for registering by Jan. 28. For details, see https://landstewardshipproject.org, or contact Karen Benson at 507-523-3366, karenb@landstewardshipproject.org.

#### ...Trench, from page 16

He has interseeded cover crops into standing corn and planted soybeans into a rye cover crop that's been terminated using a rollercrimper. These techniques have helped him control weeds while cutting erosion in his row-cropped fields.

But Cotter is also looking at ways to utilize cover crops as key stepping stones for building the long-term soil biome, opening the door to enterprises that rely on a living universe beneath our feet. For example, the 22-acre field where the trench was dug is currently undergoing a transition to certified organic production. That means it will need its biological health boosted so that it can generate fertility as well as weed and pest control without the addition of chemicals. On this summer day, it was growing a nine-way cocktail mix of cover crops. Cotter was planning on dividing it up into eight paddocks using portable electric fencing and rotationally grazing a herd of 40 beef cattle on it.

Such a strategy is financially critical: since the field is not growing a cash crop during the height of the growing season, it needs to earn its keep in another way—in this case by providing low-cost feed for the cattle deep into the fall.

But the reasons for grazing it go deeper than pure short-term economics. Managed rotational grazing has been shown to be an effective way to jump-start the biology of soil (see story below), paving the way for establishment of, among other things, permanent grazing pastures as well as certified

organic cropland.

Cotter likes the idea of getting multiple uses out of a crop field economically and biologically.

"Everything I do now I think six-seven steps ahead," he said while standing in the middle of his cover crop cocktail mix. "An agronomist at a local elevator told me, 'I'm about killing things' and I thought, 'I'm after microbes. I'm after worms. I'm after the growing way of things, rather than the killing way of things."  $\square$ 

## **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 healthy soil. You can check them out at https://landstewardshipproject.org/lspsoilbuilders/talkingsmartsoil.

## **Analysis: Grazing Cover Crops Saves Money & Improves Soil**

Cover crops can pay for themselves when combined with managed rotational grazing of cattle, concludes a study of eight Midwestern farms. Released this winter by the Pasture Project, Practical Farmers of Iowa, the Land Stewardship Project and the Sustainable Farming Association of Minnesota, the findings show how the practice can save money by producing valuable forage, reducing erosion, improving soil health and increasing nutrient efficiency.

Funded by a USDA Conservation Innovation Grant, the study is based on soil and financial data collected over three years on eight farms in Iowa and Minnesota. These farms rotationally grazed beef and dairy cattle on planted cover crops, which are non-cash crops such as small grains, brassicas and legumes that are grown between the regular cash crop growing seasons. The analysis showed that grazing the cover crops provided an inexpensive source of forage while building soil health.

Seven of the eight farms had more microbial biomass on their trial plots compared to control plots, a sign of improved soil biology and a potential boost to cash crop production as a result of higher fertility levels. The average cooperating farm spent about \$83 per acre on its cover crop—\$61 for a diverse, six-species seed cocktail and application, \$12 in increased management, and \$10 for termination. To graze a cover crop, the average cooperator spent \$17 per acre on fencing and water, but grew \$140 per acre of forage. The cost of cover cropping—\$83 per acre—against the benefit from grazing—\$123 per acre—indicates the cost effectiveness of the practice, according to the analysis.

The full findings, as well as a new "Grazing Cover Crops How-To Guide," a video series and other supporting resources, are available for viewing and downloading at http://pastureproject.org/resources-2/articles-studies/grazing-cover-crops.

## 'Soil Health & Profits' Winter Workshops in Southeastern Minnesota

The Land Stewardship Project's Soil Builders' Network will hold a pair of workshops in southeastern Minnesota this winter that will focus on ways to integrate profit-producing enterprises and the building of soil health:

- → February 15—Building Soil Health, with farmers Dawn & Grant Breitkreutz & Tom Cotter, 10 a.m.-3 p.m., St. Columban Catholic Church, 408 Preston St. NW, Preston. Contact LSP's Lewiston office at 507-523-3366.
- → March 7—Roller crimper, weed control & soil health, with the University of Wisconsin's Dr. Erin Silva, 10 a.m.-3 p.m., Saint Joseph's Catholic Church, 103 N. Mill St., Rushford. Contact: Shona Snater, LSP, at 507-523-3366 or ssnater@landstewardshipproject.org.

For the latest updates on soil health workshops and field days, see <a href="https://landstewardshipproject.org/lspsoilbuilders">https://landstewardshipproject.org/lspsoilbuilders</a>, or call LSP's office in Lewiston at 507-523-3366; or the office in Montevideo at 320-269-2105.

# **Forage-Powered Financials**

Top Graziers Prove High Productivity Doesn't Always Equal High Profitability

onsider, for a moment, the common sense-defying situation the

U.S. dairy industry finds itself in-it's a business that seems convinced that the ultimate answer

The Economics of \$oil Health

to too much milk on the market is to put

more milk on the market. A glut of dairy products—the kind of glut that has resulted

in milk being literally poured out onto the ground-has sent prices paid to American farmers into the cellar during the past few years, prompting a record number to sell off herds, declare bankruptcy and close down the 50- to 100-cow operations that have been the bedrock of many rural economies for generations. Being awash in a commodity should prompt less production, right? In fact, in an environment where the basic laws of supply and demand have been shortcircuited, more milk than ever is being produced by more U.S. cows than ever. That's because mega-dairies are expanding apace, pushing each cow to produce more milk than ever. Across the Midwest, banks are willing to loan money to dairies that are already milking thousands of cows as long as they

expand herds even further. That's because land grant economists like the University of Minnesota's Dr. Marin Bozic are pushing the narrative that the future belongs to dairies milking tens of thousands of cows, and that small- and medium-sized farms should sell out immediately. The owners of these large CAFOs, already invested heavily in everything from buildings and manure handling facilities to cropping and milking equipment, have no choice but to add cows in order to cover their overhead. They are holding out hope that by sheer expansion, they will survive what has become a war of attrition. It's a production treadmill that's lost its ability to regulate its own speed.

But a recent study of seven farms operating in four Midwestern states offers a different view of dairy farming's future, one in which profitability is not based solely on

production for production's sake. Rather, a farm's financial success is seen through

the lens of how much profitability each acre of healthy soil can generate by consistently producing the kind of forage that

cows can harvest on their own at an efficient cost. It turns out that's a big difference, since in the case of the studied farms, their future



Olaf Haugen (left) leads a pasture walk through one of his paddocks preliminary results show that planted to cover crops. Approximately 70 percent of his dairy herd's despite lower per-cow producdiet comes from grazing forages such as cover crops. "Soil is what I use tion, the seven grazing operations to grow forage, and forage puts milk in the tank," he says. (LSP Photo) had some significant competi-

is not tied directly into servicing the debt on infrastructure set up to manage thousands of cows. Because these farms are mostly reliant on feed derived from grazing animals on the landscape, they are dependent on how much forage their soil can produce. It

turns out that can be a good strategy: despite producing less milk per cow, on average the grazing farms studied were more profitable than the conventional operations they were compared to. In a sense, it's a form of supply management governed by those countless microbes present in the soil.

"Soil is what I use to grow forage, and forage puts milk in the tank," says southeastern Minnesota dairy producer Olaf Haugen. "So, for me, soil health is paramount to profitability."

### The Study

The study, which was done by the Midwest Perennial Forage Working Group of Green Lands Blue Waters (http://greenlandsbluewaters.net), examined the 2017 cost of production information from seven

farms that made extensive use of managed rotational grazing. The financials from those farms, which are in Minnesota, Wisconsin, Iowa and Illinois, were then compared to several years of benchmark data collected from dairy farms of similar size, but which do not rely heavily on managed rotational grazing.

Tom Cadwallader, a consultant with the Dairy Grazing Apprenticeship (www.dga-national. org) who helped conduct the analysis, cautions that since the study did not involve randomly selected farms, the results cannot be extrapolated to grazing farms in general. However, these tive advantages. They were so competitive, in fact, that although

the cost of producing each hundredweight of milk was higher on grazing operations, they were almost twice as profitable overall as their conventional counterparts.

Forage Financials, see page 19...

## **New Fact Sheet: Financial Advantages of Grazing**

The Land Stewardship Project has developed a new financial analysis of utilizing rotational grazing to manage a cow-calf herd. The fact sheet, which was written by LSP's George Boody, compares the economic returns of rotational grazing to continuous grazing, as well as corn and soybean production. The advantages to increasing stocking densities through adjustments to grazing rotations and the use of cover crops in a grazing system are also analyzed. The fact sheet includes a list of practical grazing publications.

A free copy of "Financial Analysis of Cow-Calf Grazing: Why Shifting to Managed Rotational Grazing Can Make Sense for Your Profits & Improve Soil Health" is available at https:// landstewardshipproject.org/repository/1/2748/financial grazing fact sheet 2018.pdf, or by contacting Boody at 612-722-6377, gboody@landstewardshipproject.org.

#### ...Forage Financials, from page 18

Put another way, it's not so much about "maximum" production as "optimal" production, says Jim Paulson, a Dairy Grazing Apprenticeship consultant who worked as a forage expert with the University of Minnesota's Extension Service for several years. A high production model does little good if it costs more to produce that milk than the farmer receives in payment, he says.

So why do those grazing farms make more money? For one, they are spending less than half the amount conventional operations do on any expenses—fuel, equipment and chemicals—related to raising crops for feed, since they rely so heavily on having the cows harvest their own forage via grazing. In fact, even when these grazing operations are buying feed to supply their cows during the winter, for example, they come out ahead financially.

A farmer who specializes in raising feed crops can almost always do it cheaper and more efficiently than a dairy operation, particularly if the dairy is located on land that is considered marginal for cropping.

"The graziers who made the most money quit trying to raise all their feed," says Cadwallader, who adds that these results track with what he's observed on the other grazing farms he's worked with over the past two decades. "They sold all the plows, they sold all the equipment they didn't need."

And because the cows on grazing operations are not being pushed productivity-wise—they can sometimes produce around half the amount of milk per-cow when compared to intensive confinement operations—veterinary costs are lower. Animal health costs on grazing operations were a third to half of what their conventional counterparts experienced, according to the analysis. In addition, the cows on grazing operations tend to stay productive longer. In fact, graziers often are growing more replacement animals than they need, which provides a source of income via the replacement heifer market.

Because the grazing farms have less invested in overhead costs like confinement buildings and cropping equipment, they can more easily cut back production during tough market situations like the one the dairy industry is currently facing. They aren't reliant on keeping a large free-stall barn full of high-producing cows in order to justify making payments on it. Cadwallader says one misconception about grazing is that farmers can be profitable by skimping on quality feed. In fact, he says, it's always important to invest in high quality feed—whether it's purchased or raised right on the farm—to keep the animals healthy

and productive. And one can't have quality forage without healthy soil.

#### Microbes = Money

Olaf Haugen would agree with that. He milks 160 cows on a seasonal basis on his family's 230-acre farm just north of the Iowa border in southeastern Minnesota's Fillmore County. He estimates that 70 percent of his herd's feed comes from grazing during the growing season; he purchases the rest of his feed needs.

In such a situation, turning cows out onto open pastures for the summer won't do; intensive grazing management from spring to fall is a must. Olaf utilizes mob grazing—a managed grazing system that crowds a high number of cows into a small area for a short amount of time—around 12 hours, in this case. Such a strategy not only gives him more animal production per-acre, but also gets more manure and trampling impact in a smaller area to build soil biology, which increases that land's ability to recover and raise quality forage in the long term.

Haugen also supplements his permanent pastures with grazing paddocks made up of annual cover crops, which he prefers to call "annual forage sources." During a recent summer field day on the Haugen farm sponsored by the Dairy Grazing Apprenticeship, Olaf, along with his parents Bonnie and Vance, showed how they graze the cows on cocktail mixes of rye, vetch, oats turnips, grazing corn and peas, among other species. While leading a group through one stand of annuals that had been recently grazed, Olaf explained that these plants can provide lowcost feed during deep summer, a time when permanent pastures tend to go dormant.

"They might not produce as much milk as really good pasture, but it's better than what poor pasture produces," he said of the cover crops, adding that economically both the cover crops and the pastures beat out feed that has to be stored. "Stored feeds are going to be at least twice as expensive—not only because you're disposing of the manure if you're feeding the herd in a confinement setting, but also because if you've got your feed stored, you now have to take it from your storage place and put it in front of the cow. If we can move the cow to the grass, we can save a lot of money and mitigate these price shocks in the market."

Because the Haugens are not invested in confinement facilities or cropping equipment, they feel they can adjust to market fluctuations by tweaking cow numbers and thus reducing production.

"You can't just say, 'I'm not going to make that free-stall payment this month, I'm not going to make the tractor payment this month,' says Olaf of confinement dairies.

## **LSP Grazing Helpline**

The Land Stewardship Project has launched a toll-free helpline for farmers seeking support related to grazing livestock. Check it out at 1-888-664-7293 (1-888-MNGRAZE).

Have questions about how to improve your grazing practices? Want some advice or resources regarding rotational grazing, cover crop grazing, stockpile grazing, winter feeding, pasture rent, etc.? Give LSP's helpline a call. Leave your name, number, where you're from, a brief description of your reason for calling and we'll be in touch. If we don't have an answer, we should be able to point you in the right direction.

"Where, in my situation, I can actually cut costs in-season if I need to."

Such resiliency can extend its benefits beyond a farm's field surface. When the Haugens bought those 230 hilly acres in 1993, the soils were eroded and biologically impoverished from years of row cropping. The family started rotationally grazing, and over the years they have seen the soil's organic matter content rise, which has resulted in less erosion and better water infiltration.

That latter impact is particularly important in this region. Because of the presence of karst geology, the area is full of sinkholes and contaminants can make their way into the groundwater within a matter of hours. As the organic matter levels have increased, so has the farm's ability to soak up and store precipitation. (One percent of organic matter in the top six inches of soil holds approximately 25,000 gallons to 27,000 gallons of water per acre, according to the USDA Natural Resources Conservation Service.) That's allowed the Haugens to ride out not just violent swings in the market, but extreme weather as well. And that's money in the bank, says Bonnie.

"We've watched," she says, "and as our organic matter has gone up, our profitability has gone up."

#### Give it a Listen

On episode 212 of the Land Stewardship Project's Ear to the Ground podcast, forage expert Jim Paulson and grazing expert Tom Cadwallader talk about the profitability of top grass-based dairy producers: https://landstewardshipproject.org/posts/podcast/1100.

On **episode 192**, farmer Olaf Haugen talks about how more microbes in the soil means more money in the bank: https://landstewardshipproject.org/posts/podcast/979.

## Farm Beginnings

# A Land-Based Launching Pad

Four Winds Farm Serves as a Staging Ground for New Agrarians

n a warm day in early October, the owner-operators of Clover Bee Farm are preparing a delivery for the 43 shareholders that make up their Community Supported Agriculture (CSA) vegetable operation. Standing in a hoop house, Andrew Hanson-Pierre cleans dozens of fat onions, while across the farmyard in a barn that's been converted to a packing shed, his life partner Margo washes a bumper crop of orange carrots. The couple is wrapping up their first growing season on this land, which they purchased last winter with the assistance of a USDA Farm Service Agency (FSA) beginning farmer loan.

As he pulls a heavy wagon of red and yellow onions toward the packing shed, Andrew explains that the family who previously owned this 20 acres of farmland near the east-central Minnesota community of Shafer were rooting for he and Margo to get the FSA loan, even though the young couple hadn't submitted the highest bid. It seems that another bidder's plan was to make it yet another field of row crops, one that did not require the presence of fences, barns, houses or people.

"They were really excited about seeing the farm stay as a farm, rather than have the house and buildings bulldozed in and just made into more corn and soybean fields," says Andrew, explaining that FSA beginning

farmer loans can take several months to go through the approval process. "They were very, very patient. They were pulling for us."

A little less than an hour's drive south of here, others are pulling for the Hanson-Pierres as well, and recently took that support beyond just providing a little patience and moral backing. For three growing seasons beginning in 2015, Juliet Tomkins and Prescott Bergh provided a staging area of sorts for Margo and Andrew, giving them access to land, some equipment and a little confidence-building at a key point in their career. In fact, over the past few years, Tomkins and Bergh's Four Winds Farm has helped launch at least one other vegetable

farming operation besides Clover Bee. In addition, the owners of a beef cattle operation are ready to take their next entrepreneurial steps as a result of time they've spent on Tomkins and Bergh's land.

"We are anxious to have them succeed," says Juliet of the farming operations Four Winds has supported during the past few years. As she says this, she and Prescott—they are in their early 60s—are sitting at the kitchen table on their 107-acre farm in western Wisconsin. "The term 'landlords' may be correct, but I'd like to think of us as partners in helping them get established. Our intention is to give them an opportunity to



Prescott Bergh and Juliet Tomkins (*left*) have opened up their land in western Wisconsin to beginning farmers like Aaron Zimmerman. (*LSP Photo*)

do something that they might not have been able to do otherwise."

Tomkins and Bergh have provided this agricultural launching pad through a structured process that goes beyond merely renting out a few acres of unused land. At the core of this process are written leases that attempt to strike a balance between laying out expectations and leaving room for the kind of relationship building that only comes with good interpersonal communication.

Farmland rental arrangements can take many forms, depending on the goals of the various parties involved. The process set up by Four Winds is an example of how sometimes such an arrangement can resemble

more a landowner-renter partnership than a simple exchange of cash. Such partnerships can result in a bumper crop of positives, including farmland access for beginning farmers, stewardship of the soil and an additional economic enterprise in a rural community.

#### **Building Soil**

When Tomkins and Bergh bought that 107 acres 10 miles east of River Falls in 1987, they were attracted to its diverse topography and varied ecosystems. It has a mix of pasture, woodlands, wetlands, even a native prairie. Natural habitat and land stewardship are important to both of them. Tomkins grew up in a part of New Jersey that at the time was very rural, and she became passionate about land stewardship via the influence of her father; she helped him plant 15,000 black walnut trees on the family's land. Tomkins went on to get a law degree and worked extensively with family farmers as an attorney with the Farmers' Legal Action Group in Minnesota. She also

> served as an adjunct professor at the University of Wisconsin-River Falls, where she taught courses on agricultural law, cooperatives, experiential learning, land use law and sustainable agriculture law.

Bergh has a strong interest in conservation as well, and a deep background in the organic agriculture community. He has traveled the country as an organic inspector and consultant, and for a time worked on promoting sustainable and organic agriculture for the Minnesota Department of Agriculture.

The couple concedes that when they first moved onto the farm, they weren't quite sure what to do with it. It had been a small dairy many years prior, but at the time they purchased the land it was being leased out for crop farming to a neighboring operation. Because

the land was being leased on a yearly contract, a lot of nutrients were being removed but not returned, so the soil was seriously depleted.

In 1992, Bergh and Tomkins started raising grass-fed beef utilizing a managed rotational grazing system on 65 acres of pasture. Over the subsequent years, they noticed how the reintroduction of nutrients via manure, which was spread evenly across the land through the rotational grazing system, was revitalizing the soil.

"When we first got there, the soil was so poor that when we tried to plant some im-

Launching Pad, see page 21...

#### ...Launching Pad, from page 20

proved legumes, we couldn't even get them to grow," recalls Bergh. "We really used the cattle as the fertility machine and over time it improved the soil a lot. It really needed that manure."

They direct-marketed the beef to consumers, and later built a hoop house for raising hogs in deep straw bedding, a system that produces pork in a natural setting that reduces the need for inputs such as antibiotics. The beef and pork enterprises, along with a small pastured chicken business, were a good fit for a farm that was relatively close to major markets in the Twin Cities and western Wisconsin.

In 2009, Four Winds got out of the livestock business. Bergh was traveling for work a fair bit and their two sons had left the farm to pursue their own career paths; by not being tied down to livestock chores, the couple felt they would have more freedom

to travel and visit extended family. They also realized that parts of the farm had been in continuous production since 1850, and they wanted to give it a bit of a rest.

Indeed, once livestock production stopped, the land started returning to a more natural state. In fact, students at UW-River Falls have done various conservation projects on the farm, including a pollinator study and prairie restoration.

"It was like having a park around here, basically," says Tomkins. "You had wildlife coming through and there was not a whole lot of maintenance. It was pretty gorgeous."

But after a few years of leaving the land fallow, they noticed that the fencelines were becoming decrepit and getting overgrown with weeds; trees were starting to take over parts of their pastures. In 2014, Tomkins and Bergh began thinking about bringing production agriculture back to the land, but this time they wouldn't be doing the farming. Tomkins had become particularly interested in giving beginning farmers access to land after joining the Land Stewardship Project's board of directors in 2012. There were a lot of discussions within the organization about how LSP's Farm Beginnings Program (see page 24) was providing top-notch training for the next generation of farmers, only to find that these new agrarians were running into significant

barriers when it came to getting access to acres. Many Farm Beginnings graduates are interested in enterprises such as small-scale vegetable production or grass-fed livestock raising, and do not require thousands, or even hundreds, of acres to be viable; often size-appropriate, affordable parcels just aren't available.

"I said to Prescott, 'What do you think of having more people on the farm?' "Tomkins recalls.

He agreed that this would be a good opportunity to not only provide land access to beginning farmers, but help revitalize and maintain parts of the operation that had become overgrown.

Tomkins started scanning the listings posted by beginning farmers in LSP's Seeking Farmers-Seeking Land Clearinghouse, which helps match up landowners and established farmers with beginning producers (see page 26). That's where she learned that two young people with some farming experience, the Hanson-Pierres, were looking for

Train trust in the state of the

Andrew and Margo Hanson-Pierre recently wrapped up their first growing season on their own land after spending three years at Four Winds. "The third year, after the season was over, I said, 'Next year, we've got to go big or go home.' So we went big, and we did really well," says Margo. (LSP Photo)

a few acres to take their vegetable enterprise to the next level.

#### Filling the Tank

Margo Hanson-Pierre grew up in Faribault in southeastern Minnesota, and Andrew is from the Twin Cities suburb of Minnetonka. They both studied fine arts in college, but eventually found themselves drawn to farming. Andrew likes that it involves working outdoors and he's passionate about the idea of getting fresh, healthy food to people who don't normally have access to such sustenance. Margo is attracted to the personal, community-centered interactions provided by selling through the CSA model and farmers' markets. She also likes that it is

the kind of profession that challenges her to constantly push the envelope.

"It's all about our customers, they mean the world to us," she says. "And always striving to do better is a main reason I'm still farming. I always want to be better."

After school, they both worked at a series of farm operations, getting firsthand experience with the ins and outs of various production and marketing models. During the winter of 2014-2015, they took LSP's Farm Beginnings course, which offers training in holistic planning, business management, marketing and goal setting. It is taught by established farmers and other agricultural professionals. Margo says, for them, the timing of the class was critical, because they had plenty of production experience under their belt, but needed help in learning the fundamentals of running a business.

Andrew says the class forced them to write down their goals for farming, as well as life in general, which helped the couple develop a joint path for moving forward. It

turned out they shared the goal of launching a produce operation in the region, and figuring out how to make it a self-sustaining source of income while feeding people healthy food and stewarding the land.

One of the things Margo and Andrew decided at that time was that they wanted to stop working for other farmers, and to take concrete steps toward starting their own enterprise. They submitted a "Seeking to Buy or Rent Land" listing to the Seeking Farmers-Seeking Land Clearinghouse, and within a week heard from Juliet. She and Prescott invited them out to the farm, where

they got a tour and sat down for an interview over a meal. The discussion centered around what Andrew and Margo's needs were as far as land and infrastructure, as well as their future plans. The older couple also were interested in how the young farmers viewed stewardship of the land—it was important that Four Winds be farmed in a way that maintained the soil health Bergh and Tomkins had built up over the years. Frankly, it can be hard for a renter to have an incentive to utilize practices that may not produce positive results for the land and soil until years down the road, perhaps long after they've moved on. However, in the case of

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## Farm Beginnings

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the Hanson-Pierres, they were on the same page as their future landlords.

"We've always felt cover crops were important," Margo says of one soil building practice they use. "I feel like if you're borrowing something like a car from someone, you should fill up the tank before you give it back to them. So that's kind of the same thing with soil, I guess."

The young farmers liked that Four Winds had land flat enough to grow vegetables on and that chemicals had not been used on it

for 30 years. That latter point, along with the fact that a 30-foot-wide strip of brush and trees around the farm serves as a natural buffer from pesticide drift, meant that producing vegetables there organically would be possible.

In total, Tomkins and Bergh interviewed five farmers/farm partners before the 2015 growing season, and gave the green light to three of them (one candidate wanted to raise small grains, which wasn't a good fit for the farm at the time). Besides the Hanson-Pierres, during the first few growing seasons Four Winds land was rented out to the brothers Jacob and Andrew Helling, who have a wholesale vegetable operation called Twin Organics. Philip and Tabitha Momyani, a couple in their 50s who commute to the farm from the Twin Cities suburb of Brooklyn Park, also started renting land there in 2015. A neighboring retired farmer with tillage equipment helped break the sod, and for the next three seasons, the three enterprises raised a total of roughly 20-acres of vegetables.

In the summer of 2017, a fourth agricultural enterprise was invited onto the land, but in this case the beginning farmers were seeking access to something that had been there for years: grass.

#### **Seeding a Seed-Stock Business**

Aaron Zimmerman's entry into the cattle business came literally in the third grade, when his grandfather bought him a heifer. Ever since, he's been building a herd, and has dreams of having a purebred Simmental operation that supplies other operations with top quality stock and show animals. By the summer of 2017, he and his girlfriend, Leeah Luepke, had two-dozen brood cows they were raising on rented land while they

attended college in River Falls, where they were renting an apartment. The herd was doing well, but the couple found themselves having to move the animals from farm-to-farm as they juggled various lease agreements. As they looked toward graduating from UW-River Falls—he in animal science, she in agricultural education—they needed a stable place to raise the cattle in the area. Through the serendipitous linkages that can sometimes develop within a rural community, they connected with Four Winds Farm.

Zimmerman says the farm has a lot to offer his livestock enterprise. For one, there is plenty of pasture to rotate the cattle through while keeping the herd all in one place. In addition, the hoop house that had been set up for swine production turns out to be a great facility for winter calving. Tomkins



Juliet Tomkins and Aaron Zimmerman discuss the young farmer's cattle operation. "Good communication is imperative," says Tomkins. (LSP Photo)

and Bergh also have facilities for handling cattle, as well as a tractor they rent out to the cattle producers on an hourly basis so they can move hay bales in the winter.

"We had a laundry list of what we needed or preferred," says Zimmerman. "There was fence to build and re-build, but this place really has worked for us."

Today, Zimmerman and Luepke are grazing 32 brood cows, plus calves and bulls, on the farm. Aaron says that one other benefit to utilizing the Four Winds land is that Bergh and Tomkins have experience with, for example, timing grazing rotations in a way that fits local conditions.

"They'd say, 'In our experience, this pasture takes longer to re-grow because it's sandy,' stuff like that," says Zimmerman. "They know the land."

Although Bergh and Tomkins were grassfinishing beef for direct-sale, a far different market than what he and Luepke are raising for, "cows eating grass is cows eating grass," Zimmerman quips.

#### **Growing Confidence**

Four Winds Farm doesn't just provide a physical location for beginning farmers to grow, it has also been a seedbed for exchanging ideas. In fact, despite working their own individual enterprises on separate plots, the produce growers developed a kind of network where they were able to share ideas on everything from weed and pest control to tillage practices.

"There were a lot of things we were learning firsthand, like, 'We've planted carrots three times and we don't get anything. What are we doing wrong?" recalls Andrew Hanson-Pierre, adding that in that case the Helling brothers had the answer. "There was a lot of back and forth. It was a

very loose cooperative model."

Tomkins says it's been a pleasant surprise how much the close proximity of the farmers has helped them each improve their practices.

"It's the benefit of working in the same space, it rubs off on each other," she says.

Four years after opening up their farm to the next generation, Tomkins and Bergh have a pretty good track record. The Hanson-Pierres were able to achieve good enough cash flow that they qualified for that FSA loan that allowed them to purchase the farm near Shafer in 2018. In addition, the Helling brothers learned through LSP's Seeking Farmer-Seeking Land Clearinghouse that a longtime organic produce operation near Northfield,

Minn., was for sale. They purchased it and recently wrapped up their first growing season there. Now that they've graduated from UW-River Falls and their herd is growing fast, Zimmerman and Luepke, who are in their early 20s, are hoping to buy their own farm after their lease at Four Winds expires this summer.

Margo and Andrew say they just didn't increase their cash flow while at Four Winds—their confidence grew as well. They started out in 2015 selling 13 CSA shares in their farm; during the 2018 growing season, they had over 40 share members.

"I feel like the first year we came here and we were like, 'Well, we'll see if we can do this,' "recalls Margo. And then the second year was like, 'Last year went well, let's see if we can do this again.' And then the third year, after the season was over, I said, 'Next year, we've got to go big or go home.' So we went big, and we did really well."

They increased their sales, started putting

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money into savings, and were able to qualify for the land loan. The Hanson-Pierres have yet to attain their ultimate financial goal—make enough off the farm to not work town jobs (Andrew drives a school bus and Margo works at a school)—but they are headed in the right direction.

#### New Leases on Life

Bergh and Tomkins are hesitant to call their farm an "incubator," mostly because, despite the few bits of advice they can offer, they are hands-off when it comes to the daily operation of the various enterprises. Rather, they see themselves as a support system that provides land and some structure for how that land is to be managed.

At the heart of that support structure is a well-thought-out lease agreement, one that's a blend of other contracts they've seen, some legal input provided by Juliet, and a few personal touches that relate directly to how the farm should be shared and the soil taken care of.

Besides clearly laying out how much the rental fee is, the leases—there is one for the vegetable plots and one for the pasture ground—have stipulations related to such things as the use of organic methods (no pesticides are allowed), repairs to fencing and other infrastructure, garbage removal, where vehicles can park, clean-up of vegetable plots at the end of the season, and legal liability. The lease also stipulates the fees for using equipment like a tractor and a walk-behind mower, as well as utilities like water and electricity.

One prominent clause in the leases has to do with communication, which Tomkins thinks is at the foundation of everything else. She and Bergh expect renters to respond "promptly" to telephone calls, texts or e-mails, and to communicate immediately any concerns or questions they have. Without good interpersonal communication, even the best written contract can lose its effectiveness. Good communication is particularly important when, as in the case of Bergh and Tomkins, a landlord is living on the land that's being rented out for farming.

"Even if you have a contract, the human component of implementing it is what's important," says Tomkins. "You have to not be overbearing, not waiting for them to make a mistake, but tuned in enough to not be afraid to step up and say, 'We agreed upon it this way, we need to have this done.'"

The leases are for three years, which

the couple thinks is important so all parties involved can plan ahead. Tomkins and Bergh also have the option to adjust the leases on a yearly basis. For example, they have recently strengthened clauses related to legal liability associated with the food the renters sell.

The leases are over three pages long, which at first blush may appear a little overwhelming, but both landowners and renters say they prefer to have everything spelled out clearly. Zimmerman says he has had bad experiences with handshake deals that later resulted in misunderstandings.

"That was the worst thing I could have ever done," the young cattle producer says of one supposed "rent-free" informal agreement he had, which ended up costing him money later. "You better have it down on paper, and have a signature on it, because things can go wrong."

#### Workshops for Landowners & Renters in Feb.

The Land Stewardship Project is holding "Managing for Stewardship" workshops around Minnesota this winter for farmland owners and renters who are looking for help developing rental agreements that reflect their stewardship values. For details, see page 32.

#### Leases that fit Your Stewardship Values

L'sembled a "toolkit" for people seeking to utilize leases that emphasize building soil health and other conservation practices. Tools include: tips on how to hold conversations with renters, lease templates, guides on setting rental rates for soil building practices, and background materials on soil health. For free copies of the Conservation Leases Toolkit, see https://landstewardshipproject.org/stewardshipfood/conservationleases, or contact George Boody at 612-722-6377, gboody@landstewardshipproject.org.

But even the most detailed lease can't cover everything, especially when nature is part of the mix. The first few years Tomkins and Bergh had renters, they realized that on the vegetable plots sometimes cover crops weren't being put in before winter, which left their soil exposed and vulnerable. It turns out with the longer, milder autumns the region has been experiencing, it's tempting to keep harvesting vegetables late into the season until it's too late to seed a cover crop.

The landlords tried requiring that cover crops be planted by a certain date, but the vagaries of climate can throw a curve ball into even the most well-intentioned plans.

"Cover crops are something that's difficult, especially in vegetable production," says Juliet. "I have to put myself in their shoes—they're going to be harvesting their vegetables as late as they can in the season."

One option she and Prescott have consid-

ered is charging extra on the rent to cover the cost of cover cropping. If renters get a cover planted, they get that money back.

#### **Building Community**

The Momanyis are returning to Four Winds for a fifth season in 2019, and another small start-up vegetable operation is beginning its second year on the farm. Tomkins and Bergh are not sure how many more, if any, farms their land will serve as a launching pad for. For now, they're happy with the role they've been able to play in at least a few farmers' dreams.

"We were game to have whatever happen, happen," says Tomkins of their goals when they first invited farmers onto the land. She adds that even if a renter used the experience to decide that farming wasn't for them, that would be considered a success—sometimes one needs firsthand experience to learn what

is not a right career choice.

"But having people graduate onto their own farms, their own places, that is pretty darn cool," she concedes.

Part of the benefit of seeing one's farm as not a terminal endpoint, but as a stepping stone for the next generation, is that it sets a good example for others who are community minded. The Hanson-Pierres, who are in their early 30s, don't need all 20 acres of that land near Shafer to raise vegetables. So, this past fall, they submitted a listing to LSP's Seeking Farmers-Seeking Land Clearinghouse, saying they have seven acres of land for rent.

Says Margo, "Hopefully we can rent some acres out to someone else and pay it forward." □

Juliet Tomkins is willing to field inquiries from landowners who are considering renting out farmland and want to ensure stewardship practices are followed. Her number is 715-821-2323. Templates of Four Winds Farm's leases are available on LSP's Conservation Leases Toolkit web page—see the sidebar on this page.

#### Give it a Listen

n episode 202 of the Land Stewardship Project's Ear to the Ground podcast, Juliet Tomkins talks about how to get started in developing a lease agreement, and Kristin Brennan of the USDA Natural Resources Conservation Service describes how landowners and renters can "team-up" to build soil health: https://landstewardshipproject.org/posts/podcast/1043.

## Farm Beginnings

## **Applications Open for 2019-2020 FB Course**

## Minnesota-Wisconsin Region Class to Begin in Fall 2019

he Land Stewardship Project's Farm Beginnings Program is accepting applications for its 2019-2020 class session. The class will be held at the Menomonie Market Food Co-op in western Wisconsin.

LSP's Farm Beginnings program is marking its second decade of providing firsthand training in low-cost, sustainable methods of

farm management. The course is for people 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, and innovative marketing techniques.

This 12-month course

provides training and hands-on learning opportunities in the form of nine classroom sessions, as well as 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 on Saturdays beginning in the fall of 2019, run until March 2020, followed by an on-farm educa-

## **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. More information is also available by contacting LSP's Amy Bacigalupo at 320-269-2105 or amyb@landstewardshipproject.org.

tion component that includes farm tours and skills sessions.

Over the years, over 800 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 toward the final fee. Payment plans are available, as well as a limited number of scholarships.

Completion of the course fulfills the educational requirements needed for Farm Service Agency loans and the Minnesota

Beginning Farmer Tax Credit.

For application materials or more information, see www.farmbeginnings.org. You can also get details from LSP's Annelie Livingston-Anderson at 507-523-3366 or annelie@ landstewardshipproject. org.  $\square$ 

## LSP's Farm Dreams Can Help You Figure out if Farming is in Your Future

arm Dreams is an entry level, four-hour, exploratory Land Stewardship Project workshop designed to help people who are seeking practical, common sense information on whether farming is the next step for them. This is a great workshop to attend if you are considering farming as a career and are not

sure where to start. Farm Dreams is a good prerequisite for LSP's Farm Beginnings course (*see above*).

LSP holds Farm Dreams workshops at locations throughout the Minnesota-Wisconsin region over the course of a year. The cost is \$20 for LSP members and \$40 for non-members. The next round of classes will

begin in April or May of 2019.

For more information, see the **Farm Dreams** page at www.farmbeginnings.org.

Details are also available by contacting
LSP's Annelie Livingston-Anderson at 507523-3366 or by e-mailing her at annelie@
landstewardshipproject.org.

## **Baby Greens**

Farm Beginnings graduates Keith and Anna Johnson, showed their daughter, Holly, a forage sample last summer during a Land Stewardship Project soil health field day and pasture walk at the Mike and Jennifer Rupprecht farm near Lewiston in southeastern Minnesota. The Johnsons raise grass-fed livestock near Gibbon in west-central Minnesota.

To read profiles of Farm Beginnings graduates like the Johnsons, see https://landstewardshipproject.org/morefarmers/meetourgraduates. For more information on LSP *Ear to the Ground* podcasts featuring interviews with beginning farmers, see page 25. (*LSP Photo*)



## LSP Launches New Farmer Network Directory for Beginning Farmers

By Dori Eder

he Land Stewardship Project has launched a new Farmer Network Directory, a searchable online listing of established farmer-leaders who have made themselves available to support other farmers in the network, especially Farm Beginnings students and graduates. The purpose of the Farmer Network is to help sustainable family farms thrive through mutual support, community building and resource sharing.

LSP's Farmer Network was initially developed to connect our Farm Beginnings students with LSP members who were established farmers and interested in offering their advice and support to those just getting started farming. We know from experience that connection to a supportive network of farmers is a critical part of establishing a successful farm.

We first published a paper directory of farmers in 2009 and offered this resource to our students only. In 2016, with the leadership of LSP's Farm Viability Steering Committee, Farm Beginnings staff undertook the project of moving our paper directory into a searchable, online format. In addition to being a valuable resource for Farm Beginnings students and graduates, this new format will allow our farmer-members to connect with each other more directly, no matter what stage of their farming career they are at. The directory will eventually include listing information on a growing cross-section of LSP's farmer-members, Farm Beginnings graduates and current Farm Beginnings students.

And because it is web-based, members of the Network can update their information as their farms change and grow and new farms can join the Network to share their own experience and expertise as they acquire it.

To check out the Farmer Network Directory and sign-up as a member, see https://network.landstewardshipproject.org.

Because the Network contains personal information, users must be LSP members and create a unique account to access the directory. If you are a farmer who would like to become part of the Network and are not an LSP member, please start by joining. You can join at <a href="https://landstewardshipproject.org/home/donate">https://landstewardshipproject.org/home/donate</a> or by contacting one of our offices. You can also join by sending in the envelope that is included in this Land Stewardship Letter.  $\Box$ 

Dori Eder is a Farm Beginnings Program organizer.



Farm Beginnings graduates Cella Langer and Emmet Fisher discussed how they got access to their land near Hager City in western Wisconsin during a Land Stewardship Project field day they hosted recently. For details on Farm Beginnings field days and workshops, see LSP's calendar at https://landstewardshipproject.org, or call 507-523-3366. (Contributed Photo)

## The Voices of Beginning Farmers

he Land Stewardship Project has developed a series of podcasts featuring the voices of Farm Beginnings graduates and other beginning farmers who are utilizing various strategies to get successfully started on the land. To listen to them, see https://landstewardshipproject.org/morefarmers/talkingbeginningfarming. Here are a few recent episodes:

- → Episode 203: How the Dairy Grazing Apprenticeship is serving as a natural next step into farming for one Farm Beginnings graduate.
- → Episode 199: Farm Beginnings helps the Schwagerls do the kind of enterprise analysis needed to transfer their passions into profits.
- → Episode 198: For one beginning organic dairy farmer, the path to affordable land leads through some trees, up a few hills, and over a brook.
- → Episode 193: A farmer's wish to not have his land become just one more cornfield provides an opportunity for beginning farmers.
- → Episode 180: Using Farm Beginnings and Journeyperson training to make holistic decisions on a community farm.
- → Episode 172: With the help of LSP's Farm Beginnings and Journeyperson, Sara Morrison takes her garden beyond the backyard.

- → Episode 170: How a Farm Beginnings field day makes everyone a "consultant."
- → Episode 169: A livestock/crop farmer lends out an "odd corner" on his property as a launching pad for a beginning vegetable operation.
- → Episode 167: Farm Beginnings grads achieve a series of "micro-goals" in service of the bigger picture: a successful livestock enterprise.
- → Episode 163: Rising from the ashes: Farm Beginnings grads recover from a disaster and launch a dairy farm.
- → Episode 160: Farm Beginnings graduates team up to create an innovative marketing cooperative in the Lake Superior region.
- → Episode 155: Farm Beginnings farmer-presenter Chris Duke talks about the importance of relationships in direct-marketing.
- → Episode 149: Farm Beginnings grads talk about being in the "experimental/making mistakes" stage of their enterprise.
- → Episode 141: A beginning farmer incubator near Duluth is helping revitalize food and farming in the Lake Superior region.
- → Episode 140: New farmers talk about how Farm Beginnings helps them balance demand for their products with keeping their businesses, and lives, sustainable.

# 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 a form and for more information, see <a href="https://landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse">https://landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse</a>. You can also obtain forms by e-mailing LSP's Karen Stettler at stettler@landstewardshipproject.org, or by calling her at 507-523-3366. Here are excerpts of recent listings. For the full listings, see <a href="https://landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse">https://landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse</a>.

#### **Farmland Available**

- ◆ Gayle Gustafson-Ferreira and Wayne Gustafson have for rent 3 acres of tillable farmland or pasture in southeastern Iowa's Des Moines County (5 miles east of Mediapolis, 15 miles north of Burlington). The land has not been sprayed and there is a horse barn that is available. The acreage has partial fence and no house is available. There is water available. A small amount of capital may be available for site improvements to make the operation work. The rental rate is negotiable. Contact: Wayne Gustafson, 319-394-3882; Gayle Gustafson-Ferreira, 908-692-9882, or gayleleeferreira@gmail.com.
- ◆ Mick Fleming has for sale 27+ acres of farmland in northwestern Wisconsin's Polk County (near Turtle Lake). The land has not been sprayed for several years and it consists of 10 acres of fenced pasture. There is 17 forest acres. Goats, sheep, pigs, rabbits and chickens have been raised on this land, and it is ready for livestock. There is a large garden, a raspberry patch, a rhubarb patch and a mint patch. There are apple trees, plum trees, crab apple trees and maple trees (over 200 trees have been tapped). There is a sugar shack with a maple syrup evaporator. The woods also consist of butternut, chokecherry, oak, ash and poplar trees. There is a small, rustic cabin, as well as a sauna, wood shop, barn and metal shop. The house and the buildings could use some upgrades (mostly cosmetic, nothing structural). The asking price is \$199,000. Contact: Mick Fleming, 715-554-0520, fleming@amerytel.net.
- ♦ Wendy Lombardi has for sale 20+ acres of farmland in *south-central Missouri's Laclede County*. There are 12 acres of pasture, 10-15 tillable acres and 8 forest acres. No chemicals have been used in 10 years. There is cross-fencing. Lombardi is open to a work-to-own arrangement. A three-bedroom house, as well as land and equipment, are available while working-to-own. The asking price is \$400 per month or \$40,000. Pictures and more information are at https://springfield.craigslist.org/reo/d/work-to-own-ozarks-farm/6757291567. html. Contact: Wendy Lombardi, wendl@earthlink.net.

- ♦ James Myers has for sale 92 acres of farmland in *northeastern Ohio's Trumbull County*. There are 70 pasture acres and 22 forest acres. The land has not been sprayed for several years. There are two barns and a house. This is a grass-fed farm and business and is for sale as a turnkey operation. Livestock and supplies would also be available for purchase. Contact James Myers, 216-314-6159, jmyers@ingw.com.
- ♦ Melinda Ninefeldt and Gene Dutkin have for rent 200 acres of farmland in *northeastern Minnesota's Carlton County (50 miles south of Duluth)*. The land consists of 20 acres pasture, 10 acres tillable and 170 acres forest. The land has not been sprayed for several years and there are two greenhouses, one hoop house, a barn, a walk-in cooler and a prep room (with stainless steel counters). No house is available. The land was certified organic until 2014. There is a good well with a hydrant near the barn for irrigating gardens and greenhouses. The rental rate is negotiable. Contact: Melinda Ninefeldt and Gene Dutkin, 218-393-7045, melinda.ninefeldt@gmail.com.
- ♦ Real estate agent Marc Cutter has for sale 52.31 acres of farmland in *northwestern Wisconsin's Polk County (near Balsam Lake)*. Approximately 25 to 30 acres is tillable. The property has been operated as an organic produce farm for the past four years. The property has several hundred feet of frontage on a small lake. In addition to the residential well, there is a high-capacity agriculture well. There is a 44 x 64 pole barn with a walk-in cooler. There is a three-sided storage shed and a three-bedroom home with a two-car attached garage. Greenhouses, high tunnels and equipment will be sold separately. The asking price is \$300,000. Contact: Marc Cutter, 715-491-9381.
- ◆ Dave Widell has for sale 10 acres of farmland in *Anoka County, near the Twin Cities, Minn., area* (25 miles from downtown *Minneapolis*). There are 7.5 acres tillable and it has not been tilled, hayed or sprayed for 40+ years. There is no nearby corn or soybean production. There is a 1970s-era rambler house (with recent updates) and an oversized concrete block three-car garage. There is a good well and certified septic system. The land could be used for grazing, greenhouse production or market gardening. The asking price is

- \$390,000, but will consider offers. Contact: Dave Widell (text or call), 952-237-7418.
- ♦ Ed Lysne has for rent approximately 9 acres of farmland in *Minnesota's Rice County, south of the Twin Cities (near Northfield)*. The land includes up to 4.5 pasture acres, up to 4.5 tillable acres and roughly 1 forest acre. It has not been sprayed for three growing seasons. It has supported a few pigs, chickens and produce during the past two years—all grown organically. There is a very large lawn with gardens, trees and shrubs. There is a house and small garage. The lease terms are somewhat negotiable. Contact: Ed Lysne, 612-790-7873, edriclysne@gmail.com.
- ◆ Paula Peterson has for rent 500+ acres of farmland in *southeastern Wisconsin's Kenosha County*. There are 200 pasture acres, a large barn with high ceilings, a grain bin and a small, open-front barn. There is fencing with water sources and feeding units throughout the pasture. There is a unit with separate corrals, and a squeeze chute for inoculations or attending to individual animals. No house is available. The price range is \$12,000 to \$13,000. Contact: Paula Peterson, 630-319-3998, paula.lp.peterson@gmail.com.

#### **Seeking Farmland**

- ♦ William Titkos is seeking to rent .25 acres of tillable farmland in *Minnesota*. Land that is certified organic and that has access to water is preferred; no house is required. Contact: William Titkos, 651-354-1297, maxtitkos@yahoo.com.
- ♦ Stephen and Nellie Kaus are seeking to purchase 20-80 acres of farmland in *northeastern Iowa's Butler or Bremer County*. Land with 5+ pasture acres, 10+ tillable acres and 5+ forest acres is preferred. Land that has not been sprayed for several years is preferred. Outbuildings, water and electricity are preferred; no house is required. They are open to farm partnership opportunities. Contact: Stephen and Nellie Kaus, 319-230-9502, whistlingthistle-farm@gmail.com.

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- ◆ Rebecca Oakley is seeking to purchase 5+ acres of farmland in *Minnesota*. Land with 10 pasture acres, 5 tillable acres and 5 forest acres is preferred. A well for water is preferred; no house is required. Contact: Rebecca Oakley, 850-408-3627, r.c.oakley @hotmail.com.
- ♦ Kody Heideman is seeking to rent 50-500 acres of tillable farmland in *southwestern Minnesota or northwestern Iowa*. Land that has not been sprayed for several years is preferred; no house is required. Heideman has smaller machinery that works good for irregular shaped and smaller fields. Contact: Kody Heideman, 508-227-8909, kody\_1989@hotmail.com.
- ★ Kristen Conley is seeking to purchase 10+ acres of farmland in *southwestern Wisconsin* (*within a 40-minute drive of Dubuque, Iowa*). Land with 5 tillable acres, 5 pasture acres, outbuildings and a house is preferred. Contact: Kristen Conley, 563-542-7663, kkconley3@hotmail.com.
- ♦ Bob and Hilary Leuer are seeking to purchase tillable farmland in *Minnesota*, *Wisconsin*, *South Dakota*, *Nebraska*, *Iowa*, *North Dakota or Illinois*. A house is required. Their family is seeking an opportunity to work with farmers who want to transition their life's work to the next generation. They both have animal science degrees and 10+ years experience working in agriculture. They are willing to consider various transition arrangements, partnerships or opportunities. Contact: Bob and Hilary Leuer, 651-216-0648, farmingminnesota@gmail.com.
- ◆ Jody Armstrong is seeking to purchase 70 acres of farmland in *Minnesota or South Dakota*. Land with 30 acres pasture and some forest is preferred. A house is required. Contact: Jody Armstrong, 518-796-8428, jjman3184@gmail.com.
- ♦ Michele DuRand is seeking to purchase 2-20 acres of farmland in *Minnesota*. Land with 1-10 acres forest as well as water is preferred. Land with outbuildings and a house is also preferred. Contact: Michele DuRand, 952-221-7616, m.durand@yahoo.com.
- ♦ Bonnie Warndahl is seeking to purchase 10-40 acres of farmland in *west-central Wisconsin*. Land with 5 pasture acres and 5 tillable acres is preferred. Land with a barn/pole shed and a house is also preferred. Contact: Bonnie Warndahl, 612-462-9311, bonniehering@gmail.com.
- ◆ David Engen is seeking to purchase 40+ acres of farmland in *Minnesota*. Land that has not been sprayed for several years

- and that has 15+ acres of pasture, 5-10 tillable acres and 15+ forest acres is preferred. No house is required. Engen is a therapeutic body-worker and long-time gardener looking to relocate and find community and create a homestead/family-farm for himself, his wife, two kids and his parents. He is interested in designing property to do agroforestry/regenerative ranching/farming. Contact: David Engen, 415-867-7577, davebengen@gmail.com.
- ◆ Jesse Sigurdsen is seeking to purchase 2 acres of farmland in *Minnesota*. Land that has 1 acre tillable and 1 acre pasture is preferred. No house is required. Contact: Jesse Sigurdsen, 651-249-5132, momasboy11@ hotmail.com.
- ♦ Nancy St. Germaine is seeking to purchase 10+ acres of farmland in *Minnesota or western Wisconsin*. Land that has not been sprayed for several years is preferred. Land with utilities and a house or other livable structure is ideal. Contact: Nancy St. Germaine, 612-209-2045, nancystg@yahoo.com.
- ♦ Milton Scheirer Jr. is seeking to purchase 40-80 acres of tillable farmland in *central Illinois*. No house is required. Contact: Milton Scheirer Jr., 309-339-9461, schyr1@mtco.com
- ♦ Kelly Schaefer is seeking to rent 20 acres of farmland in *Minnesota*, *Arkansas*, *Oklahoma or Kentucky*. Land with pasture, fencing, water, power, outbuildings and a house is preferred. Contact: Kelly Schaefer, 218-573-2737, kgf7arctic@yahoo.com.
- ◆ Andrea Ortiz is seeking to purchase 3-10 acres of farmland in *Nebraska*. Land that has not been sprayed for several years is preferred; no house is required. Contact: Andrea Ortiz, 402-706-6371, andrea@zealousfarm.org.
- ♦ Susan Reed is seeking to rent 5+ acres of tillable farmland in *eastern Wisconsin*. Land that has not been sprayed for several years and that has access to water as well as storage buildings is preferred. No house is required. Contact: Susan Reed, 920-944-5063, foxvalleyinteriorslle@gmail.com.
- ♦ Joseph Brown is seeking to rent 7-10 acres of farmland in *Minnesota* for a community solar garden. The land needs to be in Xcel Energy territory and near a three-phase electricity line. No house is required. Brown is willing to pay \$750 to \$1,100 per acre. Contact: Joseph Brown, 612-999-3999, joseph. brown@novelenergy.biz.
- ◆ Elizabeth Wilts is seeking to rent 160 acres of farmland in *Minnesota*. Land that includes 20 acres of pasture is preferred. No house is required. Contact: Elizabeth Wilts, 320-444-7296, ewilts13@gmail.com.
- ◆ Christopher Brenna is seeking to rent .25 acres of tillable farmland in *Minnesota*. Land that has not been sprayed for several years

- and that has water, electrical hookups and a place for a tiny house is preferred. No house is required. Contact: Christopher Brenna, 612-242-1434, cjbrenna@gmail.com.
- ◆ Jill Sobel is seeking to rent 2-5 acres of farmland in southeastern Wisconsin. Sobel would prefer land that includes a house, outbuildings, water, electricity for the barn and fenced pastures. Sobel would like to bring her 12 goats onto the land and she has experience with dairying, breeding goat husbandry, grazing rotation and small-scale hay production. Her goal is to provide quality dairy products for the region, as well as educational programming and small-scale grazing for homeowners. She is willing to engage in mentorship of someone currently on the land and rent out a bedroom/bath if that is available. Contact: Jill Sobel, 303-242-8751, fetchinfarms@gmail.com.

#### **Seeking Farmer**

- ◆ Hallie Anderson is seeking three interns for the 2019 growing season (two positions for March to November; one position for June to September) for a vegetable operation in Washington County, in Minnesota's Twin Cities region (near Afton). These are entry-level programs combining hands-on training and skills-based education in micro-farming (farming on an acre or less), so that interns will have the knowledge and experience to start their own agricultural project. Interns will learn by being involved with all aspects of a diversified organicpracticing vegetable farm, which includes succession planting for extended season, working with CSA and wholesale markets, and high tunnel and greenhouse management. The land has not been sprayed. The pay is \$700 per month and housing is available. Contact: Hallie Anderson, 612-770-7194, hallie@10thstfarmandmarket.com.
- ◆ Urban Roots in *Saint Paul, Minn.*, is seeking a fulltime market garden seasonal supervisor for the 2019 growing season. Urban Roots is a 50-year-old nonprofit that works to build healthy communities on the East Side of Saint Paul through conservation, gardening and healthy cooking. The garden program employs 18 interns ages 14-19 who live on the East Side. A total of one acre is farmed on six separate urban farm sites. The market garden seasonal supervisor is responsible for all types of farm production and marketing, as well as education of the interns. The pay is \$15 an hour; no housing is provided. Contact: Sydney Davis, 651-228-7073, sdavis@urbanrootsmn.org.



### Dirt to Soil One Family's Journey into Regenerative Agriculture

By Gabe Brown 2018; 223 pages Chelsea Green Publishing www.chelseagreen.com

Reviewed by Brian DeVore

n 2012, I had the great fortune to get a tip about a group of farmers, scientists and government soil conservationists who had teamed up in south-central North Dakota to take a holistic approach to making the land more resilient. By focusing intensively on building soil health utilizing a combination of practices—no-till, managed rotational grazing, cover-cropping, diverse cropping rotations—they had gotten a whole lot of farmers and ranchers excited about the world beneath our feet. As a result, they were building organic matter at rates scientists long thought weren't possible and churning out soil that was less erosive, better able to manage water and just plain more profitable to farm.

I spent a few days hanging out with members of this team, and came away with a deep sense that they were onto something. It had been a long time since I had seen a collaborative effort generate so much of a buzz in a community and beyond. The farmers and ranchers who were involved with this effort felt they had control of their own futures, and that's a powerful thing.

As I made the long drive back to Minnesota, I thought a lot about why the Burleigh County Soil Health Team was so effective. There were plenty of factors, including good leadership on the part of local natural resource agency personnel and a willingness on the part of top-notch scientists to listen to and learn from farmers. But one critical reason this team was successful locally, and eventually became the template for similar soil health teams around the world, was because of a man who knew how to talk about the importance of soil health to just about anyone he met: Gabe Brown.

He's not just an innovative farmer with lots of good advice to impart. As anyone who picks up his new book, *Dirt to Soil:* One Family's Journey into Regenerative Agriculture, will soon learn, Brown has an irresistible "rags-to-regeneration" back story, and he's very good at sharing it. This gem of

a book combines Brown's personal tale with practical advice on how to build soil—yes, the "Five Principles of Soil Health" are covered. For good measure, numerous entertaining anecdotes are sprinkled in to keep the reading fun.

After reading this book, I realized how lucky I was back in 2012 when Brown spent half-a-day giving me a personal tour of his operation. Would he have been so generous with his time today? Perhaps he'd want to

be, but the fact is the farmer's time has become quite valuable in recent years. He is a YouTube star who is frequently interviewed by both the agricultural and environmental media; I've even heard him on National Public Radio. And then there's the speaking engagements - Brown himself concedes that he is such a popular speaker both here and abroad that he's had to adjust his farm management to accommodate all of the absences from the land. To be fair, Brown makes it clear he is more than willing to talk one-on-one with

anyone who wants to learn how to bring soil to life, but let's face it, there are only so many hours in the day.

So, for anyone interested in learning what makes the soil health revolution tick and perhaps how they can jump in themselves, the timing of this book is optimal.

Part of Brown's appeal is he's not afraid to talk about the mistakes. He begins the book by describing how multiple years of crop failures, which almost put him and his wife Shelly out of business, forced them to look deeper into the way the soil was being treated. Brown is a city kid from Bismarck, which means he didn't have as many preconceived notions of how farming should be done. That opened him up to successful alternatives like planting multiple species of cover crops and mob grazing in a way that leaves lots of forage uneaten. A farm kid might have thought twice about going against the grain. Still, it didn't come easy.

"I often say that I had to fail at everything twice, usually the hard way," quips Brown.

But he learned from those failures, and wasn't afraid to reach out to anyone he thought could help him bounce back and move forward. Some chapters read like a who's-who in soil health/regenerative agriculture. Brown has interacted with them all: from Ray Archuleta and Dr. Kris Nichols to Dave Brandt and Gail Fuller. A particularly touching section tells the story

of how Brown learned grazing innovations from Canadian Neil Dennis, who died soon after the book was published. One gets a sense that even after becoming a "rock star" in regenerative agriculture in his own right, Brown has been using all this hobnobbing to learn more and tweak the way he does things. He is a lifelong learner.

One minor criticism of *Dirt to Soil* is the chapter describing how Gabe and Shelly Brown, along with their son Paul, have de-

veloped a successful directto-consumer marketing venture as a way to get rewarded financially for building soil health. It's exciting to read about how customers can't get enough of their pastureraised meat and eggs. But considering how much the local food movement is struggling, this chapter could have used more context. There's no doubt the Browns have worked hard to make their "Nourished by Nature" marketing venture successful, but I suspect there are a certain set of unique circumstances helping them out, such as the fact that their

region simply does not have a lot of farmers supplying locally produced foods.

But that's a small quibble—the rest of the book leaves the reader with the feeling that regenerative farming is possible just about anywhere. In fact, before I left his farm in 2012, Brown told me, "There are people all over doing this. They just don't have the mouth I have."

To prove his point, he includes a chapter in the book called, "Will It Work on Your Farm?" It consists of eight mini-profiles of farmers and ranchers who, as Brown puts it, "...changed the way they saw the world after becoming inspired by the possibilities of regenerative agriculture." The profiles were done by *Grass*, *Soil*, *Hope* author Courtney White, and they include innovators from Canada, Kansas, North Carolina, Texas and Montana. A glaring absence is anyone from Minnesota, Iowa, Wisconsin or even Illinois. Does that mean these states lack anyone of Brown's caliber? No. I've interviewed plenty of regenerative pioneers in those and other states who are extremely innovative. Let's just say they don't have the "mouth" that Gabe Brown does.

Land Stewardship Letter *editor Brian DeVore is the author of* Wildly Successful Farming: Sustainability and the New Agricultural Land Ethic (*see page 29*).

Dirt
Soil
One Family's Journey into
Regenerative Agriculture

Gabe Brown

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## **Great American Outpost** Dreamers, Mavericks, and the Making of an Oil Frontier

By Maya Rao 2018; 324 pages **Public Affairs** www.publicaffairsbooks.com

Reviewed by Dale Hadler

*∀reat American Outpost* is best described as a study in contrasts. On the one hand, the author, veteran journalist Maya Rao, describes the beauty of North Dakota's Theodore Roosevelt National Park and what she refers to as "Montana sunsets," in a manner befitting a Zane Grey or Louis L'Amour Western novel. But she also reports on the environmental destruction and social problems created by the hydraulic fracturing—popularly known as "fracking" - of oil and gas in the Bakken Shale formation, which underlies the western part of the state.

Rao, who is a reporter for the Minneapolis Star Tribune, describes a situation that will be familiar to anyone who has been in a community where the promise of quick wealth sweeps in. Felons, many convicted of violent crimes, move in, seeking to reinvent themselves. Ponzi and get-rich-quick schemes proliferate, along with sexual violence and drug abuse. Serious injury or death from toxic gases or oil fumes is a constant companion in the Bakken oil fields.

In spite of the author's avowed efforts to

not write an "anti-fracking" book, she does not paint an attractive picture of the industry's impact on rural North Dakota.

In a particularly heartbreaking passage, Rao describes a scenario that is sourced from many stories she heard while traveling the region. It describes a typical situation where a farm family has granted a company an easement to run an oil pipeline across

the land in return for a payment. The company promises to return the land "to its old state" once the pipeline is buried.

Rao writes, "Then you saw the soil slumping. Topsoil misplaced. Vegetation not restored right. Noxious weeds sprouting. They said they'd fix it. More land men came with more promises, and you believed them because the North Dakota way was to take a person at his word. They said they'd pay more money, but the farm equipment could no longer run over masses of compacted

dirt. The land could no longer grow the same kind of crop. Scars crossed once unsullied fields, marking the presence of pipelines years after the disruption."

Rao spent a year living in the Bakken Region and made many shorter reporting trips there between 2012 and 2016, which means she was able to see firsthand the results of the fracking boom, as well as what happened as the oil economy started to collapse.

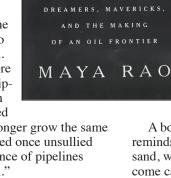
She notes that when the boom transitioned into a bust, many of the people who came to the Bakken to make a quick buck took off, leaving in their wake empty housing and financially struggling businesses, as well as drug and crime problems. They also left behind a decimated landscape.

Anyone who has paid attention to a

sub-set of the fracking boom, frac sand mining (frac sand is a major ingredient in hydraulic fracturing), should take notice of the lessons Rao shares. Frac sand companies came to southeastern Minnesota a few years ago armed with big promises of economic development. They also vowed to restore mined land to its former state. But farmers and other rural residents only had to look across the Mississippi River to Wisconsin to see the devastation this industry can cause. That's why, working with the Land Stewardship Project, citizens organized a successful campaign to ban frac sand mining in Winona County.

A book like Great American Outpost reminds us that whether the resource is oil, sand, water or soil, when the "land men" come calling, it's best to take a long look at who is promising what.  $\Box$ 

LSP member Dale Hadler lives in Winona in southeastern Minnesota.



GREAT

AMERICAN

OUTPOST

## Wildly Successful Farming Book Now Available

WILDLY

SUCCESSFUL

**FARMING** 

Sustainability and the New

**Brian DeVore** 

Agricultural Land Ethic

n October, the University of Wisconsin Press released Wildly Successful LFarming: Sustainability and the New Agricultural Land Ethic, a book written by Land Stewardship Letter editor Brian

DeVore. This book tells the stories of farmers across the Midwest who are balancing viable food production with environmental sustainability and a "passion for all things wild." They are using innovative techniques and strategies to develop their "wildly successful" farms as working ecosystems. Several Land Stewardship Project farmermembers are featured in Wildly Successful Farming.

Since its release, the book has received a positive response in the agricultural and environmental communities:

"An accessible, engaging survey of alternatives to the powerful but brittle model of industrial agriculture. DeVore conveys the

diverse ideas and methods that environmentally minded farmers are employing, backed up by recent scientific findings from agroecology, soil ecology, conservation biology, and related fields. Timely and important."

> - Curt Meine, author of Aldo Leopold

"Meet optimistic realists-farmers, conservationists, and scientists—blurring occupational boundaries to reveal a world in which

productively intertwined. These are outliers in a sea of corn and soybeans, but their stories, told often enough, can change all of that."

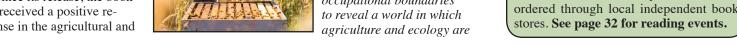
- Karen Oberhauser, director of the **University of Wisconsin-Madison** Arboretum

"We don't have to choose between healthy land and productive land—we can have both. DeVore's careful chronicling of Midwest farmers who practice an agriculture that respects and supports nature will give you hope for the future."

- Kristin Ohlson, author of The Soil Will Save Us

## Want a Copy of the Book?

To order a copy of Wildly Successful Farming, see https://uwpress.wisc.edu or call 1-800-621-2736. Copies can also be ordered through local independent book





## Membership Update

## **Show Your LSP Support with Pride**

There are now numerous fun ways you can show your support for the Land Stewardship Project. LSP has available for purchase t-shirts (\$20), caps (\$20), window decals (\$3), tote bags (\$15) and, marking the return of a classic, "Let's Stop Treating our Soil Like Dirt" bumper stickers (\$3).

All of these items can be ordered from our online store at https://landstewardshipproject.org/store. Some items may also be available from our offices in Lewiston (507-523-3366), Montevideo (320-269-2105) or Minneapolis (612-722-6377), as well as at Land Stewardship Project events and meetings.



T-shirt





**Window Decal** 



Cap



**Tote Bag** 



**Bumper Sticker** 

## **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 or 612-722-6377.

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## Art of the Possible

The Land Stewardship Project recently L commissioned a piece of art from member John Fisher-Merritt (pictured), to be hung in the organization's Minneapolis office. Fisher-Merritt, along with his wife Jane and son Janaki, operates Food Farm, a Community Supported Agriculture operation near the northeastern Minnesota community of Wrenshall.

When he delivered the wooden artwork, Fisher-Merritt also provided LSP with a beautiful description of its history and what it, and LSP, represent to him. Below is that description.

## **Possibilities & Imperfections**

From the blufflands of southeastern
Minnesota and definition Minnesota and the Driftless Area of western Wisconsin, to the Red River Valley in the west and the thin rocky soils of northeastern Minnesota, the Land Stewardship Project has been a positive influence in people's lives, supporting a message of healing the land through soil stewardship.

This piece of artwork is intended to represent farmers' attempts to make a living where it is easy, and where there are significant challenges in the landscape. The beauty of the wood grain reveals the effects of bad agricultural practices as well as good ones, showing eroded landscapes as well as carefully tended fields preserved through contouring, buffer strips and grassed waterways.

Forty-five years ago a man I barely knew, but who had heard about my homemade portable saw mill, delivered five myrtle wood logs to my house and told me that he would give me one-third of the resulting boards if I would cut them. He gave me the boards he considered to be the least valuable because of imperfections. This is one of those boards. Where he saw imperfections, I imagine narrative possibilities they reveal.

> John Fisher-Merritt, farmer and Land Stewardship Project member, Wrenshall, Minn.

## **Get Current With**

LIVE AMMAND WIRE

ign up for the LIVE-WIRE e-letter to get monthly updates from the Land Stewardship Project sent straight to your inbox. Details are at https://landstewardshipproject.org/signup.



John Fisher-Merritt (right), shown here with Land Stewardship Project membership and major gifts officer Josh Journey-Heinz, recently created a piece of artwork for the organization's Twin Cities office. Shown in the background is a "Barn Star," which was created for LSP by Audrey Arner, who farms (and does art) near Montevideo in western Minnesota. (LSP Photo)

## This Tax Season: IRS or LSP? Choose LSP!

For those privileged enough to have contributed to tax-deferred 401(k)s and IRAs, income tax is due on that money when you take withdrawals in retirement. Annual withdrawals from these retirement accounts are often required after age 70½, and the penalty for skipping a required minimum distribution is 50 percent of the amount that should have been withdrawn.

However, if you are in the fortunate position of not needing your distribution for living expenses and are interested in supporting the Land Stewardship Project, you can avoid income tax on your required withdrawal by donating that money directly to LSP. If you are over 701/2 and have an IRA that requires a minimum distribution, ask your IRA broker or tax planner how your retirement account can be used to help grow LSP's work and reduce your tax bill.

For more information, contact Josh Journey-Heinz, LSP's membership and major gifts officer, at 612-722-6377 or jjourney-heinz@landstewardshipproject. org. 🗖

## Volunteer for LSP

big "thank you" goes out A to the volunteers who help the Land Stewardship Project in all aspects of our work. 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:

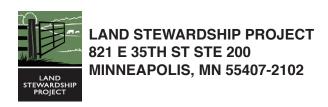
- Montevideo, Minnesota Terry VanDerPol, 320-269-2105, tlvdp@landstewardshipproject.org
- Lewiston, Minnesota Karen Benson, 507-523-3366, karenb@landstewardshipproject.org
- Minneapolis, Minnesota Clara Sanders Marcus, 612-722-6377, cmarcus@landstewardshipproject.org

## **Membership Questions?**

**T**f you have questions about the status Lof your Land Stewardship Project membership, give our Individual Giving and Membership Program a call at 612-722-6377, or e-mail Clara Sanders Marcus at cmarcus@landstewardshipproject.org.

## **Land Stewardship Talk**

The Land Stewardship Project's **1** award-winning *Ear to the Ground* podcast features over 220 episodes focused on everything from beginning farmer issues and soil health, to policy and local food systems. Check them out at https:// landstewardshipproject.org/posts/podcast. Ear to the Ground is also available on Stitcher and iTunes.



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Your timely renewal saves paper and reduces the expense of sending out renewal notices. To renew, use the envelope inside or visit https://landstewardshipproject.org.

#### STEWARDSHIP CALENDAR

- → FEB. 7— Managing for Stewardship: Women Landowners & Digging Deeper into Conservation on Your Land, Willmar, Minn. (see sidebar, this page)
- → FEB. 7—LSP Farm Financial Stress Workshop, Rochester, Minn. (page 7)
- → FEB. 9—Sustainable Farming Association of Minnesota Conf., St. Joseph, Minn. Contact: www.sfa-mn.org, 844-922-5573
- → FEB. 13— Managing for Stewardship: Women Landowners & Digging Deeper into Conservation on Your Land, Roseville, Minn. (see sidebar, this page)
- → FEB. 14— Managing for Stewardship: Women Landowners & Digging Deeper into Conservation on Your Land, Albert Lea, Minn. (see sidebar, this page)
- → FEB. 15— Building Soil Health, with farmers Dawn & Grant Breitkreutz & Tom Cotter, Preston, Minn. (page 17)
- → FEB. 15— Wildly Successful Farming book reading/signing, 7 p.m., Jubilee Market & Peacemeals, Mountain Lake, Minn. Contact: Judy Harder, 507-360-3293
- → FEB. 16— LSP Farm Transition Planning Workshop, Rochester, Minn. Contact: Karen Stettler, LSP, 507-523-3366, stettler@landstewardshipproject.org
- → FEB. 19— Wildly Successful Farming book reading/signing, 6:30 p.m., Deer Park (Wis.) Public Library. Contact: Brian DeVore, LSP, 612-722-6377, bdevore@landsteward-shipproject.org
- → FEB. 21-23— MOSES Organic Farming Conference, La Crosse, Wis. Contact: https://mosesorganic.org/conference, 888-906-6737
- → FEB. 26— 14<sup>th</sup> Annual LSP Family Farm Breakfast & Day at the Capitol, Saint Paul, Minn. (page 9)
- → FEB. 28— LSP Grazing Listening Session, 6:30 p.m.-8:30 p.m., Lewiston, Minn. Contact: Liana Nichols, LSP, lnichols@

landstewardshipproject.org, 507-523-3366

- → MARCH 5— Wildly Successful Farming book reading/signing, 6:30-7:30 p.m., River Falls (Wis.) Public Library. Contact: Brian DeVore, LSP, 612-722-6377, bdevore@landstewardshipproject.org
- → MARCH 7—LSP Roller Crimper, Weed Control & Soil Health Workshop, with Dr. Erin Silva, Rushford, Minn. (page 17)
- → MARCH 7—LSP Marketing Forum,
- 4 p.m.-8 p.m., Saint Paul, Minn. Contact: Scott DeMuth, LSP, 320-269-2105, sdemuth@landstewardshipproject.org
- → MARCH 13-15— LSP Holistic Management Training, with Tara & Joshua Dukart, Stewartville, Minn. (page 17)
- → MARCH 16—LSP Farm Transition Planning Workshop, Rochester, Minn. Contact: Karen Stettler, LSP, 507-523-3366, stettler@landstewardshipproject.org

- → MARCH 16—Wildly Successful Farming book presentation at Leopold Landscape Alliance, Burlington, Iowa. Contact: Steve Brower, brower406@aol.com, 319-759-5062
- → MARCH 30—Finding Farmland: LSP Workshop for Beginning & Aspiring Farmers, Minn.-Wis. region (details to be determined). Contact: Karen Stettler, 507-523-3366, stettler@landstewardshipproject.org
- → APRIL 10—Minnesota Water Action Day, State Capitol, Saint Paul, Minn. Contact: Amanda Babcock, LSP, 612-722-6377, ababcock@landstewardshipproject.org
- → APRIL 10—Wildly Successful Farming book reading/signing, 7 p.m., The Lingonberry, Decorah, Iowa. Contact: Brian DeVore, LSP, 612-722-6377, bdevore@landstewardshipproject.org
- → MAY 19—2019 Regular Session of the Minn. Legislature Adjourns (pages 8-9)

## Want a Rental Agreement that Reflects Your Values? Check Out these LSP February Workshops

The Land Stewardship Project will be holding several "Managing for Stewardship" workshops this winter for farmland owners and renters who are looking for help developing rental agreements that reflect their stewardship values. These are two-part workshops for digging deeper into details. In the morning, we will have a session for *women landowners only*, recognizing that many farmland owners are women who have often inherited land without having been deeply involved in farmland management. We will go over some basics, offer each other support, and talk about what this group needs most to be able to make changes on the land that they manage.

We will break for lunch at which point *anybody* can join us for the afternoon where we will bring in legal, financial and agency experts, as well as farmers, to answer your more in-depth questions about what you can do on your land, what to include in your lease, and how to approach conversations and changes. These are the workshops we have scheduled:

- Feb. 7: Vinje Church, Willmar, Minn.
- Feb. 13: Roseville, Minn.
- Feb. 14: Albert Lea, Minn.

For more information and to register, see <a href="https://landstewardshipproject.org/">https://landstewardshipproject.org/</a> managingforstewardship2019. Details are also available by contacting LSP's Robin Moore at 320-269-2105 or rmoore@landstewardshipproject.org. See <a href="mage-page-20">page-20</a> for how a couple from western Wisconsin has been using detailed lease agreements as launching pads for beginning farmers while maintaining stewardship of their land.

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