The Land Stewardship Letter

LAND STEWARDSHIP PROJECT

38 Years of Keeping the Land & People Together

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LSP Photo

Putting water in its place (*page 16*).

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Letter
Keeping the Land & People Together
Vol. 38—Number 1, 2020

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All inquiries pertaining to the content of the *Land Stewardship Letter* should be addressed to the editor, Brian DeVore, 821 East 35th Street, Suite 200, Minneapolis, MN 55407-2102; phone: 612-722-6377; e-mail: bdevore @landstewardshipproject.org.

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The COVID-19 Pandemic has Shown Just How Interconnected We Really Are

By Brian DeVore

When do you know a plant is growing in soil that is healthy enough to generate its own fertility, resistance to diseases, and overall resiliency? Vibrant-looking leaves and stems? High yields? Those are all good indicators, but don't tell the whole story. Agrichemicals and other inputs are quite effective at propping up the production of crops that are in fact growing in soil lacking the basic biological components needed to be called "healthy." It's a vicious cycle: the more reliant we become on these artificial inputs, the less able the soil is to be self-reliant.

Everything works fine as long as fossil fuels remain affordable and Mother Nature somewhat cooperative. Then something comes along to rip the mask off the whole charade. In the case of our chemical- and energy-intensive cropping system, that "something" has been climate change. Extreme weather is revealing just how unsustainable our current cropping systems are.

The COVID-19 pandemic is peeling back the shiny veneer in its own way. In this case, the coronavirus is showing just how unhealthy our overall food and farming system is. Much like crops that are being propped up by iron, oil, and chemistry, the way we process and distribute our food has had the appearance of being incredibly successful.

But within days of the pandemic making itself known in this country, cracks in the food and farm system emerged that showed this to be a shaky infrastructure reliant on "just-in-time" distribution, powerless farmers, and workers toiling in brutal conditions. It also shows this system adheres to Barry Commoner's first law of ecology: "Everything is connected to everything else."

For example, the meatpacking industry, after decades of successfully pushing the government to increase line speeds and in general weaken worker safety rules, became the home of some of the hottest hot zones in the pandemic. All the while, Big Meat failed to acknowledge that a system based on maximizing profit at any cost was inherently flawed, and that COVID-19 did not care what your share price was trading at. Eventually, numerous pork, beef, and poultry plants were closed down indefinitely.

In case we aren't aware of it already, these shutdowns reinforce the reality of who is being harmed the most by these shoulder-to-shoulder working conditions: low-income people of color, many of whom are new immigrants. To one of these workers, receiving a $500 bonus for not missing a shift for a month met the difference between making a rental payment and being out on the street. And in a town like Worthington, Minn., it was often a packing plant that brought them to the area. Now, besides dealing with discrimination rooted in racism and xenophobia, their only source of employment, which is likely one of the biggest economic engines in the community overall, is shut down.

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How dysfunctional is our food and farming system? While animals were being euthanized, milk dumped, and vegetables buried, food banks were overwhelmed with demand.

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As these plants shuttered, the dominoes started to fall. Suddenly, we were seeing the shortsightedness of allowing mega-packing plants put smaller competitors out of business. One major plant goes down, and a hog farmer must transport their hogs twice as far to have them processed at the next mega-plant — until that plant shuts down as well.

By the end of April, farmers were killing their hogs, poultry companies were coming on to their contractors' farms to gas chickens, and eggs were being smashed. Dairy farmers were forced to dump milk and large vegetable operations in Florida and California were plowing under produce as the "food service" market — schools, hotels, and restaurants — vanished.

How dysfunctional is our food and farming system? While animals were being euthanized, milk dumped, and vegetables buried, food banks were overwhelmed as the unemployment rate skyrocketed — demand at food banks rose 70%, according to Feeding America. So much for the myth that a concentrated, industrialized food and farming behemoth will feed us all.

And in this country, there is another significant result of being out of a job: lack of health insurance. As LSP member Jennifer Jacquot-DeVries wrote in a blog in early April: "With a national healthcare system that links employment and health insurance coverage, that means thousands of Minnesota families and millions of American families are also losing their health insurance coverage." Consider the irony: In the midst of one of the biggest health crises this country has ever faced, millions of "essential workers," including farmers, lack good healthcare coverage.

Meanwhile, as this country's residents are forced to go online in order to do everything from get a basic education and work to purchase necessities and communicate with loved ones, the digital divide in rural America has become a crisis all its own.

But COVID-19 hasn't just shed light on the weaknesses in our food and farming system; it's also made people aware of the strong bonds that can develop when eaters and farmers "shorten the food chain." As panic grocery buying took hold in the early days of the outbreak, interest in locally produced food rose. In March and April, LSP farmer-members were reporting a surge in demand for direct-marketed meat. Some Community Supported Agriculture farms were seeing a rise in member sign-ups.

Much of that interest in local farms may have been rooted in the kind of panic-driven consumerism that takes hold whenever there is a contamination scare in the mainstream food system. Unfortunately, this kind of interest in local, regeneratively-produced food often fades once the initial health crisis has passed. But this time may be different. The extent to which our concentrated, corporate-controlled food system is broken is receiving a lot of attention. If nothing else, we are all more aware there are people behind our food, from the farmers and the people who work in processing plants to the warehouse workers and the folks who drive trucks and stock shelves.

As this *Land Stewardship Letter* goes to press, it's unclear what the future will bring. Some things are simply out of our control. That's why, with the help of our members and allies, the Land Stewardship Project is continuing to have an impact on what we can control: creating healthy soil, working to bring about fair treatment of *everyone* that's part of the food chain, building the next generation of farmers, and protecting the power of communities to build their own economic and social resilience.

Remember: "Everything is connected to everything else." In other words, we are all in this together. ❐

Brian DeVore is the editor of the Land Stewardship Letter.

Stewardship Roots

Glover Named LSP's New Executive Director

Mark Schultz Retires After 3 Decades with the Land Stewardship Project

When Jess Anna Glover was a young attorney working for Farmers' Legal Action Group (FLAG) back in the early 2000s, she became acquainted with a coalition of organizations that was fighting corporate concentration in agriculture by organizing farmers across the Midwest. That group, the Campaign for Family Farms and the Environment, was working with FLAG to challenge the federal commodity checkoff program, which farmers had maintained was forcing them to support a type of agricultural model that was putting them out of business. That case eventually made its way to the U.S. Supreme Court in 2004.

"For a young lawyer to get to work on a case that eventually went up to the U.S. Supreme Court — it was amazing," she recalls.

Glover, who grew up in southeastern Minnesota in a family of farmers, was not only intrigued by the legal ramifications of the checkoff case. She was also impressed by how farmers had come together to challenge the checkoff. In particular, a Minnesota-based group, the Land Stewardship Project, had worked tirelessly with other members of the Campaign for Family Farms and the Environment to organize family hog farmers, who eventually voted in a national referendum to end the pork checkoff program (as result of a backroom deal with the National Pork Producers Council, the USDA ignored that vote and chose to continue the checkoff).

Through her work with FLAG, Glover had become deeply aware of the enormous power corporations, policymakers, and commodity groups wielded in undermining the ability of independent farmers to make a living, all while claiming they spoke for those same farmers.

"All of those experiences were just real eye openers," says Glover, who, while at FLAG, also worked on farmer contract rights, Hmong farmer rights, and land tenure rights for Native Americans. "LSP was the organization thinking about those issues and working on them, all while advocating for something better. The legal case was important, but the real connection and the real power of it was the organizing that went alongside it and the focus on community. I think that is one of the most powerful things about LSP."

Now, some 16 years later, she will have an opportunity to help LSP put into play an ambitious long-range plan that focuses on utilizing its strengths — organizing, community building, and implementing people based practical solutions — to build a just, sustainable food and farm system. In March, LSP's board of directors announced that Glover would be stepping in as the organization's new executive director. She is taking over from Mark Schultz, who recently wrapped up an impressive three-decade career with the organization. Glover will also serve as director of the Land Stewardship Action Fund (LSAF), a sister organization to LSP that works to promote and expand people-powered organizing in the context of public elections.

Jess Anna Glover (*center*)**, shown here speaking with LSP member Sister Kathleen Mary Kiemen and LSP co-managing director Mike McMahon at the recent Farm Crisis Summit, says taking over as executive director is "daunting, but really exciting."** (*LSP Photo*)

"Jess Anna is excited to jump in and work hard as LSP's executive director, and we are excited to have her," says LSP board chair Jody Lenz. "I can think of no one better suited to take on the challenges and opportunities our members, staff, and organization as a whole have in front of us."

LSP's board of directors undertook an extensive executive director search during the past several months that produced an impressive pool of 32 highly qualified candidates, according to Dan McGrath, who led the board's transition committee.

"The input of board members, staff, and leaders gave us a clear idea of the kind of leadership the Land Stewardship Project needs to take on the farm crisis and advance our work to support a positive future for agriculture and our rural communities," said McGrath. "Jess Anna's energy, insight, and managerial skills are exactly what we need at this critical time."

Glover, who began her duties April 28, will be the fourth executive director the organization has had since it was founded in 1982. Besides Schultz, LSP has been led by Ron Kroese (he co-founded the organization with Victor Ray) and George Boody.

Glover says in a sense, she feels like she is returning to her roots as someone who has always seen farmers as key components of rural communities, both economically and ecologically.

"I'm committed to working with LSP's members and staff to fight for the people who are the pillars of our rural communities and stewards of the land — independent farmers," she says.

Sunday Drivers

Glover remembers well as a little girl visiting her grandparent's farm near Stewartville. The farm is now owned and operated by a cousin, Jimmie-John King, who is also Stewartville's mayor. She says the Sunday drives she took with her grandparents, when they noted how the crops were doing and the condition of the farms, taught her to see the connection between the health of the community and the health of the land.

"There were no screens back then, so it was just looking out the windows and listening to grandpa talk," she recalls.

Glover also learned the power of community during that time. Her grandfather and an uncle served on the school board, and were leaders in the local co-op, as well as other civic groups. Her late mother, Carol King, was a teacher and founder of the Stewartville Area Historical Society. Her mother raised Glover as a single parent, which made connections to the extended family and larger community even more critical.

"Sitting around the table with older folks was the norm," she says. "I was raised by really strong women, and men as well."

After graduating from Stewartville High

Executive Director, *see page 5…*

…Executive Director, *from page 4*

School in 1992, Glover got a degree in international relations, economics, and environmental studies from the University of Wisconsin. A short stint as a caseworker for a U.S. Senator from Oregon got her interested in how public policy could affect people's lives, and she went on to get her law degree from the University of Minnesota, where she also served as a policy fellow at the Humphrey School of Public Affairs.

Connecting with Farms

Glover felt fortunate to land an internship and eventually a fulltime staff position with FLAG. Founded in 1986, the nonprofit law firm provides legal services and support to family farmers and their communities. Besides taking on cases, FLAG also produces numerous resources for farmers trying to figure out how to negotiate contracts or undergo financial mediation, for example. At one time, FLAG attorneys Stephen Carpenter and Randi Roth had been involved with Pigford vs. Glickman, a class action lawsuit against the USDA alleging racial discrimination against African-American farmers in its allocation of farm loans and assistance.

"It's relevancy is as powerful today as it was back then," says Glover of the Pigford case. "People lost land because they couldn't get loans and they couldn't pass that property on through generations, and property ownership is how we pass on generational wealth; that has a lasting effect for decades."

Besides farming and the environment, another passion of Glover's is education, and after leaving FLAG she spent almost a dozen years as an attorney with the teacher's union Education Minnesota. Besides providing legal representation to educators across the state, Glover was involved in lobbying, legislative research, and the drafting of bills.

"The pillars of rural communities, from my perspective, continue to be farmers and education," she says. "So I continued being connected with rural communities throughout that time."

During her time working in the education field, Glover saw how youth who undergo "adverse childhood experiences," also called ACES, experience numerous negative impacts, including disciplinary problems in school and ill health.

"One of the most powerful tools to combat that trauma and build resiliency is through mentoring, having a strong relationship with a caring adult," she says.

This awareness led Glover to her most recent position as the executive director of MENTOR Minnesota, which supports 200 mentoring programs throughout the state.

"There is no doubt in my mind that Mark Schultz cannot be replaced," says Jess Anna Glover of her predecessor. (*LSP Photo*)

Moving Forward with LSP

Glover comes on board with LSP at a time when her predecessor, Schultz, had just completed a high effective career with the organization. Schultz became executive director in 2017, taking over the reins from George Boody, who had occupied that position since 1993. Before becoming executive director, Schultz was the organization's Policy and Organizing Program director (he created that program), as well as LSP's associate director. He first joined LSP's staff in 1987, and with the exception of a period when he worked for other grassroots organizations in the late 1980s and early 1990s, had been an organizer and program director for the organization ever since.

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"LSP was the organization thinking about those issues and working on them, all while advocating for something better…I think that is one of the most powerful things about LSP."

— Jess Anna Glover

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During Schultz's tenure as executive director, LSP launched a major soil health program, established the Land Stewardship Action Fund, advanced work on racial and gender justice, grew the organization's membership base, and developed strong relationships with allied groups locally, regionally, and nationally (*for more on Schultz, see the No. 4, 2016,* Land Stewardship Letter).

"There is no doubt in my mind that Mark Schultz cannot be replaced," says Glover. "The passion, commitment and leadership he brought to this work was unparalleled. However, demand for the work and expertise and leadership of LSP continues, and I'm committed to advancing these efforts as this organization and its members look to the future."

Lenz said the organization is in a particularly good position for a leadership transition as a result of a new *Vision for the Future* five-year plan that was released in early September. The plan, which was the result of input from hundreds of LSP members, lays out seven strategic initiatives the organization will advance in the next five years and beyond. These initiatives include: addressing the agricultural economic crisis; increasing land access for small- and medium size farmers; building a functional local and regional food system; advancing solutions to the climate crisis; expanding LSP's membership base; growing the organization's work on economic, racial, and gender justice; and increasing LSP's organizational effectiveness by upgrading its internal systems of operation.

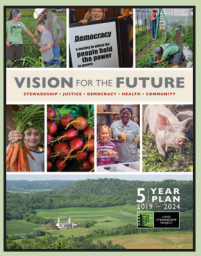
Glover says she is particularly excited about executing the long-range plan and figuring out ways to utilize connections between LSP's various areas of work to bring the plan to fruition. That will require figuring out ways to support the already great work LSP staff and members are doing, and engaging even more with communities of color and youth, among others, she adds.

"Those are ongoing things; there's no endpoint to advocacy — it is what we have to do, and we keep building it, right? Pretty daunting, but really exciting." ❐

Read LSP's Long Range Plan

The Land Stewardship Project's five-year plan, *Visions for the Future*, is available at **www.landstewardshipproject.org/about/longrangeplan**.

Free paper copies are available by calling the Land Stewardship Project's Minneapolis office at 612-722-6377.



LAND STEWARDSHIP PROJECT *LSP News*

LSP Staff Changes

Bobby King has departed the Land Stewardship Project after over two decades of organizing members around issues ranging from fighting factory farms to ensuring public funding for sustainable agriculture research. He has taken a position with Solar United Neighbors, which works on democratizing the energy system and for solar power in Minnesota that is used locally, with the profit staying in the community.

Bobby King

King joined LSP's staff in 1999 as an organizer working on factory farm and local township control. For the past decade, he has led work on state and local organizing and policy. During that time, LSP became a leader in, among other issue areas, advocating for local democracy and funding of sustainable agriculture research at the University of Minnesota and the Minnesota Department of Agriculture. Starting in 2017, King served as the director of LSP's Policy and Organizing Program.

Liana Nichols has left LSP's Bridge to Soil Health team to work as the agricultural lead for Wozupi Tribal Gardens in Prior Lake, Minn. Nichols joined LSP's staff in 2018 and has worked the past two years to reach out to the Soil Health Network, a group of 750 farmers and others who share information on soil health practices in southeastern Minnesota, northeastern Iowa, and southwestern Wisconsin (*see page 18*). Nichols organized numerous field days and workshops, and most recently, helped launch a successful grazing network and a series of pasture walks.

Shona Snater has been named the co-director of LSP's Bridge to Soil Health Program. She is sharing management responsibilities with Doug Nopar, who launched the initiative in southeastern Minnesota in 2016. Since 2017, Snater has been a member of the Bridge to Soil Health team. She has helped launch and grow the highly successful Soil Health Network, organized field days and workshops, coordinated the Soil Builders' Network Newsletter, and increased media coverage of regenerative farming practices.

Shona Snater

Snater can be reached at 507-523-3366 or ssnater@landstewardshipproject.org.

Maggie Wright-Racette has joined LSP's staff as an administrative assistant in the organization's Minneapolis office. Wright-Racette grew up working on her parents' Community Supported Agriculture farm in western Wisconsin and has studied gender studies at the University of Wisconsin-Madison and Metropolitan State University. Most recently, she worked as an administrative assistant and client services coordinator at Fraser, an autism and early childhood mental health provider. Wright-Racette can be contacted at 612-722-6377 or mwrightracette@landstewardshipproject.org.

Maggie Wright-Racette

Laura Dorle has joined LSP's staff as an organizer for its Policy and Organizing Program. She is also working as an organizer for the Land Stewardship Action Fund, LSP's sister organization that focuses on building power through electoral politics.

Dorle has a bachelor's degree in environmental sciences, policy, and management from the University of Minnesota-Twin Cities. She has worked as campaign director for Environment Maine and served as a policy associate for Ward 3 in Minneapolis. Most recently, Dorle worked as an independent political and nonprofit consultant. She is based out of LSP's Minneapolis office and can be contacted at 612-722-6377 or ldorle@landstewardshipproject.org.

Laura Dorle

Liana Nichols

Jess Kochick has joined LSP's staff as a Policy and Organizing Program assistant. She has a bachelor's degree in politics and Spanish from New York University and a master's degree in anthrozoology from Canisius College. Most recently, she taught in the Los Angeles Unified School District and worked for the San Francisco Bay Bird Observatory. While in Los Angeles, Kochick was involved with union organizing and has volunteered for various groups, including the National Park Service and Friends of the Mississippi River.

Jess Kochick

She can be reached at 612-722-6377 or jkochick@landstewardshipproject.org.

Emily Minge recently returned to LSP's staff to help organize the 15th Annual Family Farm Breakfast and Day at the Capitol (*see page 30*) and to help with state policy organizing. Minge organized the 2018 Family Farm Breakfast as well, and recently wrapped up two years at Interfaith Power and Light, where she was the Solar Outreach Manager.

Emily Minge

Matthew Sieg has been serving as an "extern" with LSP's Policy and Organizing Program this winter and spring. Sieg grew up on a farm near Lewisville in southern Minnesota and has a bachelor's degree in political science. He is in his third year at Mitchell Hamline School of Law and has worked for AmeriCorps as well as on various political campaigns. Most recently, he was a student attorney for the Ramsey County Public Defender's Office.

Matthew Sieg

At LSP, Sieg has been focusing on bringing a legal perspective to organizing, policy development, advocacy, and research as it relates to the organization's farm crisis and legislative work (*see page 8*). ❒

It's All About the Small Group Discussions

It's funny how a pandemic can suddenly make one feel nostalgic for a time when you could get together with neighbors, colleagues, and maybe someone you just met to discuss anything from farm crisis issues to soil building techniques to healthcare challenges. A mainstay of every Land Stewardship Project meeting has always been small group discussions where people get a chance to brainstorm ideas as well as discuss the challenges they face. Before COVID-19 put a hold on public events, this winter LSP members were able to gather at numerous venues. Here are a few photos from those meetings. Keep in mind that once we get through this crisis, there will be more opportunities than ever to get face-to-face and hash out what we want our communities to look like, and how to get there together. As soon as LSP schedules new workshops, meetings, and field days, we will post them at www.landstewardshipproject.org and list them in our *LIVE-WIRE* e-letter. (*LSP Photos*)

"Farm Crisis Summit," Mankato, Minn., Feb. 29

"Farm Crisis Summit," Mankato, Minn., Feb. 29

"Dairy Crisis Meeting," Greenwald, Minn., Jan. 30

"Cover Crops, No-Till & Grazing: Evaluating the Economics & First Steps to Improving Soil," Elgin, Minn. Jan. 29

"Farm Crisis Forum: Resiliency, Resources & Taking Action," Preston, Minn., Feb. 13

"From Entomology to Economics: Building Soil Health with Jonathan Lundgren of Blue Dasher Farm," March 5, Caledonia, Minn.

Minnesota Supreme Court Upholds Winona County Frac Sand Mining Ban

Decision Marks 3rd Time Ban is Supported in the Courts

The Minnesota Supreme Court has upheld Winona County's landmark ordinance banning frac sand mining. The court ruled March 11 that Winona County, which is in southeastern Minnesota, acted fully within its rights when it used its zoning authority in 2016 to prohibit industrial mining operations. This latest ruling upholds a District Court ruling issued in 2017 and an Appellate Court ruling issued in 2018.

"This ruling further affirms that our government belongs to the people and exists to take bold action to protect the common good, for both people and the land," says Johanna Rupprecht, an organizer for the Land Stewardship Project, which worked with Winona County residents on a 17-month grassroots campaign to put in place the frac sand mining ban. "This ruling affirms the power that organized people have, acting through our local governments, to protect our communities from harmful, extractive industries that would place corporate profits above communities' well-being. Winona County residents fulfilled their responsibility to act together and make sure elected officials protected the common good, and the courts have repeatedly supported that right."

Frac sand corporation Minnesota Sands, LLC, which refused to disclose the identities of its owners and backers, had challenged the ban in court as an attempt to circumvent the will of the people in Winona County, according to Rupprecht. The Supreme Court has now upheld that the Winona County ban is fully within the Constitutional rights of a local government, ruling against Minnesota Sands' claims that the ordinance violated the Commerce Clause and created a "taking" of property from the company.

"The destructive frac sand industry has no place in the kind of economy we need for our rural communities to thrive," says Barb Nelson, who lives outside of Lewiston in Winona County and is an LSP member who helped lead the campaign to pass the ban. "People took action to pass this ban because we understand that the land has inherent value, and that the health of the land and of people are interconnected. By destroying the land, we also harm ourselves."

LSP submitted an amicus curiae ("friend of the court") brief to make sure the interests of its Winona County members were fully represented in the court process.

"This ruling is an inspiration to people in all communities fighting back against corporate power and organizing to prevent harmful, extractive proposals, whether they are frac sand operations, factory farms, immigrant detention centers, or others," says Rupprecht. "People have the power, when we work together, to protect our communities and to achieve a vision for the future that upholds our values."

The Supreme Court decision is available at https://bit.ly/2y5ZT0R. ❐

LSP Members Push for Bold Policy Action on the Farm Crisis

During Forum, Ag Commissioner, Attorney General Field Questions From Farmers & Rural Residents

Public officials need to take immediate action to address the farm crisis that is decimating Minnesota's rural families and communities. That was the message nearly 150 Land Stewardship Project members conveyed Feb. 29 to state Commissioner of Agriculture Thom Petersen and Attorney General Keith Ellison at a special farm crisis forum in Mankato, Minn.

"We need to turn this crisis around quickly," said Canton, Minn., dairy farmer and LSP member Bonnie Haugen. "We are risking losing the backbone of rural America — our family farms."

During the past several months, hundreds of LSP members have been meeting across the state to discuss how to address the economic crisis that is plaguing the farm community. LSP farmer-members and other rural residents have developed a list of demands for public policy changes to address the crisis as it relates to market access, credit availability, consolidation, mega-mergers, healthcare, support for struggling farmers, and the structure of cooperatives.

The demands for action include:

1) State officials must strengthen the Minnesota Farm Advocates program so farmers know their rights. Minnesota needs to double the number of Farm Advocates to meet Minnesota farmers' needs. In addition, the Farmers' Legal Action Group (FLAG) needs funding to support the training of Farm Advocates and to provide legal resources to farmers in financial trouble.

2) The Minnesota Attorney General's office must use its authority to investigate farmer-owned cooperatives that have turned their backs on the farmers who created them.

3) Farmers need accessible opportunities to restructure loans.

4) Minnesota must put in place a moratorium on massive dairies over 1,000 animal units.

5) Bold steps must be taken by the Governor and the Legislature to ensure affordable, quality healthcare is available for farmers and other rural residents.

During the 2020 session of the Minnesota Legislature, bills were pushed by LSP that related to supporting the Farm Advocates program and FLAG, providing farmers accessible opportunities to restructure loans, implementing a moratorium on issuing permits for mega-dairies, and providing affordable healthcare for farmers and rural communities. (As this *Land Stewardship Letter* went to print, the session was scheduled to adjourn May 18.)

Those proposals, along with a petition signed by over 2,000 farmers and others, were presented to Commissioner Petersen and Attorney General Ellison at the Feb. 29 forum. The farmers gathered there at a time when low commodity prices, lack of access to markets and extreme weather have sent all sectors of the farm economy reeling. The 2019 median farm income for U.S. farm households was negative $1,383, according to the USDA's Economic Research Service. In recent years, roughly half of farm households have had negative farm income each year, and the majority of the total income of farm families comes from off-farm sources. Dairying has been especially hard hit as mega-operations contribute to an oversupply of milk; Minnesota alone lost 250 dairy farms in 2019, according to the USDA.

Meanwhile, consolidation in the commodity processing sector has reached a point where economists no longer consider it a

Crisis Forum, *see page 9…*

…Crisis Forum, *from page 8*

competitive situation. Minnesota agribusiness giant Cargill recently reported a profit of $1.9 billion, a 61% increase from a year ago. Dairy giant Land O'Lakes enjoyed a $207 million profit in 2019, despite a crisis that is sending milk farmers out of business at a record pace.

The farm economy was already suffering when the COVID-19 pandemic hit the U.S. in March; it remains to be seen what the ultimate impacts of the outbreak will be in rural areas and society at large.

Sounding Out

Petersen and Ellison fielded numerous questions from forum participants on everything from antitrust enforcement and making co-ops accountable to their farmer-members to ways of providing support to struggling farmers and bolstering regenerative agriculture practices.

Petersen said he agrees that Minnesota agriculture is facing a significant crisis and legislators need to hear from farmers and other rural residents about the importance of the Farm Advocates Program and FLAG. He also said he would support some sort of moratorium on massive dairy farms "in principle," although he wasn't sure if 1,000 animal units was the right number to settle on.

Ellison said consolidation in agriculture has reached a point where there is little fairness on either end of the market: input suppliers are charging whatever they want, and processors are paying noncompetitive prices. Caught in the middle are farmers.

"This isn't because [farmers] are making bad business decisions, it's because of decisions made by big players in the industry, who are supposed to be regulated," he said.

Ellison said his office is committed to enforcement of laws related to unfair market practices, but in order to move forward on investigations, they need to hear from the people who are being impacted directly by anticompetitive behavior.

"You're the expert," he said. "We have to get on the phone, we have to stay in touch. It all starts with you." ❒

To contact the Minnesota Attorney General's office about a concern related to anticompetitive behavior in agriculture, see www.ag.state.mn.us or call 1-800-657-3787.

In Mankato, Land Stewardship Project members and organizers talked to Minnesota Commissioner of Agriculture Thom Petersen (*left*), and Attorney General Keith Ellison (*center*) about public policy steps that need to be taken to support agriculture and rural communities during the farm crisis. (*LSP Photo*)

Voices from the Forum…

"Our talented young farmers are being driven off by big corporations, land investors, bankers, and greedy neighbors who don't believe in sharing our resources with each other. An 8,000-cow herd starting up will squeeze out probably 80, 100-cow farms. This hurts all of us."

— Sleepy Eye, Minn., dairy farmer Madonna Sellner

This is…a silent crisis. We don't have tractors going out to Washington, because we're too busy working our second and third and fourth jobs. We don't have foreclosure auctions we attend every week because it rarely gets to that point. We took other jobs. We stretch out the loan durations, or refinance. And slowly and silently exit the market."

— Marshall Minn., farmer & teacher Kathleen Deutz

"I am two miles from the nearest Riverview dairy factory. I have 50,000 cows within 10 miles of my farm, and not nearly enough people… while we're complaining about what's being done to us, we also need, as much as we can, to be thinking about what we can do that's better than what we see around us right now."

— Kerkhoven, Minn., farmer Jim VanDerPol

Lights in the Darkness

It Takes Community to Save a Community in Crisis

A neighbor to Cynthie Christensen recalls how when he used to be out doing spring field work in the evening, he would see the lights of half-a-dozen of his neighbors doing the same thing. It was comforting for him—doing a key job on his own farm and yet knowing others were also out there. He felt part of some larger community effort in southeastern Minnesota.

"And now he says, 'There's no other lights, you're the only one out there,' " said Christensen, a psychiatric nurse who lives on a farm near Rushford and has her own therapy practice in Rochester. "And it's a lonely place to be."

As the farm economy enters a sixth year of basement-level commodity prices and lack of access to consistent markets, there has been a lot of talk about the financial impact it's having on farmers and the rural communities that rely on them. No wonder: U.S. farm bankruptcy rates jumped 20% in 2019, an eight-year high, according to federal court data. The 2019 median farm income for U.S. farm households was negative $1,383, according to the USDA's Economic Research Service. In recent years, roughly half of farm households have had negative farm income each year, and the majority of the total income of farm families comes from off-farm sources. Dairying has been especially hard hit as mega-operations contribute to an oversupply of milk; Minnesota alone lost 250 dairy farms in 2019, according to the USDA.

Cynthie Christensen: "If you know someone who's really struggling, I would really encourage you to reach out to them."

But something often overlooked in all the talk about the crisis is the emotional bankruptcy plaguing Farm Country. Extreme weather has imposed a huge amount of stress on especially crop producers, and now, with the COVID-19 pandemic, farmers are swimming in the same lake of anxiety as the rest of society.

Christensen said her neighbor's story illustrates the emotional stress farmers are carrying as they watch their neighbors go out of business one-by-one, all the while knowing they could be next. This impacts the community in ways big and small.

Christensen was one of the presenters at a pair of recent farm crisis workshops in southeastern Minnesota sponsored by the Land Stewardship Project and the Izaak Walton League. She and others made the case for why now, more than ever, communities need to work together to not only address the economic devastation of the agricultural crisis, but the mental health effects.

What You Can Control

Dan Miller, a southeastern Minnesota crop and livestock farmer who also serves as a Farm Business Management instructor at Riverland Community College, didn't sugarcoat the situation, and made it clear this is an industry-wide problem, not just an example of a few incompetent farm managers not making it. Six years ago, the average farm had about 40 cents of debt per dollar of asset; now that figure is 50 cents per dollar, he said. Net farm income in 2019 was about half of what it was in 2013 and the return on investment for agricultural operations hasn't exceeded 3% the past six or seven years.

"Well, that doesn't work real good if you're paying five, six, seven percent interest on borrowed money," said Miller.

Farmers can get a better handle on their financial situation by enrolling in programs like Farm Business Management. It has a $1,900 annual tuition fee per family; beginning farmers can get that cost covered for their first three years via government grants.

But Miller said it's important to be aware that some things—weather, worldwide economic trends, political shifts—are out of our control, and it may be simply an issue of timing and when one gets started in farming.

"In the business of farming, maybe 40% of the variables we can control, which is good," he said. "But 60% of farming's variables we can't control."

Dan Miller: "In the business of farming, maybe 40% of the variables we can control, which is good. But 60% of farming's variables we can't control."

You Have *Got* to Respond

When the emotional stress brought on by economic, legal, or other problems in farming become overwhelming, it's human nature to want to withdraw and not respond to telephone calls, letters, or other communications that are coming from creditors or the government.

"What I really, really want to emphasize is, as hard as it is, you have *got* to respond," said Stephen Carpenter, an attorney with Farmers' Legal Action Group, a nonprofit that works with farmers on legal issues. "The worst thing possible is to not open the mail."

By not responding to bad news, strapped farmers are at risk of losing their rights when it comes to addressing financial and legal problems. For example, The Minnesota Farmer-Lender Mediation Act calls for a specific set of steps to get an indebted farmer and their lender to sit down with a mediator (and often a Minnesota Department of Agriculture Farm Advocate) to work to resolve a financial situation via renegotiation, restructuring, or other steps short of foreclosure. In recent years, this hands-on approach has been successful 85% of the time. As a result of low commodity prices paid to farmers and lack of access to consistent markets, the number of farmers eligible for mediation has risen to near the levels last seen during the catastrophic farm crisis of the 1980s. More than 3,800 Minnesota farmers were eligible to participate in this process during 2019, with most selecting mediation.

Stephen Carpenter: "The worst thing possible is to not open the mail."

"When you get something in the mail that says you're eligible for farmer-lender mediation, I can't emphasize enough how important it is to understand the process and take part in it," said Carpenter.

Lights, *see page 11…*

…Lights, *from page 10*

Impulse Control

Christensen said farmers' tendency to pull inward and try to gut through tough times makes it even more critical that other members of the community take note when someone is showing signs of depression, such as not showing up to church or dramatic mood swings.

"I'm a pretty good therapist and psychiatric nurse, but I can't read people's minds, and people are pretty good at faking, especially farmers," she said. "So I like to look at behavior, because what you're thinking is reflected in what you're doing."

By paying attention to their neighbors' and family members' behavior, and asking how they are doing emotionally, members of the community can head-off tragic situations. She talked about a farmer she has counseled who had gotten some "devastating" news about his loans, and had made the decision to take his own life. He had a gun and he was sitting in his pickup.

"He thought, 'This is the only option I have,' " said Christensen. Fortunately, he called a friend, who then contacted the sheriff, and the farmer was prevented from pulling the trigger.

"Suicide is an impulsive act; people think they don't have options, but they do have options if they can get help," she said. "If you know someone who's struggling, I would encourage you to reach out to them."

Christensen added that just as farmers reach out to a veterinarian, an agronomist, or other professionals to help with other aspects of the operation, they should seek a professional to take care of the most important resource on the farm: the farmer.

The Glue that Binds

Southeastern Minnesota dairy farmer Bonnie Haugen said when she looks around her community, she sees one way people are dealing with stress is by trying innovative approaches to making a living. On her own farm, her family is utilizing managed rotational grazing to cut feed costs and reduce labor. Farmers in her community are also experimenting with raising different crops or adding a campground business.

"And selling the dairy, that is an option too. It may not be their first choice, but it is an option," said Haugen.

One of the most positive innovations Haugen has seen in recent years is the emphasis on building soil health using cover cropping, rotational grazing, and no-till. Such methods not only increase a farm's resilience when it comes to extreme weather, but provide farmers a chance to share information, which is key to building community.

Bonnie Haugen: I sit here and think we need our glomalin so we can not just learn how to work together, but actually keep working together."

"When I attended a workshop, I learned about glomalin, which is the glue that holds soil together," she said. "When we talk about networking and needing to work together, I sit here and think we need our glomalin so we can not just learn how to work together, but keep working together. For farmers that's tough, we're independent. But we've got to learn to give and take; we've got to work on our glomalin."

Fighting Shame

Working together in a community is one way to fend off the shame that can come with financial, legal, and emotional difficulties. And a prime way to do that is by banding together to fight the policies that are the root causes of the farm crisis, said Paul Sobocinski, a southwestern Minnesota livestock farmer and LSP organizer. Farmers did that back in the 1980s, when they pushed the Minnesota Legislature to put in place requirements around mediation and development of the Farm Advocates Program, he said. That wouldn't have happened if people hadn't come to small community meetings, which evolved into wider actions like a march on the state Capitol.

Paul Sobocinski: "This does not get better unless we come together as a community and stand up."

And now, farmers and their allies are working together again to, for example, push for more resources for the Farm Advocates Program and impose a moratorium on mega-dairy expansion, said Sobocinski. In April, LSP worked successfully to get the Minnesota Legislature to place an extension on farm financial mediation periods in the state as part of a COVID-19 relief package.

"We have to make people part of the fight back to get them out of shame," said Sobocinski. "This does not get better unless we come together as a community and stand up." ❐

Give it a Listen

On **episode 235** of the Land Stewardship Project's *Ear to the Ground* podcast, farm advocates provide tips on dealing with the agricultural crisis, and how we can fight for a brighter future: www.landstewardshipproject.org/posts/podcast/1265.

Farm Crisis Resources

Minnesota Farm Advocates

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

National Suicide Prevention Lifeline

The National Suicide Prevention Lifeline is a national network of local crisis centers that provides free and confidential emotional support to people in suicidal crisis or emotional distress 24-hours-a-day, 7-days-a-week. The Lifeline is committed to improving crisis services and advancing suicide prevention by empowering individuals, advancing professional best practices, and building awareness. Call **1-800-273-8255**.

LSP Farm Crisis Resources

Feeling stressed or know someone who is? Check out LSP's list of hotlines, websites, and other resources at **www.landstewardshipproject.org/farmcrisis**.

LSP & the Farm Crisis

For more information on LSP's farm crisis work, contact LSP organizers Tom Nuessmeier at tomn@landstewardshipproject.org or 507-995-3541; Paul Sobocinski at sobopaul@landstewardshipproject.org or 507-342-2323; Matthew Sheets at msheets@landstewardshipproject.org or 320-766-4395.

Farm Crisis

Making a Wager on Smaller Dairy Farms

Fair Wage Milk Could Help Producers & the Communities They Support

By Alex Romaro

Mike and Joan Gilles are first-generation dairy farmers with a well-known, local reputation for prioritizing the land and their community over personal profit.

For example, about five years ago, the Gilleses, who farm near Ridgeway in southeastern Minnesota's Winona County, were approached by a frac sand mining company that wanted to "rent" 20 acres of their farmland to excavate silica sand, which would then be used for getting access to rockbound fossil fuel deposits in oil and gas fields. Such an operation would have required building a substantial open-pit quarry on their property and stripping away the soil. Without them having to do any work, the Gilleses easily would have profited to the tune of hundreds of thousands of dollars per year, based on what frac sand was going for at the time. But knowing what that would have done to their land, their farm, and their community, they said, "No, this land belongs in grass." Instead, they continued focusing more on building connections and opportunities in their local community like volunteering at Ridgeway Community School, establishing ski and hiking trails on their land for school clubs, and establishing a "hip camp" enterprise in their woodlands for Driftless Area visitors.

Today, Mike and Joan manage a pasture-based dairy where they milk 110 crossbred cows. Their dairy has been in operation for 38 years, and they hope to keep it going for generations to come, which has prompted them to put forth a new idea for keeping dairy farmers in their community and beyond in business: "Fair Wage Milk."

At the heart of their Fair Wage Milk idea is figuring out a plan to influence the base price individual producers receive for the volume of milk they produce. Based on the Gilles' math, fair milk pricing would mean that the first 1.5 million pounds of production qualifies a farm for a minimum pay price of $30 per hundredweight. That's roughly equivalent to the production of a 50-head cowherd. Every licensed dairy in the U.S. would be eligible, and larger dairies could still milk as many cows as they want — they just couldn't qualify for a Fair Wage Milk premium for anything they produce beyond 1.5 million pounds. The idea is that the gross revenue produced by the premium would keep a small dairy in business, and, in turn, this income would keep enough dairies viable to support a local community. Studies show that having many small and medium-size dairy farms in a community generates numerous benefits for Main Street businesses; having one or two mega-operations simply isn't as good for the local economy or institutions like schools and churches.

Dairy farmer Mike Gilles: "The sooner we can come to a common plan, the better off we'll be." (*Photo by LeeAnne Bulman,* Agri-View)

A payment of $30 per hundredweight is a starting point, Mike says. In 1985, the milk price was $12.76 per hundredweight; in today's dollars that's $30.44. The dairy farmer's buying power has significantly decreased over time, and a higher milk price is needed to compensate for inflation. The goal is to provide enough gross revenue to enable smaller dairies to cover fixed costs, with a reasonable margin for things like family living expenses. This plan would also help beginning farmers get started, retire debt faster, and increase their odds of long-term success. The pay price and milk production levels would be monitored and adjusted to achieve the goal of retaining smaller dairies.

Mike and Joan have been developing the idea for Fair Wage Milk for some time. The staggering loss of dairy farms across the region, in particular dairies managed by young families, has troubled them and left them contemplating who is going to take over the operations that remain. On top of that, they've watched their communities lose business-after-business as farms go under. Main Streets are suffering, along with local schools, hospitals, and churches. They believe that a major policy change is needed to turn these trends around.

The Gilleses point to how the Fair Trade Certified program that exists for coffee and chocolate has helped draw attention and resources to small-scale agriculture and rural communities around the globe. In their view, farmers not getting a fair price for what they produce, or a fair share of the food dollar, is a common experience for both U.S. farmers and farmers abroad. Fair Trade has helped change that in other countries, and they believe Fair Wage Milk can do the same for dairy farmers in the U.S. In addition, many consumers like to buy products that support smaller farms. The Fair Wage Milk label would give consumers a voice with their buying power.

Fair Wage Milk encompasses more than a fair price; it also upholds the Gilles' values of stewardship and sustainability. They understand that while wages (profit) are essential for small and medium-size independent farms to survive, they will only prosper when the animals, land, and people are treated in a respectful and sustainable way. It's all interconnected. Sufficient farm profit helps provide the resources needed to properly care for the land, water, animals, and, of course, people.

Mike compares this plan to the minimum wage. Minimum wages are designed to help working people bring in enough money to pay their bills and maintain a decent quality of life. Like the minimum wage, setting a floor price on the base production would not be government-funded. Rather, the consumer would support it by paying the blended price of all milk.

"One of the other strengths of this idea is to make it work at the processor and retailer level — there has to be what I see a tax credit to the people who participate," he says.

Processors, or anyone buying milk directly from producers, would get federal income tax credits equivalent to the pay differential and indexed to the percent of Fair Wage Milk they purchase. So, for example, if 15% of a processor's supply comes from smaller farmers at the higher pay rate, then they would be getting at least a 15% tax credit. Milk retailers would also receive a tax credit for Fair Wage Milk products sold. Co-ops and processors would have minimum and maximum participation levels to

Fair Wage Milk, *see page 13…*

…Fair Wage Milk, *from page 12*

ensure level playing fields across regions.

At recent Land Stewardship Project dairy crisis meetings, other ideas for fair compensation for small and medium-size milk producers have been discussed. Groups like National Farmers have been pushing such strategies as a way to support smaller operations and help them thrive. For example, National Farmers proposes establishing a Federal Milk Marketing Order with a $4 per hundredweight price adjuster for up to one million pounds of monthly production for every dairy farm in the country (*see www.nationalfarmers.com*).

The key piece connecting any of these ideas is that a one-size-fits-all policy will not solve this problem. Whether it's called "Fair Wage Milk" or something else, economist Richard Levins (*see story below*) sees a "reverse volume premium" strategy as a way to keep family dairying from collapsing.

"I hope Fair Wage Milk reaches the desk of other groups. The Dairy Together Coalition is an outstanding group of organizations that are trying to put something together," says Mike. "The sooner we can come to a common plan, the better off we'll be."

Mike and Joan are making connections with specialists and other farm organizations developing ideas for stabilizing small and medium-size dairies. Since the Gilles' idea was publicized in an *Agri-View* article, they've had about 90% positive feedback.

"Frustration with the status quo is common across dairy regions — rural communities have been losing ground for a long time," says Mike. "Whether they're dairy farmers or in a supporting business, their future is uncertain if we continue on this same path. People are ready for change."

Mike and Joan Gilles are happy to talk about Fair Wage Milk with anyone interested. An e-mail is the best way to reach them: fairwagemilk@aol.com. ❒

Alex Romano works with dairy graziers and other farmers through the Land Stewardship Project's Bridge to Soil Health program.

Cows Don't Go to Hardware Stores…

…and a few other dairy farming economic truisms

Agricultural economist Richard Levins makes one thing clear: there is *not* room for all sizes of dairy farms. The math simply doesn't work out. If one or two mega-dairies add 20,000 cows to the market, people are not going to consume all that extra milk.

"If I'm going to bring 20,000 cows into a market, 20,000 other cows gotta go, and that's in the form of 200, 100-cow dairies," says Levins. "We're playing musical chairs on a fixed market."

Indeed, in Wisconsin approximately 800 dairy farms — mostly small, family-run operations — went out of business in 2019; Minnesota lost 250 dairies that same year.

Levins, who is a professor emeritus in the department of applied economics at the University of Minnesota as well as a dairy policy adviser to National Farmers, spoke at a pair of LSP farm crisis forums this winter. Following are a few insights Levins shared:

No Cows on Main Street

One argument for allowing dairies to expand without limits is that more cows in a community automatically equals more local economic activity. But research done by Levins and others has shown that, in fact, it's the number of *farmers* that create a vibrant community (*see the Myth Buster in the No. 3, 2019,* Land Stewardship Letter). Levins had a graduate student who did an analysis of what happened to the Minnesota community of Green Isle when the number of farms serving a local creamery plummeted. Retail sales dropped by 81% in a 10-year period and Main Street businesses closed permanently.

"When we were doing a survey in Green Isle for the study, the hardware guy says, 'You know, I haven't had many cows come in here lately,' " said Levins.

The Home Depot Effect

Levins said that another prevalent myth is that massive dairy farms that have 10,000 cows or more are just the result of natural expansion — a smaller dairy wanting to get a little bit larger. But there's a big difference between an 80-cow dairy expanding to 200 cows and a factory operation adding thousands more animals.

"We're not running out of milk, we're running out of farmers, and that's a much more serious issue," says Levins. (*LSP Photo*)

That's why Levins prefers to call mega-operations "Big Box Dairies," rather than farms. It's to the benefit of agribusiness to be associated with the word "farm," given the positive connotation, but it's not accurate.

"It's like saying the local small-town hardware store needs to become the next Home Depot," said Levins. "That's not possible. They both might sell a hammer, but they're not the same thing."

Bad Managers Created the Dairy Crisis

Levins started his career in the 1970s crunching numbers for farmers looking to improve their financial acumen. He said for years economists made the argument that as long as a farmer was a "top 10%" manager efficiency-wise, they would be successful. The problem is, as small and medium-size farmers chase efficiency through expansion, the goal posts keep getting moved — what is considered an "efficient size" just increases with no end in sight. Now, 5% of the largest farmers produce over half the milk.

Levins said the efficiency argument is "a way to make people who are struggling feel horrible. If you're making a dairy work even a little bit, you're an exceptional manager. But I know what a struggle that hardware store has when Home Depot comes in."

Lions & Lambs

Because of the myth that what's good for the Big Box Dairy is good for its smaller, family-sized counterpart, public agricultural policy is often of the one-size-fits-all variety.

"Too much policy is 'Well, we have a lion and a lamb here, let's give them equal amounts of feed,' " said Levins. "Maybe the lion and the lamb can stay in the same cage, but mostly you're only going to get one coming out."

That's why Levins likes proposals that are based on a kind of "reverse volume premium" (*see story above*) that provides an incentive to remain smaller.

"We need to figure out what we can do to treat the lion and the lamb differently." ❒

Give it a Listen

On **episode 238** of the Land Stewardship Project's *Ear to the Ground* podcast, Richard Levins talks about the negative impacts the "get big or get out" attitude has had on farming and rural communities: www.landstewardshipproject.org/posts/podcast/1268.

Report: Ag Can Help Climate, Clean Water

Policy Changes & Market Support Could Help MN Become Carbon Farming Leader

Farming systems that build healthy soil by keeping the land covered in vegetation year-round have the potential to lower the net greenhouse gas emissions produced by Minnesota's crops and livestock by as much as 30% while cutting nitrogen pollution by up to 45%, according to a white paper released earlier this year by the Land Stewardship Project. "Farming to Capture Carbon & Address Climate Change Through Building Soil Health," which is based on an analysis of the scientific literature related to soil health and climate change, as well as interviews with Minnesota farmers, makes several state and federal policy recommendations (*see sidebar below*), including increased funding for initiatives that promote and support soil-building farming systems.

"Agriculture is a major contributor to greenhouse gas emissions, but it is also key to helping us mitigate climate change while making us resilient in the face of its impacts, both here in Minnesota and across the country," says LSP's George Boody, who authored the paper as a part of LSP's Bridge to Soil Health initiative. Boody is the science and special projects leader for LSP.

Humans must act to reduce greenhouse gas emissions by at least 25% by 2030 to limit global average temperature increases to less than 2 degrees centigrade. Agriculture is a major contributor to emissions that impact climate change — accounting for 9% and 24% of U.S. and Minnesota greenhouse gas emissions, respectively. The good news is that during the past decade, scientific advances as well as the on-the-ground experiences of crop and livestock farmers have shown that soil organic matter can be increased in a matter of a few years. Because 58% of organic matter is carbon, the more organic matter in the soil, the greater its potential to store greenhouse gases.

Building carbon-rich soil results from the presence of a diversity of plants (and their roots) on the land via "continuous living cover" and reduced tillage. Examples of continuous living cover systems include planting cover crops as part of the corn-soybean system and longer rotations such as those used in organic farming.

The paper documents how managed rotational grazing of cattle and other ruminants on perennial grass pastures, as well as on annual cover crops, can build the soil's ability to store carbon. Subdividing pastures with fencing, moving herds frequently, and allowing time for vegetation to regrow before being grazed again is accomplished through managed rotational grazing systems.

Some Midwestern farmers have been able to more than double their organic matter levels in as little as a decade by adopting continuous living cover, reduced tillage, and managed rotational grazing.

As much as 9% of U.S. greenhouse gas emissions could be offset by shifting 25% of ruminants to well-managed grazing and 25% of cropland to a combination of perennial cover, diverse rotations, and cover crops. Based on similar adoption rates, the LSP white paper shows a scenario that would potentially lower Minnesota crop and livestock net greenhouse gas emissions by 30%, compared to 2016 agricultural emissions totals.

The analysis also concludes that building soil health could help Minnesota deal with another major environmental problem: water pollution. Integrating continuous living cover and managed rotational grazing into farming systems could help reduce agricultural nitrogen pollution by up to 45% in surface waters, while capturing rainfall and storing more water, according to the paper.

However, the paper finds that government policy and markets too often promote a type of agriculture focused on annual monocultures and the confinement of livestock. Over the decades, farmers have seen, and science has documented, a reduction in soil health and the loss of soil carbon. Through increased continuous living cover research such as what is being done by the University of Minnesota's Forever Green Initiative, as well as significant modifications to state and federal programs and greater market incentives for livestock products produced on grass, Minnesota could become a leader in soil-smart farming, concludes the paper.

"We have a unique opportunity and responsibility to invest in keeping small and medium-size farmers on the land in a way that builds soil health and improves water quality," says Boody. ❒

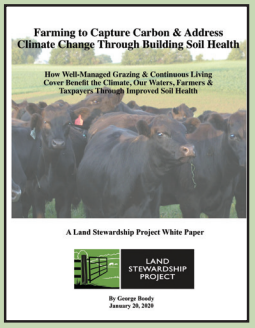
Read the Paper

To read the Land Stewardship Project's "Farming to Capture Carbon & Address Climate Change Through Building Soil Health" white paper, see **www.landstewardshipproject.org/carbonfarming**.

Paper copies are available by contacting George Boody at 612-722-6377 or gboody@landstewardshipproject.org.

Give it a Listen

On **episode 191** of LSP's *Ear to the Ground* podcast, George Boody talks about farming's potential to capture carbon: **www.landstewardshipproject.org/posts/podcast/978**.



Policy Recommendations from the White Paper

- ➔ Fund research on continuous living cover systems and managed rotational grazing.
- ➔ Make continuous living cover and managed rotational grazing critical components of Minnesota's climate change efforts, the Green New Deal, and other climate change policy proposals.
- ➔ Enhance Farm Bill and Minnesota state programs that emphasize building soil health through managed rotational grazing and other continuous living cover systems, and develop comprehensive regulations for mega-factory farms.
- ➔ Enhance markets for products produced by small and medium-size farm operations that use managed rotational grazing.
- ➔ Design "payment for ecosystem services" programs at state and federal levels with true cost accounting to help farmers shift marginal fields in summer annual crops to perennials and maintain and expand managed rotational grazing.
- ➔ Modify and reform Farm Bill programs that now strongly incentivize getting bigger at a significant cost to soil health, small and medium-size farmers and ranchers, and rural community viability.

Raising Produce in a New Ecosystem

Growers Gather to Share Challenges, Ideas in the Midst of a Changing Climate

Since Patty Wright and Mike Racette launched Spring Hill Community Farm in 1992, the average annual amount of rain falling in their western Wisconsin community has jumped five inches.

"That's stunning, that's changing the ecosystem," said Racette. "We're trying to figure out how to raise vegetables under those conditions."

Judging by the reaction of the more than two-dozen vegetable farmers Racette was telling this to recently, a whole lot of people are trying to figure out how to raise produce under extreme weather conditions. That was one of the reasons vegetable producers Anna Racer and Pete Skold organized a "Climate Change Forum" on a recent winter day. Vegetable producers from across Minnesota and western Wisconsin gathered in a church in south Minneapolis to compare notes about how challenging climate change has made it to raise a profitable crop, and to share ideas for building resiliency. They represented a range in sizes, marketing systems, and experience.

Racer and Skold's Waxwing Farm is located south of the Twin Cities and raises vegetables for Community Supported Agriculture members and wholesale accounts. They've had once-reliable vegetable plots become almost unfarmable, grappled with disease problems that thrive under wet conditions, and seen their windows of opportunity for planting, weeding, harvesting, and even cover crop seeding become increasingly narrow. In May 2019, the farmers shot a short video showing water racing through one of their high tunnels during a storm.

Vegetable growers from Minnesota and Wisconsin gathered in January to discuss how climate change is impacting their operations. "We're all dealing with catastrophe," said farmer Anna Racer. (*LSP Photo*)

Racer and Skold said that the gathering was needed as a kind of "validation" that they weren't the only ones dealing with these issues.

"The meeting made it clear to us we're not alone in this, we're not bad growers," Racer said afterwards. "We're all dealing with catastrophe."

Megan Greeson, who raises vegetables near Deer Park in western Wisconsin, agreed. "We can have the best soil in the world, but how do you deal with extreme weather?" she asked. "Increasingly, our failures are related to climate change."

And this isn't just a Midwestern problem. Rodrigo Cala, who raises vegetables near Turtle Lake, Wis., has trained farmers in other regions of the U.S., as well as Mexico. "They are having the same problems" with weather, he said.

As far as vegetable producers are concerned, the great irony of climate change is although it's resulted in milder winters, it has, as a result of record-setting rain events, in effect still shortened the growing season by limiting the number of days field work can be done. Skold and Racer estimate that in past years on average the first day they were able to get into their vegetable plots to till was around April 20; in 2019 they didn't get in until May 8.

"I wish we had kept track last season how many true field tractor days we had, because it really wasn't that many," said Racer. "So every time we had a dry window of maybe three days, we were forced to do several days of field work in one day, which was never enough time, obviously."

And 2019 wasn't an anomaly — at the January meeting vegetable producers talked about how during the past five years or so, extremely wet weather — "100-year" rain events, for example — has limited field work throughout the growing season going well into the fall. All of that rain is not only limiting efficiency and producing erosion. Several farmers talked about the phenomenon of literally losing land to climate change as soils become consistently saturated. In some cases, artificial drainage from area corn and soybean fields is pushing excess moisture onto the vegetable operations. For operations like Waxwing, which has a total of 40 acres (they raise vegetables on six of those acres), they can switch plots to other areas. But for farms with a much more limited land base, the situation poses a significant threat to production capacity.

"I have a wetland that's growing and I think I've lost a quarter-of-an acre," said Melissa Driscoll, who farms near Kenyon in southeastern Minnesota. "I haven't been able to plant there in three years."

All of that excess moisture is resulting in pest and disease problems that these farms have never had to deal with before, or at least didn't have to on this scale. Saturated conditions are causing "black rot" in lettuce, as well as a mold problem in broccoli and cauliflower called alternaria, say producers.

Extreme moisture can also result in pest problems indirectly. Insect pests like potato beetles don't like heavy rains, but they benefit from the fact that organic sprays designed to kill them must be applied during dry weather. Plus, when bad weather limits the amount of productive time available in vegetable plots, that means less time available to do everything from deal with insect pests to weed.

Responding to Extremes

Participants in the January forum shared numerous ways they are adjusting to the new climate reality. Some are using more water-resistant covers to keep the soil dry at certain times. Others have changed the types of vegetables they grow. Greeson started growing "mini-head" lettuce plants that are the size of a softball to avoid rot problems. Racer and Skold are growing sprouting broccoli, which lacks the big crowns of regular broccoli, but has the ability to stay ahead of disease pressure. They've also become more reliant on starting their plots with transplants, given the tendency of direct-seedings to wash away when it rains heavy, and have been raising pastured pork on their more marginal acres.

Racer and Skold are entering their 10th season (eight years at the current location) of vegetable production. In a sense, said Skold, they benefit from the fact that during almost their entire farming career, they've only known extreme weather conditions.

"Our first year we had a six-inch rain that

New Ecosystem, *see page 16…*

…New Ecosystem, *from page 15*

was like a 50-year or 100-year storm. And then the next year, we had another one," he said. "So as relative newbies, we've only known that kind of volatility and as we've learned to grow and meet the demand of our markets and our customers, we've just built that into our systems."

Some vegetable produces have used funds from the USDA's Natural Resources Conservation Service to plant native perennials on saturated land, providing much needed pollinator habitat. Ben Doherty, who farms near Northfield, Minn., used Environmental Quality Incentives Program money to put in a basin to manage a neighbor's runoff. Soon after it was built, a six-inch rainfall almost filled it to the top in just two hours.

Racette said it's important for small-scale vegetable farmers to apply for these cost-share funds, which generally go to larger row crop farmers and livestock producers.

"We need to show that 'Hey, we're here too,' " said Racette, who has gotten USDA money to put in pollinator habitat.

Another survival strategy for dealing with climate problems is sharing with customers the challenges associated with raising produce under extreme weather conditions. Racer and others made the point that through newsletters, e-mails, websites, social media postings, and face-to-face conversations, consumers need to be made aware that not only is extreme weather making farming more difficult, but it's being caused by human-generated climate change. In a sense, farmers can be climate change bellwethers for the rest of the public, which often spends the work day isolated from the land.

"Your customers might not know about climate change necessarily because they don't want to know — they just might not be aware of it," said Joan Olson, who farms near Litchfield west of the Twin Cities.

Creating a support network amongst other farmers is also key, said participants, who discussed ways of helping other vegetable farmers by supplying them product that's wiped out by a storm event or offering joint education to the general public about climate change's impacts.

Karin Jokela, who farms near Cannon Falls in southeastern Minnesota, said that building farming operations that can weather extreme conditions requires treating it as a community-based effort.

"It goes without saying—climate resilience requires this support network," she said. ❒

Channeling Water's Power Profitably

Farmers Battle Saturated Soils with More Roots in the Ground

By Brian DeVore

To Tom Cotter, the various natural resources his farming operation relies on don't operate in a vacuum. Rather, they have a relational quality — the role one resource plays in keeping his business viable depends on how it interacts with other resources. For example, rain falling out of the sky is, in itself, a welcome natural phenomenon. But that can change once it hits the ground. Biologically rich soil with plenty of good aggregate structure soaks up that water and stores it for plants to use while growing. But if that soil is too compacted to absorb that moisture, rainfall becomes a source of frustration, or worse, a menace. Cotter, who farms low-lying land near the Cedar River in southern Minnesota, puts it in monetary terms.

"Rich water falls from the sky. Poor water can't infiltrate, and it makes the soil poorer and your pocket book poorer," he says.

The role "poor water" is playing in leaching profits from fields is a lot on the minds of farmers these days, as climate change produces storms of unprecedented capacity across the landscape. It seems just about every community in the Upper Midwest broke rainfall records in 2019, and a lot of that water pooled up and simply ran off into rivers and streams. Minnesota alone saw its wettest year on record. The Mississippi River was at flood stage deep into the summer. The U.S. Army Corps of Engineers reports that the volume of water leaving states like Minnesota and flowing downriver through Rock Island, Ill., smashed all previous records. In fact, in Rock Island, the last decade saw three times the number of days over flood stage compared to any decade in the previous 130 years, according to the Corps.

All that water is washing agrichemicals off farm fields at an unprecedented rate. Monitoring of crop plots at the Olmsted County Soil and Water Conservation District's Soil Health Farm in southeastern Minnesota shows that as precipitation amounts increased 42 percent from 2017 to 2019, groundwater nitrate concentrations jumped 44 percent. Last fall, scientists recorded an oxygen depleted "dead zone" in the Gulf of Mexico that was over 6,900 square miles in size, the eighth largest area mapped since 1985. Nitrates and other nutrients escaping farm fields and making their way to the Gulf via the Mississippi are a major cause of the dead zone. Excessive water flow contaminated with chemicals is creating problems closer to home, as well.

Nitrate contamination of drinking water supplies is a growing issue in both private and public systems. One in eight Minnesotans served by groundwater-based public water systems consumes nitrate-tainted drinking water, according to data from the state health and agriculture departments analyzed by the Environmental Working Group.

And all that water is wreaking havoc before it even leaves the farm. A record number of acres in the Corn Belt were never planted — called "prevent plant" — to corn or soybeans in 2019 due to muddy fields. The previous prevent plantings record was set in 2011 at a little less than 10 million acres. In 2019, prevent planting acreage was more than double that. In terms of corn, South Dakota led the country in the amount that wasn't planted at 2.9 million acres, followed by Illinois and Minnesota at more than 1 million acres each. Stuck equipment was spotted in fields across the Midwest well into the summer, exacerbating soil compaction issues even more.

"Just up the road from me, a sprayer was stuck so badly that an excavator had to come and retrieve it," says southeastern Minnesota crop farmer Martin Larsen. "And the excavator sank to the cab, so a second excavator and a winch dozer had to come out. You hear about those things happening in peat bogs, but not in the ag fields of Olmsted County. In years like that, it's not just me that's questioning whether we can keep farming the way we've been farming."

Water, *see page 17…*

…Water, *from page 16*

Managing a Liquid Asset

He's right. Judging by the turnout at soil health workshops the past few years, an increasing number of farmers are questioning whether production systems that leave the soil uncovered and absent living roots for two-thirds of the year makes sense under this new climate reality. Over two days in late January, a pair of Land Stewardship Project soil health workshops attracted a total of over 200 participants from southeastern Minnesota and northeastern Iowa. The farmers who gathered were there to learn about the economic benefits of building soil health — reduced need for inputs, increased livestock carrying capacity, for example — but also how they could use a solid natural resource to manage a liquid one.

At an LSP Soil Builders' workshop in Elgin, organizer Doug Nopar noted that in 2019 this particular part of southeastern Minnesota had shattered previous precipitation records by over 10 inches, a situation that's created a lot of hardship for farmers.

The Breitkreutzes have used soil-building practices to increase the ability of their southwestern Minnesota pastures and crop fields to soak up water. "Our soils have room to hold air, water, nutrients," says Grant Breitkreutz. "Our neighbors' soils are tight and compacted — every tillage pass makes it worse." (*LSP Photo*)

"The bright spot has been farmers getting together and building the knowledge base and skill base to manage these difficulties," he said.

At the core of this bright spot is the fact that building organic matter in soil using cover crops and managed rotational grazing of perennial pastures not only increases the land's financial resiliency, but it also has a direct impact on how well it can manage runoff and store moisture. Increasing organic matter levels by 1% can help the top six inches of soil store an extra 25,000 gallons of water per acre, according to one estimate by the USDA's Natural Resources Conservation Service. Some soil scientists have questioned that figure, saying it can vary based on soil type, for example. But the fact remains: More soil organic matter equals better aggregate structure and thus increased water infiltration and less erosion and runoff.

At the Elgin workshop, Grant and Dawn Breitkreutz described how during the past two decades they have used multi-species cover cropping, no-till, and managed rotational grazing of beef cattle to increase organic matter levels on their fields and pastures, which are a mix of low-lying land and hilly acres along the Minnesota River in southwestern Minnesota's Redwood County. As a result, their water infiltration capacity has doubled in some cases, and the creeks running through their farm have flat bottoms with gentle, vegetated banks.

"Our soils have room to hold air, water, nutrients," said Grant. "Our neighbors' soils are tight and compacted — every tillage pass makes it worse."

The Breitkreutzes say perhaps the most striking aspect of how they've positively impacted their water cycle is that five different springs have emerged on their hillsides. The farmers feel that by retaining water on the high spots of their operation, the moisture is slowly making its way through the soil profile and percolating out in hillside springs. Before, it would run overland quickly, pooling up in low spots at the bottom of the hill, creating boggy areas that were difficult to even graze.

"Now those swamps and bogs that we never were able to graze are pretty regularly productive pastures," said Grant. "And the neat thing is where these springs are appearing on hillsides, there's all these different species of forbs and grasses."

As a result, they've quadrupled the livestock carrying capacity on their home farm while slashing input costs.

By increasing organic matter levels in their crop fields, the Breitkreutzes have been able to plant, as well as harvest, their corn and soybean crops on a consistent basis during the past four years "without sinking a combine."

Grant says 40% of the crop ground in their area wasn't planted in 2019. And of the acres that were planted, farmers struggled with mud, even on ground that has been artificially drained.

"Our neighbors, you could lay tile lines in the ruts they leave," he said.

Downstream Thinking

Despite positive changes made to the water cycle on the Breitkreutz farm, there are harsh reminders that we are all downstream from someone else. On July 3, 2018, a 10-inch rainfall in the Redwood Falls area sent water racing from area fields through the Breitkreutzes' land. During the Elgin workshop, the farmers showed a slide revealing the ugly results: an eroded gully several feet deep slashing through their property.

"You wonder why people downstream from us in agriculture are a little upset? I'm sure that all ended up in Lake Pepin in the Mississippi River," said Grant.

That's one reason that during workshops and field days, farmers like the Breitkreutzes are increasingly emphasizing the importance of networking with other producers and working together to get more soil building practices established on a wider swath of the landscape. After all, climate change and the volumes of water it's producing does not respect property lines.

"This is one of the key benefits," Dawn said while flashing a slide of a clean, slow-running creek that flows through their farm. "We want to have clean water. We want the people down in Louisiana not to be angry with us anymore." ❐

Give it a Listen

On **episode 236** of the Land Stewardship Project's *Ear to the Ground* podcast, Dawn and Grant Breitkreutz talk about how they are building soil carbon and bolstering financial resiliency: www.landstewardshipproject.org/posts/podcast/1266.

Grazing & Soil Health

Check out LSP's Grazing & Soil Health web page for fact sheets, podcasts, videos, and other resources on using livestock to build soil resiliency in a profitable way: **www.landstewardshipproject.org/lspsoilbuilders/grazing**.

Agriculture, Insects, Ecology & Economics

An Entomologist Sees Farms as Part of the Solution to Biodiversity Loss

It's called the "windshield effect" — a harsh but effective way to gauge insect populations. The more dead bugs smashed on the front end of your F-150, the more live ones buzzing around in surrounding fields. Scientists, and anyone who drives for that matter, are noticing much cleaner windshields these days. That's because, says entomologist and South Dakota farmer Jonathan Lundgren, we are experiencing what some call the "insect apocalypse." The journal *Science* reported in April that about a quarter of the world's terrestrial insects have perished in the past three decades. The study found that the Midwest had some of the most dramatic declines, with 4% of its bug population being lost annually.

It's become clear that chemical-intensive, monocultural agriculture is playing a major role in the decline of insects. The lack of habitat and foraging areas, coupled with insecticides that indiscriminately kill the good bugs along with the bad, is having a devastating impact. But during a recent series of Land Stewardship Project Soil Builders' workshops in southeastern Minnesota, Lundgren cautioned against seeing profitable farming as inherently the enemy of insects.

"This isn't a bee problem, it's a biodiversity problem," he said. "Agriculture can be part of the solution."

In fact, it's to farmers' benefit to create agricultural systems that benefit bugs. Some insects can be major pests, but the majority are beneficial. Besides providing pollinator services, insects play critical roles in the workings of the ecosystem, doing everything from forging links in food chains to helping with decomposition and recycling. For example, according to the science writer Brooke Jarvis, dung beetles save U.S. ranchers $380 million annually by helping break down manure.

"For every species of pest, there are 1,700 species of insects we can't live without," said Lundgren.

The entomologist, who was a scientist with the USDA's Agricultural Research Service for 11 years and has an extensive background in researching ecologically-based pest and farm management systems, says the loss of insects is not a farming problem per se. Rather it's how that farming is carried out. Relying on industrialized systems that leave no room for biodiversity is a disaster not only for bugs, but for humans, he argues.

"Agriculture can be part of the solution," says entomologist Jonathan Lundgren, shown here (*left*) **talking to farmers in Caledonia, Minn.** (*LSP Photo*)

Lundgren has the proof to back up this contention. In 2016, he started Blue Dasher Farm in eastern South Dakota as a place where he and his team can study regenerative farming practices that promote biodiversity while boosting farmers' bottom lines. The working farm raises livestock and crops, as well as keeps bees. Through Blue Dasher and the Ecdysis Foundation, Lundgren and his team are looking at ways biodiversity-based farming systems can be scaled up and adapted on a wider basis.

One Blue Dasher project found that farms raising corn without insecticides and using regenerative methods such as multi-species cover cropping, no-till, and integration of livestock via rotational grazing were nearly twice as profitable as their conventional counterparts, even though they yielded as much as 29% less grain. According to the study, which was published in February 2018 in *PeerJ—the Journal of Life and Environmental Sciences*, these regenerative farms had many more quantities and varieties of insects when compared to their conventional counterparts. As it happens, bio-inventories showed the conventional corn fields had 10 times more insect pests than their regenerative counterparts — an indication that insecticides and lack of diversity are wiping out the beneficial insects that keep the harmful ones under control.

The regenerative farmers were more profitable because they didn't pay for insecticides and expensive genetically engineered "stacked" seed varieties. And because the biologically rich soil on these farms was generating more of its own fertility, the producers spent less on purchased fertilizers as well. The connection to soil health is key — Lundgren said there was a striking correlation between higher organic matter levels and increased profitability.

"Why on earth do we gives prizes to the farmer who can grow the highest yield in the county? It's about the profits, right? Organic matter levels are what we need to be giving prizes for, not yields." ❐

Give it a Listen

On **episode 239** of the Land Stewardship Project's *Ear to the Ground* podcast, Blue Dasher Farm's Jonathan Lundgren talks bugs, biodiversity, and, of course, cow pies: www.landstewardshipproject.org/posts/1279.

A New Generation of Soil Generators

'If you're not doing anything, then what* are *you doing?'

Entomologist Jonathan Lundgren made it clear during a recent soil health workshop (*above*) that an agriculture based on biodiversity needs to be a critical part of the future of farming. As it happens, that workshop also featured a panel of young — they are all under 30 — farmers describing why they are excited to play a role in a regenerative system that values bugs over jugs.

Connor McCormick

McCormick grew up on a farm near Caledonia, Minn., and while a student at Saint Olaf College, did a project on cover cropping and soil health. He was excited by research showing how cover crops and no-till built soil biology and reduced carbon dioxide emissions. Since returning to the family operation, he has been experimenting with interseeding cover crop mixes into crops like corn and is pleased with the early results. He's also aware that studying regenerative farming methods and making it pay on a working farm are two different things.

Generators, *see page 19…*

…Generators, *from page 18*

"Farming's tough," he said during the panel discussion. "If it doesn't pencil out, you're probably not going to do it. So I had to figure out a way to make it pencil. I read in a farming magazine that if you can add 1% organic matter, you can make available 50 more pounds of usable nitrogen. To me, that's dollar signs for the farmer."

Aaron Gillespie

Gillespie, along with his father Jeff, raises crops and livestock near Fountain, Minn. Along with beef cattle and sheep, they raise corn, soybeans, oats, alfalfa, and canning peas. Most of their land is certified organic, and he said interseeding of a cover crop mix after taking off canning peas produced his best stand of corn in 2019. The Gillespies are interested in experimenting with planting 60-inch corn rows to provide more room for cover crops to thrive, and thus creating more forage for livestock grazing. Short season corn would give them a chance to get rye established earlier in late summer. Roller crimping rye when planting soybeans is another option they are considering.

"In 2019, 75% of our acres had a living root in them going into the fall," says Gillespie. "Our long-term goal is no-till organic and grazing as much as we can."

Rachelle & Jordan Meyer

Soon after the Meyers started farming north of Caledonia in 2015, they noticed the land was rampant with ragweed. They started utilizing cover crops and diverse rotations in an attempt to break up the weed pest cycle. But it wasn't until they saw Lundgren speak in 2018 that they realized just how important it was to get livestock on the land.

They now produce beef, hogs, chickens, turkeys, and eggs on pasture. The Meyers have also recently added goats to help clear out woody invasives and make use of the ragweed they still have on the farm (a leaf analysis showed the ragweed actually has 29% protein content).

Participants in a recent LSP soil health panel: (*clockwise, from left***) Rachelle and Jordan Meyer, Connor McCormick, and Aaron Gillespie. (***LSP Photo***)**

"The goats can utilize stuff that cows don't eat," said Rachelle. "Through animal impact we can clean up our woods, create more pasture, give more fertility to our land, and then we can sell our goats for meat. It's going to turn our problems into profits."

Drive-by Critics

The panelists were asked how they deal with one of the biggest barriers to adopting innovative practices that step out of the corn-soybean duo-track system: peer pressure. McCormick said that networking with other farmers interested in soil health helps.

"That's what it's all about, is this network," he said. "I get excited about this stuff, and I'm glad you guys are here and are excited about this as well."

Jordan Meyer was blunter when it came to describing how he and Rachelle deal with neighbors slowing down as they drive by to gawk at their experiments. "If they don't like it, they can look away," he said with a laugh.

Gillespie said that being organic for 20 years has prepared their neighbors for any "surprises" they may see on the land he and his father farm. "We do a lot of different things. If you're not doing anything, then what *are* you doing?" ❒

The Power of Pasture Walks

Jean Erpelding

I began attending Land Stewardship Project soil health events because I was looking to improve the soil health of my hayfield and pasture, which sustain some beef cattle and equine southwest of Winona, Minn. I attended several of the grazing group pasture walks.

The pasture walks provided an opportunity to share knowledge and to learn about not only the hosts' experiences, but other attendees' experiences. There was a lot of great discussion and the LSP facilitators did an excellent job sustaining the conversation by framing questions. Being onsite with the ability to see and interact in the environment made the pasture walks a valuable and memorable learning experience.

From the walks I attended, I gained additional insight into a variety of topics. Here are a few of them:

- Techniques for pruning evergreens
- Field rotations (crop, hay, pasture)
- Cover crop varieties
- Pasture plant mixes
- Seeding
- Fencing supplies and techniques
- Weed management
- Fly control
- Watering systems
- Power source options
- Grazing and rest schedules
- Maneuvering through funding programs
- Desirable characteristics of grazing livestock

With each pasture walk, I gained an understanding of what local graziers are doing and the elements driving their strategy. There are so many variables which influence decisions: weather, soil type, time of year, livestock density, existing vegetation, soil health, financial resources, funding program requirements, personal values, personal preference, etc.

No two farms or even pieces of land on one farm are necessarily the same. Therefore, what works on one won't necessarily work on the other; it is important to observe and react. This year I plan to divide my pasture into more sections for rotational grazing and allow longer periods of rest in the sequence. What I heard and saw on the various pasture walks support this change; allowing adequate rest between grazings was a consistent message. ❒

Land Stewardship Project Farm Beginnings (see page 32) graduate Jean Erpelding is a member of LSP's Soil Health Steering Committee. For resources and details on field days, workshops, and other events, check out LSP's Soil Builders page at www.landstewardshipproject.org/lspsoilbuilders.

Join the Soil Builders' Network

Join the 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 on joining, see **www.landstewardshipproject.org/lspsoilbuilders** or call **507-523-3366**.

COVID Community

Fulfilling a Social Contract

A Viral Carrot Sale During a Pandemic Reveals Local Food's Potential…& Limits

By Brian DeVore

In mid-March, when it was becoming clear the COVID-19 pandemic was going to change the way food is procured in the U.S. and beyond, the owners of Open Hands Farm placed five bags of carrots and a money box in their driveway. Farm owners Erin and Ben Doherty weren't quite prepared for what happened next.

"We had cars coming in and out of the driveway constantly for two days," recalls Ben. "We would be eating lunch and cars are still coming in. Somebody had to leave lunch to go restock the five bags out there. It was totally amazing."

During a hectic 24-hour-period, the Northfield, Minn., farm sold 9,500 pounds of carrots to over 250 households. The Open Hands "viral carrot" incident didn't happen by accident — it's an example of what can happen when a farm, suddenly faced with a vaporized market, taps into a network of people who in turn pass on the good word to all their connections. At a time when a superbug is turning society upside down, it's the ultimate feel-good story that reveals just how hungry, so to speak, people are for local food produced using regenerative methods. It's also an example of how a smaller, more diversified operation is nimble enough to navigate through crisis-ridden waters while bigger, industrialized operations flounder.

But this situation also points to the lack of resiliency in the overall food system, and the limits to relying on people coming together to support a farm in crisis.

"It's a heartwarming event that's given us comfort in all this uncertainty," says Ben. "But if everything continues to be shut down, we're going to be looking at a lot of produce that we need to find homes for."

A Reliable Market

The irony of the situation that sent Open Hands scrambling for emergency buyers is that it was the result of one of their most reliable market outlets falling through. Besides operating a 200-member Community Supported Agriculture (CSA) enterprise, the 15-acre certified organic operation also sells to distributors and processors in the Twin Cities region. And in 2015, they got into the farm-to-school market in a big way when they started supplying schools in Minneapolis. They also sell to the two private colleges in Northfield — Saint Olaf and Carleton — as well as to other schools through the Good Acre, a Twin Cities nonprofit that works with local food distribution, among other things. Overall, about one-third of Open Hands' market is school-based.

Ben and Erin Doherty (*center*) **shown with the Open Hands Farm crew. "If there's cheap produce rolling in from California, and if grocery stores are still able to stock their shelves with that, will there be increased demand for local?" Ben asks.** (*Photo provided by Open Hands Farm*)

Ben says farm-to-school has been a good fit for them. The farm added at least 30% to their production and increased storage capacity just to meet the demand from schools. That market has resulted in them adding two more fulltime employees during the growing season and allowed Open Hands to pay a good wage. The farm has regularly supplied eight different kinds of vegetables to schools, including carrots, cabbages, beets, and kale. Fall is their busiest time with school markets, but storage crops like carrots offer a way to move product into cafeterias over the winter as well.

Ben says in normal times, schools are a consistent market, in contrast to farmers' markets and restaurants, which can be "notorious" for fluctuating in their demand. Open Hands has a letter of commitment with schools; it's not a legally-binding contract, but it provides certain guarantees.

"With schools, if somebody tells us they're going to buy 500 pounds a week, they pretty much do that," Ben says.

But a school without students is a school without a sit-down lunch program. So in early March, Erin and Ben watched with concern as it became clear Minnesota Governor Tim Walz was going to shut down schools as part of a wider initiative to slow the spread of COVID-19. Many schools offer "grab-and-go" food packs to students, but fresh, whole produce does not lend itself well to being included in these mobile meals.

The farmers were particularly concerned about their inability to move the rest of the carrots they had harvested last fall and put in storage. This is a big crop for them: Open Hands harvests about 100,000 pounds of carrots annually, and Ben estimates that not having schools buy up what they had left would cost $10,000 in sales.

So, on March 17, the farmers posted a letter on Facebook and sent it via e-mail to their CSA members. Their lead sentence was eye-catching: "It is, despite shortages of other things, time to hoard carrots!" They went on to explain that during the next few days, they would be placing 25-pound bags of carrots on a table in their driveway. They were offering a 35-cent discount off the regular price, and people could leave cash or a check in a money box; there was also an option to pay online. Buyers were asked not to enter other buildings on the farm and only five bags of carrots would be available at a time to avoid crowding. That first day, Erin wondered aloud if they'd only sell a couple bags.

It turns out the farmers misjudged the power of social media and word-of-mouth, especially when it's fueled by people committed to local, sustainably-produced food.

"The letter made it clear they were nervous," says Jerri Hurlbutt, a freelance editor living in Saint Paul.

Hurlbutt grew up on a dairy farm near Northfield and has been a longtime Open Hands CSA member. But she admits she had never thought much about how critical wholesale markets were to the farm's success until she saw Ben and Erin's note. Just

Carrots, *see page 21…*

…Carrots, *from page 20*

as she supports the CSA concept of farmers and eaters sharing in the rewards and risks of production, Hurlbutt saw this as an opportunity for the wider community to make sure this crisis didn't decimate an important business in the area. She posted the letter to a Carleton College listserv she belongs to.

"The response was immediate, because they wanted to support local business," Hurlbutt recalls. "I had a couple people write back and say thanks for giving us a chance to support local food."

The carrots were moved through wider networks as well. Land Stewardship Project staffers Elizabeth Makarewicz and Scott DeMuth heard about the carrots and helped pass on a significant number of bags beyond the Northfield area. Makarewicz distributed around 1,000 pounds in Minneapolis after they were dropped off at the LSP office there. DeMuth, who lives in western Minnesota's Yellow Medicine County, got over 600 pounds to distribute; it turns out farmer Peg Furshong, who is also the operations and program director for Clean Up the River Environment in Montevideo, was passing through the Northfield area and was able to haul them to western Minnesota.

Doherty says overall, they estimate one-fifth of the carrot buyers were people Open Hands had not had contact with before. It's clear that given the size of the portions, more than just 250 households benefited from the sale — several split up the bags and shared them with friends and neighbors.

"People don't realize what a 25-pound bag of carrots looks like," said Makarewicz with a laugh; in response, she started a Facebook page devoted to carrot recipes.

Beyond Viral

The Open Hands farmers are the first to say that despite how inspiring it was to sell over 9,000 pounds of carrots in a flash sale, it's nothing to base a long-term sustainable marketing strategy on. A lot of farmers who market via short supply chains are thinking the same thing, says Helen Schnoes, a regional marketing specialist for the Minnesota Department of Agriculture (MDA).

Schnoes was hired in November as a result of a farm-to-school bill pushed by LSP and its allies during the 2019 session of the Minnesota Legislature. One focus of her work is to help cultivate more efficient relationships between farmers and schools. A 2015 USDA survey showed that a little over 1,000 Minnesota schools were buying at least some food from area farmers, which represented over $12 million invested in local food. Slightly more than half of Minnesota school districts buy local food, a sign that there is more potential for making schools and other institutions consistent customers for farmers. Because of the 2019 legislation, an existing MDA program was expanded to allow the reimbursement of schools for purchases from local farmers. Schnoes is also working to help farmers access wholesale markets in general.

During the past few months, Schnoes and other MDA staffers have been scrambling to collect information from farmers about the best way to help them deal with major disruptions to their marketing and distribution system. Farmers responding to a joint MDA-Minnesota Grocers Association survey expressed significant concern about the long-term implications of the pandemic, especially as the harvest season approaches.

One thing that's become clear is that one-time bulk purchases won't cut it — farmers need consistent, repeated sales. The MDA is also hearing about innovative ways farmers and others are working around the pandemic to get food to consumers safely. Options such as online ordering, pre-ordering farmers' markets items, drive-through pick-ups, and doorstep delivery are being ramped up.

"I'm really inspired by the creativity of farmers," says Schnoes. "We're learning every day, just like everyone else."

One advantage operations like Open Hands have is that they are small and diverse enough to pivot when a major disruption appears — larger, more monolithic operations simply aren't as flexible. That has become clear already in states like Florida and California, where mega-vegetable operations have been forced to plow under produce because of lost food service markets. About 40% of this country's fresh produce goes to restaurants, institutions, and other "food service" outlets; overall, this sector represents a quarter of the food consumed in the U.S., according to *Politico*.

"In local and regional food systems, that's an asset — nimbleness and creativity," says Schnoes. "Ben and Erin were able to tap into a different market in a short amount of time. If you have different networks, that really helps."

A Linked Food Chain

Produce farmers in Minnesota benefit from the fact that through the MDA and the University of Minnesota, there are resources available for making sure food is handled safely on the farm before it gets to the consumer, says Doherty. With a little tweaking, he's confident Open Hands can keep its food handling system safe, even in a pandemic. But, he concedes, this is all new territory.

As the growing season advanced and questions about the availability of food service markets remained, Open Hands was considering options like expanding the number of CSA shares it offers and modifying how the produce is delivered.

"Sanitizing and things like that are relatively easy — the social distancing is a bigger marketing challenge," he says.

There's no doubt the pandemic triggered a higher demand for locally-produced food this spring, especially as people become reliant on home cooking. Some CSA farms were experiencing increased sign-ups, and many direct-to-consumer meat producers were busier than ever. But it was unclear if that love for local was just a spring fling.

"We need people to keep showing up," says Doherty. "If there's cheap produce rolling in from California, and if grocery stores are still able to stock their shelves with that, will there be increased demand for local?"

And another issue has emerged: The pandemic has revealed how interconnected everything is in our food system. Some farmers may be able to adjust to a new marketing and distribution climate, but the schools, grocery stores, and restaurants they sell to must also adapt — and remain open.

"That speaks to the systems side of local and regional food systems," says the MDA's Schnoes. "We're all in this together." ❐

LSP Farmer-Eater Exchange

During these unsettled times, it is more important than ever to come together as a community. One way to do that is by supporting the farmers who are producing safe, healthy food using regenerative methods. In recent weeks, the Land Stewardship Project has heard of several situations where farmer-members have lost access to customers due to the closing of restaurants, universities, K-12 schools, co-ops, and other market options. These losses, even in the short term, can be devastating.

One way we can all work together during this difficult time is by supporting local food systems. Supporting local farmers is a great way to not only help them get through this crisis, but to get access to safe, healthy food that supports our communities.

LSP is compiling a list (**www.landstewardshipproject.org/foodexchange**) of farmer-members who have products available; many offer delivery or other options for obtaining the food directly. The Farmer-Eater Exchange also includes links to resources for farmers looking for ways to safely market food during the pandemic. If you are an LSP farmer-member who would like to be listed in the Exchange, check out the form link on the left-hand side of the web page.

More of the Same or a New Direction for Ag?

The Government's Immediate Virus Response Could Have Long Term Impacts

By Darrel Mosel

The coronavirus pandemic has made it clear we can no longer take for granted grocery stores brimming with food. In fact, it has, at least for now, drawn attention to my often-ignored profession: farming. So, I was happy to see that the $2 trillion pandemic aid bill coming out of Washington in March included $23.5 billion for agriculture.

It was especially good to see $9 billion of that money being targeted at helping farmers who raise food for local and regional markets such as schools, restaurants, and farmers' markets. The coronavirus outbreak could cost the economy $1.3 billion as a result of the sales hit local and regional food systems are expected to take by May, according to Colorado State University and the University of Missouri. The vast majority of farms involved in local and regional food systems are small and often operated by beginning farmers like my son, Chris, who is trying to get his own organic dairy off the ground.

The bad news is the bulk of the agricultural money — $14 billion — is going to the Commodity Credit Corporation, the USDA branch that has been responsible for shelling out aid to farmers as a result of President Donald Trump's last-man-standing trade war. Unfortunately, those trade bailout payments mostly benefit some of the largest agricultural firms in the country, not folks like me. Of the tens of billions of "Market Facilitation Payments" made during the past few years, the top 10% of recipients — the largest, most profitable industrial-scale farms — got half, according to Freedom of Information Act data obtained by the Environmental Working Group. The top 1% of recipients received an average payment of $177,010 during one round of payments. The bottom 80% of recipients got an average of around $5,136 during that particular round. It's particularly galling to know that $67 million in bailout money went to JBS USA, a subsidiary of a Brazilian company that's the world's biggest meat processor.

Here in Minnesota, giant Molitor Farms of Cannon Falls has received almost $1.4 million in trade bailout funds. Our farm received a total of around $30,000 in Market Facilitation Payments the past few years, which is a fraction of the $300,000 I estimate we lost due to the trade war. Perhaps this unfair tilt should be no surprise, given that the federal government has long favored mega-ag via policy initiatives such as crop insurance and crop subsidies.

So, who do you think will be crowding the trough to lap up as much COVID-19 money as they can? And that brings up another problem — the bill gives one man, Sonny Perdue, a lot of leverage in determining who will get farm checks. During a talk he gave at the World Dairy Expo in Madison, Wis., last fall, Perdue, who is President Trump's Secretary of Agriculture, said, "In America, the big get bigger and the small go out. I don't think in America we, for any small business, have a guaranteed income or guaranteed profitability."

It turns out Perdue has no problem supporting policies that guarantee profitability to some of the largest agribusiness firms in the world. His statements, and actions, make it clear he's fine with the current uncompetitive situation in agriculture, where, for example, just four firms control 85% of the beef slaughter and almost 80% of soybean processing. Farmers, as well as consumers, are at the mercy of an increasingly powerful small group of players in the food industry, and that's not good, especially during a pandemic.

No wonder the 2019 median farm income for U.S. farm households was negative $1,383, according to the USDA. My fellow dairy farmers have been especially hard hit as mega-operations contribute to a massive oversupply of milk; Minnesota alone lost 250 dairy farms in 2019.

This crisis will produce more bailouts and more policy initiatives, both on the federal and state level. The focus this pandemic is bringing to food and farming could bring about long-term changes to agriculture — for good as well as bad. The COVID-19 stimulus package's support for local and regional food systems represents one positive road we can take. The open checkbook approach of the rest of that money is a path towards more of the same, which results in empty rural communities, dirty water, and a food system controlled by fewer and fewer.

As the system for distributing agriculture funds — during a crisis as well as in more normal times — shows, public policy created this mess, and public policy can get us out of it. ❐

Darrel Mosel raises crops and livestock in Minnesota's Sibley County and serves on the Land Stewardship Project's federal policy steering committee.

CFFE: COVID-19 Aid Should be for People, Not Global Agribusiness

In early April, the Land Stewardship Project joined organizations in Iowa, Minnesota, Missouri, and South Dakota in submitting a letter to Congress calling for strong oversight of a recently passed COVID-19 aid package (*see story above*) to ensure the USDA disburses aid to people and rural communities, not global agribusiness firms that reaped tens of millions of dollars from recent trade-aid payments.

In the letter, the Campaign for Family Farms and the Environment (CFFE) urged Congress to set up guardrails for USDA regarding a total of $23.5 billion in aid designed to support farmers hurt by the enormous disruption in markets and supply chains caused by the COVID-19 outbreak. Specifically, CFFE called for: no public money to go to new or expanding concentrated animal feeding operations (CAFOs), which have flooded the market, driving farmers' prices for livestock and milk down, while polluting rural waterways; a prohibition on multinational agribusiness firms from receiving aid; and adequate resources for farmers supplying local markets that have disappeared.

As this *Land Stewardship Letter* was going to press, Congress was considering another farm aid package. CFFE pointed to the urgent need for that package to address structural failures in agricultural markets that prevent farmers from making a fair living. CFFE highlighted the need for a two-year suspension of loan payments, a halt on loans for new or expanding CAFOs, a moratorium on new agribusiness and food industry mergers, stronger fair market practices rules, enabling access to safety net programs for farms and small food businesses, and mandatory Country of Origin Labeling (COOL).

The full letter can be read at https://bit.ly/2Xv89lm.

Besides LSP, the Campaign for Family Farms and the Environment is composed of the Missouri Rural Crisis Center, Iowa Citizens for Community Improvement, Dakota Rural Action, Food & Water Watch, and the Institute for Agriculture and Trade Policy.

How Are You Doing?

As a Crisis Unfolds, LSP Members Share Their Thoughts

In March, the Land Stewardship Project sent a survey to its members asking them how they were handling the COVID-19 pandemic. Specifically, we asked how it was impacting them, their families, their farms, their health, and their employment situation. We also asked what LSP should be doing to help its members get through this situation while continuing to work for a just, sustainable food and farming system. We'd like to thank everyone who took the time to respond, and will be using the survey results to guide our work. Below are a few of the dozens of responses we received.

•••

We have a CSA farm and shares are not selling very quickly. I think our members are holding tight to their money and carefully making decisions about how to spend it. Time will tell if they find purchasing a share the best use of their money (in their eyes).

•••

So many things have been canceled or postponed that we now turn to each other. Perhaps we are now relearning some lost skills.

•••

I will get a smaller number of cattle to custom graze because the owner can't afford the amount of cattle originally discussed. So I project a 25% loss of income. The cattle I thankfully do get should arrive around April 1st.

•••

We are concerned about our farmers' markets going forward and how to handle that; hoping they will work with us. We are concerned about employees coming onto the farm and general hygiene protocols.

•••

The business side of farming is unknown moving forward with our CSA; it will happen, but we know it will look different this year. In terms of planting, we are on schedule and will be planting a few more staple crops this year.

•••

We have concerns about the long-term financial outlook of rural CSA members being unable to afford shares in the future, as well as the stability of local small food co-ops. We have some concerns about keeping employees healthy and needing to adjust CSA pick-up sites that are located in healthcare facilities.

•••

Our community, like many, is feeling anxious about how this will affect our local businesses. There is so much uncertainty around what the economic impact will be.

•••

I miss physical connections with family and friends. I have a concern for how this will affect the economy. I have a concern that the rich corporations will continue to exploit situations like this

•••

Many dairy farmers I know are now being told to dump their milk since the market has tanked. The inadequacy of rural broadband access has become really apparent — the digital divide is REAL! Since all the schools are closed and a third of rural folks in Wisconsin have no reliable Internet access, parents are now stuck loading all the kids in a car and driving to a library parking lot in hopes they can get online and homeschool online.

•••

I don't think we know the impacts yet. There is a lot of uncertainty about farmers' markets and CSA delivery sites. We had planned to do on-farm sales, and are no longer planning that. I am in the process of setting up online sales, which was something I wanted to do anyway, but it now seems urgent.

•••

I'm worried about our most vulnerable: the homeless, incarcerated, ICE detainees, etc.

•••

We will be impacted by sales to restaurants. The biggest disruption to our workforce is having our two children at home instead of at school or daycare. We do have two employees working here now and we have implemented a COVID work policy. However, we are not both able to work as much and that will be an issue at some point during this season.

•••

Being a grazing dairy farm, our animals and feed sources are okay. The livestock sale prices have gone in the dumps. Milk prices were in trouble before, but now are very shaky. The milk that was going to schools could not be easily moved to other places because the delivery systems were not in place for those containers or amounts.

•••

Milk prices have dropped by $7 per hundredweight. We have way too many bills for our income. The pandemic has caused so much uncertainty our milk cooperative does not know if they will be able to pick up our milk.

•••

Our CSA membership goals will be met, but we are concerned about added expenses due to social distancing and delivery costs. We are also quite concerned about the scenario in which either my partner or I become ill.

•••

Restaurants and the people that work for them are hurting. Are we going to be stuck with only chain restaurants and fast food after this is over?

•••

I think this pandemic has laid bare just how dangerous the conditions of capitalism are for so many people. A healthcare system driven by profit is disgraceful. A society that privileges the economy over human life, health, and wellbeing is toxic. Times of disruption like this exacerbate existing inequalities in ways that are already proving deadly to some. I can't think of a better moment to fight for bold, revolutionary change in the ways we support one another as a society.

Photo by Mark Hirsch

That Farm on Highway 40

A Pioneering Organic Operation, a Trial Run, & the Next Generation

Black, ominous clouds were approaching fast, and Luke Peterson was in a bit of a panic as he stood next to his tractor parked in an 80-acre soybean field, scanning the sky. Hooked up to that tractor was a rotary hoe, and before this particular day in early summer, the young western Minnesota farmer had never used one of these implements. But he didn't have time for a lesson — his organic soybeans were at a key stage of growth and were already overdue for some critical weed control.

But oh, that ugly looking storm front sweeping across the flat prairie — it was already passing over the town of Madison just a few miles to the west. Peterson needed to hurry, but what little hoeing he had done already that day had inflicted more damage than he was comfortable with. This was his first year of trying to raise chemical-free soybeans, and now it looked like he was destroying the crop before it even got a good start.

So, he whipped out his cell phone and made a call to the neighborhood organic cropping sage.

"I've got beans laying on my fenders. I've got beans hitting the back of the window. I'm killing my crop!" Peterson said in desperation.

"Yeah, how bad is it?" the voice on the other end calmly responded.

"It's bad," said Peterson.

"Well, put a little more pressure down, you need a few more beans on the fender if you're going to do any good," advised the older farmer.

"So I cruised over 80 acres thinking I'm destroying the whole crop my first year into it," recalled Peterson recently. But it turns out the advice was spot-on — the soybeans could take more abuse than it appeared. "It's situations like that where it just doesn't seem like the right thing to do when you've never done it. Then it's like, 'Ah, I see.' "

During the past few years, he's had numerous "Ah, I see" conversations with that lifeline farmer, Carmen Fernholz. The veteran organic producer has provided tips on everything from weed control and soil management to yes, just how fast to run a rotary hoe across a soybean field as you're being chased by storm clouds. Peterson says he's benefited greatly from this relationship. But it's also been reciprocal; Fernholz and his wife Sally now have someone who will continue their farm's impressive legacy of regenerative agriculture. This spring, Peterson, who is 30, took over day-to-day management of A Frame Farm's 350 acres as the Fernholzes, who are both 75, step back and retire.

Exiting active farming is never easy, but it's particularly hard when so much sweat has been poured into doing things decidedly out of the mainstream. Add on to that the extra burden of actually being widely known for these innovative practices, which is the case with the Fernholzes. Fortunately, as they transitioned into retirement, the veteran regenerative practitioners found a way to produce one more important crop: a new organic farmer in the neighborhood.

"He just said, 'Yeah, why wouldn't you do that?' " Luke Peterson (*right*) says of one of his first conversations he had with Carmen Fernholz about getting into organic farming. (*LSP Photo*)

A Solid 'Yes'

When Luke Peterson first got interested in farming organically, he knew exactly who to approach: that outgoing former teacher and wrestling coach who lived in the A-frame house on State Highway 40 just outside of Madison.

"I knew he was *the* organic farmer in the area," recalls Peterson.

Over the past four decades, Carmen and Sally Fernholz have built A Frame Farm into one of the most respected organic cropping operations in the Midwest. They've had plenty of misfires, but also a fair amount of success, to the point that when the University of Minnesota wants a reliable place to test out a new crop like the perennial wheatgrass Kernza (*see the No. 2, 2019,* Land Stewardship Letter), A Frame Farm is the first place they call. Carmen has spoken at innumerable conferences, hosted popular field days, and helped set up who-knows-how-many test plots. The Fernholzes have also been recognized by the organic farming community for their contributions to the movement — in 2005 Carmen and Sally were given the Organic Farmer of the Year award by MOSES. They've come a long way from that day in 1971 when they put a down payment on 80 acres of land east of Madison and tried to ignore neighborhood comments about weed-choked fields.

Peterson grew up just five miles from the Fernholzes, but didn't have much interest in farming until he and his wife Ali moved to Fargo so she could get her nursing degree at North Dakota State University. During the three years they were there, Luke worked for an area farmer fulltime. When they returned to the Madison area, he was with the Minnesota Department of Natural Resources, where he saw firsthand the negative environmental impacts chemical-intensive row crop agriculture was having.

In 2012, Peterson started renting farmland for crop production, and at one point was farming 350 acres conventionally. He became increasingly interested in organics, and even approached some of his landlords about transitioning their acres to chemical-free.

"I got many solid 'no's,' " recalls Luke. But when he approached Carmen about getting into organics, the older farmer was enthusiastic.

"He just said, 'Yeah, why wouldn't you do that?' " Peterson recalls.

Such encouragement is great, but means little without practical follow-through skills. Peterson had experience growing his garden organically, but found even that to be a lot of work. He remembers standing on a hill overlooking 80 acres of his family's land that he wanted to farm organically and thinking, "That's a big garden. That's a lot."

Transitioning to organic doesn't just require dropping chemicals — it's a whole new way of managing a field. For example, the first year he tried raising organic soybeans, Peterson planted it with straight,

Farm Transitions, *see page 25…*

…Farm Transitions, *from page 24*

90-degree corners in the end rows, which makes sense when you can use chemical weed control. But cultivators can't turn on a dime. He spent the summer hand-hoeing around five acres worth of corner rows.

Fortunately, Fernholz is a big believer in the idea that a lot of "tuition" has to be paid before an organic system is perfected on an individual farm. At one point, the young farmer sat at the kitchen table with Carmen and over a few hours threw question-after-question at him related to weed control, fertility management, prices paid for organic crops, equipment needs, and the amount of labor involved.

"And I think one of the most important things we talked about was that you make all of your own decisions, and you have to decide whether it works for you," recalls Carmen. "I can tell you what works for me. I can tell you what the shortfalls are. I can tell you what the good things are. There's going to be tuition that you're going to pay in terms of weed management, fertility management. I just told him everything: the good, the bad, and the ugly."

Despite paying a lot of "tuition," the first couple of years of organic transition went surprisingly well for Peterson, which he credits his relationship with Fernholz to. And in 2015, his marketing received a boost when he connected with the Food Building, a Minneapolis collaborative operation that, through Baker's Field Flour & Bread, processes specialty, locally-raised small grains. Peterson now raises emmer wheat, oats, flax, and corn for Baker's Field. This has allowed him to expand his rotation — a key element of success in organic production —while farming relatively few acres.

In 2016, Peterson decided he wanted to up his game as far as getting mentored in organic production. He approached Fernholz about working alongside him that growing season to get even more hands-on instruction. He didn't want to be paid anything, he just wanted to learn and to test out what Fernholz had been telling him.

Fernholz agreed, and it went well. The older farmer noticed that Peterson had the desire to learn, as well as a lot of patience and tenacity. At one point the young farmer spent hour-after-excruciating-hour cultivating a 30-acre field of soybeans where the plants were only three or four inches high. Top speed—one mile an hour.

"That's when he really got the understanding of how really focused you have to be in organic," Fernholz recalls.

It turns out that about that time Carmen and Sally had been thinking seriously about the future of their farming career. They have four adult children who have lives that have taken them away from the farm. But being organic pioneers comes with a bit of a burden — they didn't want decades of building healthy soil to be reversed by renting it out to a conventional producer.

"The position I found myself in is here I've been doing this for 40 years, and there's no way that I could let this farm go back to conventional operation," says Fernholz. "If for no other reason than my integrity would be worthless."

So why not cultivate a farmer in the neighborhood who could continue that organic legacy? At the end of that summer, Carmen made an offer to Luke: How about working for two years on A Frame Farm as an intern, and if that goes well, then taking over full management via a lease?

Luke said he'd think about it, and during the 2017 growing season, they farmed separately. Peterson says it soon became clear this was an opportunity too good to pass up.

"I'd go to a conference, and some big swingers at the conference would be like, 'You work with Carmen?' 'Yeah,' I'd say. I don't know how many times I've heard, 'You're really lucky.' "

In 2018 and 2019, Peterson worked alongside Fernholz. He wasn't paid, but in exchange had access to the older farmer's equipment for use on his own rented acres. Peterson said the two-year timeline was important for him so that he could see a couple of growing seasons work through a full cycle. Those trial growing seasons were important to Carmen as well. "I needed those two years, because it's a mental adjustment, for sure, to retire from farming," he says.

Staying in the Family

The Fernholzes made it clear to Luke that he would probably never have the opportunity to buy A Frame Farm. Seven years ago, Carmen and Sally started a family limited partnership. Through that, they have been gradually gifting the farm to each of their four children, and in 2018, the process was concluded. The Fernholz children now own the farm, and Carmen serves as the general partner, which means he can make decisions such as who to rent it out to.

Fernholz knows how important it is to be able to plan ahead in organic production, so the rental arrangement will be renegotiated every year for the third year out, meaning both will have time to adjust for things that might need changing. Peterson says not having the option of buying the Fernholz land doesn't bother him.

"I'd like to, of course, buy a piece of land one day, just so I can really think long term," he says. "But if you look at what farmland goes for right now, I don't know if that would really be an option anyway."

Even though Carmen can determine who to rent to, he technically doesn't own the farm anymore. That's why before the two-year trial began, all four of the Fernholz children had a chance to get together at Christmas and meet Luke, Ali, and their young children (they had two at the time; now they have three).

"So we sat around this table for two, three, four hours talking. And they got to know Luke and Ali and their children and Luke and Ali go to know my kids," says Carmen. "I think what really made it a good situation was we're on the same page as they are—appreciating the soil, appreciating the natural resources, the environment, all those things. So when my four children listened they really felt like we had made a good connection here."

New Ideas

Those two growing seasons have been productive ones — crop wise and ideas wise. Spend any time with Carmen and Luke, and it's clear they enjoy working together and figuring out new ways to do things. Carmen is also aware that so much of the way he farms is based on gut instinct, and that's not always translatable. For example, over four decades Carmen had developed a way of cultivating weeds that was more art than science.

In order to "professionalize" it a bit, the two farmers spent a lot of time those two summers developing an auto-guidance system for the cultivator utilizing high-tech cameras and monitors. At one point, while Luke ran the cultivator, Carmen was walking behind, noting how close they could get to the plants.

"We'd stop and tweak, stop and tweak. I kept kidding that we've got to get down to an inch on either side of that soybean plant," recalls Carmen.

"We were joking, but by the end of the season, we *were* down to an inch," says Peterson. "Neither one of us was ever satisfied. Now we have a tool that is a huge breakthrough, because we had that flexibility, and we both put our time and effort into it. It's going to save a lot of work."

The two trial seasons also gave Peterson an opportunity to determine what implements he will need to farm the Fernholz land as well as other acres he rents. At the end of the trial, they established a value for each of Carmen's implements, and set up a payment plan for the pieces Luke will buy.

Having access to good equipment is key to Peterson because it will save him labor,

Farm Transitions, *see page 26…*

…Farm Transitions, *from page 25*

giving him more time to devote to his next enterprise goal — making livestock part of his organic operation. Counting the Fernholz acres, Luke is now farming over 430 acres of organic land. He's convinced that he needs animals on the land to help with fertility, as well as to add value to certain crops like alfalfa hay. Fernholz agrees. He says his one regret during his long farming career is he never found a way to add livestock to the operation. That's why he financed the purchase of five beef steers in 2019. Once Luke sells them, he will pay Carmen back. The Fernholzes say they are in a good position financially, and are willing to help bankroll Peterson's development of a cow-calf beef herd over the next several years.

In 2019, both farmers received USDA Environmental Quality Incentives Program cost-share money to set up rotational grazing systems. Carmen is particularly excited about trying to graze the perennial Kernza he's been growing.

"It's really huge for me, because I grew up with cows and calves when I was a kid, and I always said that was the piece that was missing in my whole system," he says.

Rooted in the Intangibles

On a fall day, Carmen and Luke walk across a driveway on A Frame Farm to check out a thriving stand of corn, ready for harvest. Luke uses his hands to shell a few kernels off a cob — the bright, yellow grain pops in the sunlight, rich in carotene. These acres have not had chemicals applied to them in 40 years. Earthworm middens dot the field's surface at the base of the corn plants, and an aggregate test done a few months prior showed the soil was extremely resilient. Carmen talks about how in the spring of 2019 they were able to get into this field to plant earlier than their conventional neighbors, despite an extraordinarily wet season. One drawback to the organic system is that it relies on mechanical disturbance of the soil to control weeds, which can lead to erosion and the disruption of the soil's biology. Soil tests show that decades of organic management on the Fernholz farm have built the soil's biology to the point where it's resistant to erosion. Still, Carmen and Luke agree that reducing tillage as much as possible is an important goal.

"I think what really made it a good situation was we're on the same page…appreciating the soil, appreciating the natural resources, the environment, all those things," says Fernholz. (*LSP Photo*)

One way to do that is to suppress weeds with cover cropping. Carmen recently invested in a used high-boy sprayer and Luke's been modifying it so it can interseed covers into standing row crops.

It's clear that both generations share a love of farming and reverence for the soil, providing a connection that goes beyond knowing how to set up a cultivator or plan a rotation. When Fernholz and Peterson worked together that first summer in 2016, the older farmer noticed not only that Luke was patient, good with equipment, and hardworking. There was also another, less tangible trait — a love of the soil and the responsibility that comes with that.

"The first day when I bought this farm, I went out and walked the whole 80, just feeling it, getting to see what it was like," says Fernholz. "That first summer with Luke I talked to him about what every inch of soil on the farm means to me."

Luke is animated when he talks about that recent soil aggregate test and the ability of livestock to build biology.

"There's something in the air. I'm not sure why, but there's a small, growing group of people my age that are really seeing the need for a different way to do farming," he says. "A lot of it has to do with Carmen." ❐

A Few Tips for Germinating the New Generation

Here are a few tips from Carmen Fernholz on working with someone who wants to continue a farm's innovative, regenerative legacy:

Do a Trial Period

Fernholz recommends working alongside the beginning farmer for a year or two before you retire. It's a good time to not only pass on knowledge, but to allow the beginner to push the envelope.

"Let them feel free to try a few things," he says. In Peterson's case, he used that time to develop a more efficient way to mechanically control weeds.

A trial period also prepares the retiring farmer for the day when they will no longer be out in the field. "The owner needs an adjustment time too," says Fernholz.

Use Your Finances Strategically

Fernholz says older farmers may want to take a look at how they are managing the money they are setting aside for retirement, and figure out ways it can help the next generation.

"Instead of having to put together a lot of retirement funds, figure out how you can stretch your asset liquidation over a longer period of time, and use that creativity to help finance a person coming in," he says.

For example, the Fernholzes are financing Luke Peterson's foray into livestock production as a way to reduce his debt load. And all of the Fernholzes' equipment has been appraised; Peterson can now determine which pieces he would like to purchase.

"And I can be flexible in saying, 'Luke, I'll give you another year on this tractor, because I don't need the income for tax reasons,' " says Carmen.

Help with Goal-Setting

Having an overall goal of "wanting to farm" isn't enough, Fernholz argues. In Peterson's case, he made it clear he wants to farm organically, and eventually have an operation that integrates livestock and crops in a more "self-sufficient" manner. It helps to talk over an incoming farmer's goals, and work with them to refine them. The retiring farmer should also prioritize one major goal themselves, says Carmen.

"Keep in mind that you want more of the Lukes out here in the future."

Seeking Farmers-Seeking Land Clearinghouse

Are you a beginning farmer looking to rent or purchase farmland in the Midwest? Or are you an established farmer/landowner in the Midwest who is seeking a beginning farmer to purchase or rent your land, or to work with in a partnership/employee situation? Then consider having your information circulated via the Land Stewardship Project's ***Seeking Farmers-Seeking Land Clearinghouse***. To fill out an online form and for more information, see **www.landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse**. You can also obtain forms by e-mailing LSP's Karen Stettler at stettler@landstewardshipproject.org or by calling her at 507-523-3366. For the latest listings, see **www.landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse**.

Farmland Available

◆ Tim Drake has for sale a 40-acre farm in ***central Minnesota's Stearns County (north of Saint Joseph)***. The farm has been managed organically for nearly 13 years and it includes a large prairie-style barn, a granary, a silo, a lean-to, a garden shed, and a metal pole shed with 220-electric service, all with metal roofs. The farmhouse has been completely renovated and has four bedrooms and two full bathrooms, as well as high-speed Internet. There are apple and plum trees on the property, which is partially wooded. Contact: Tim Drake, timdrakemn1@gmail.com.

◆ Brad Zettler has for sale 20 acres of certified organic farmland in ***north-central Wisconsin's Marathon County (near Athens)***. The land consists of 18 acres of pasture, a house, a 36 x 110 barn with milk house, a cemented cow yard, and a 40 x 80 pole barn built in 2015. There is some fencing, a raised lane, and a frost-free watering system. There is additional land for possible rental. Contact: Brad Zettler, 715-965-3440, bradleybzacres@aol.com.

◆ Krista Ollom-Klein has for rent 12 acres of farmland in ***western Wisconsin's Pierce County (near Prescott)***. The land consists of 12 acres of prairie grass with about 60 apple trees; no house is available. The apple trees have not been pruned in a few years, but do produce. The land has not been sprayed for several years. There is no water, electricity, or outbuildings on the property. Ollom-Klein would be fine with the renter tilling an acre or so for a garden or with someone starting a bee operation. The rental price is negotiable. Contact: Krista Ollom-Klein, 612-987-1604, kollomklein@yahoo.com.

◆ Joshua Reed has for sale a homestead near ***Menomonie in western Wisconsin*** that has 11 acres of Standard apples. The trees were planted in 1969 and they have sat untended for 20 years, so they are in varying condition (but they still produce). There is a well with a hand/solar pump; there is no electricity and Reed was give a quote of $6,000 to install it. There is a cabin, a greenhouse, three buildings, an Air Stream trailer, a well house, and a storage container. Reed hopes to sell the property with buildings, but if the buyer doesn't want them, they can be moved to lessen the sale price. Tools and equipment for homesteading could also be included. The asking price for everything would be $75,000; $30,000 down and a land contract at 3% to 5% interest, depending on length of contract. Contact: Joshua Reed, 715-279-2951, ancestralseeds@gmail.com.

◆ Conrad Christiansen has for rent 25 tillable acres of farmland in ***western Wisconsin's Pierce County***. He is seeking a renter who practices sustainable, regenerative farming and utilizes conservation practices. The land is rolling, overlooks the Mississippi River Valley, and has not been sprayed for several years. No house is available; the rental rate is negotiable. Contact: Conrad Christiansen, 651-380-4061.

◆ Steven Trogstad has for rent a 210-acre certified organic farm in ***southeastern Minnesota's Olmsted County***. The land consists of 140 grazed acres, with fencing and watering systems. There is a total of 160 tillable acres, as well as 20 forest acres. The outbuildings include milking facilities and a house is available. There is an opportunity to stack systems. Contact: Steven Trogstad, 507-884-7506, tripletorganics@gmail.com.

◆ Knelly Dettinger has for sale 220 acres of certified organic farmland in ***western Wisconsin's Dunn County (near Menomonie)***. The land consists of 155 tillable acres, 30 pasture acres, and 35 forest acres. There is a house. The farm is currently operating as a small organic dairy with L-shaped 50 x 100 x 100 free stall barn and modern eight-cow milking parlor; started construction on double 10 parlor (not completed at this time); covered hay storage includes 40 x 160 pole building with insulated shop. There is a 16 x 80 trailer with an 8 x 16 greenhouse attached. The asking price is $950,000. Contact: Knelly Dettinger, 507-272-0526, timdrakemn1@gmail.com.

Seeking Farmland

◆ Marylee Kishel is seeking to purchase 10-40 acres of farmland in ***Wisconsin or Minnesota***. Land with 2-10 acres of pasture, 3-10 acres tillable, and 2-10 forest acres is preferred. Land that has not been sprayed for several years is preferred, and a pond, stream, river, or spring on the property would be good. No house is required. Contact: Marylee Kishel, 608-359-8770, kishml@yahoo.com.

◆ Simon Schneider is seeking to purchase 10-40 tillable acres of farmland in ***Minnesota or Wisconsin***. Schneider is particularly interested in buying land in the Lake Superior region, but is open to other options. No house is required. He is open to working with someone who wants to transition their land to a younger generation. Contact: Simon Schneider, 715-255-0665, simian@live.com.

◆ Christopher Brenna is seeking to rent .15 to .5 acres of farmland in s***outheastern Minnesota's Olmsted County*** for a small-scale windrow compost pile. It needs to be agriculturally-zoned land as close to Rochester as possible; access to a front-end loader a plus; no house is required. Contact: Christopher Brenna, 612-242-1434, cjbrenna@gmail.com.

◆ David Dempster is seeking to rent 5 tillable acres of farmland in ***Minnesota***. Land that has not been sprayed for several years is preferred; no house is required. Contact: David Dempster, 507-993-4090, dcdempster74@gmail.com.

◆ Saeng Her is seeking to rent 4 acres of tillable farmland in the ***Twin Cities, Minn., region***. Land that has not been sprayed for several years is preferred; no house is required. Contact: Saeng Her, 763-913-0434, samabo_h@yahoo.com.

◆ Jeremy Bundgard is interested in purchasing farmland or working with a retiring farmer who is interested in transitioning to the younger generation. He is a military veteran and grew up on a farm in Kansas and currently is farming organically on a small-scale on rented land for a CSA. He would like to be within ***one-hour of the Twin Cities in either Minnesota or Wisconsin***. Bundgard has a family with young kids. A house would be required and outbuildings preferred. Contact: Jeremy Bundgard, 651-707-5389, jeremy.bundgard@outlook.com.

Reviews

Wilding
Returning Nature to Our Farm

By Isabella Tree
301 pages
New York Review Books
www.nyrb.com

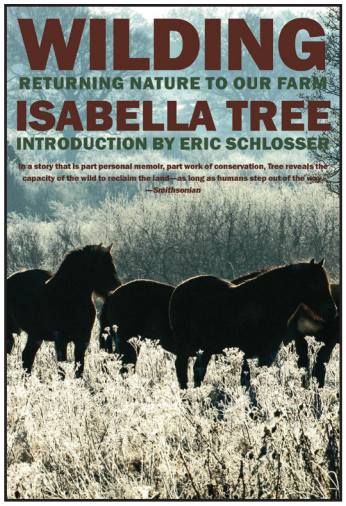
Reviewed by Dana Jackson

In *Wilding: Returning Nature to Our Farm* — a combination personal memoir and well-researched ecological study — English writer Isabella Tree expands her readers' understanding about the relationships between farming and the natural world. While watching wild plants and animals reclaim fields that had been intensively cropped with chemicals and big equipment, she gained a Leopold-level ecological understanding ("By land is meant all of the things on, over, or in the earth…the land is one organism.") that undergirds her conclusions about the value of nature, even when the land must produce food.

The natural world disappeared in England after World War II, including iconic oak trees and hedge rows, turtle doves and skylarks, birds mentioned in literature for centuries. Drastic changes occurred on the landscape because the country never again wanted to face starvation as it had during the war when most food was imported. The government subsidized farmers to plow as much land as possible, including traditional grazing land, and continuously crop it with big machinery, chemical fertilizers, and pesticides. Later, the European Union subsidized England's large industrial farms, which mostly produced livestock feed. But then large-scale farms on other continents also began to compete on the world market, resulting in surpluses, low prices, and bankruptcies.

The farm owned by Charles Burrell and his wife Isabella Tree on the 3,500-acre Knepp estate in Sussex, England, was losing money when Charles inherited it from his grandparents in 1987. It made a profit in only two years out of 15, and by 2000 they were in debt to the tune of 1.5 million British pounds (about $1.9 million). Charles aimed to make it profitable through the "efficiencies" of bigger and better. He replaced the old-breed Red Poll dairy cattle with high-producing Holsteins and Friesians, upgraded the milking parlors, put in centralized, modern feeding systems, and bought extra milk quotas, which required cultivating more acres of the poor Sussex clay soil and using more chemicals to grow more silage. It was all to no avail. Burrell and Tree ended up selling all their machinery and dairy cattle.

What they allowed the land itself to do after that resulted in a resurgence of biodiversity, different sources of income, and a new understanding of the value of nature. First, they began by restoring the Repton Deer Park — a 350-acre parcel around their residence that includes a castle designed and built between 1809 and 1812. They cropped the former fields aggressively to suck up excessive nutrients and "carted the vegetation off the land." Then they collected rare grass and wildflower seeds from tiny remnants of unplowed grassland meadows and planted them under the ancient English oak trees, one seven-feet in circumference and 550 years old.



A tree expert told them that plowing the soil around and under the big oaks with heavy equipment had disturbed the roots and underground network of mycorrhizae fungi that supply trees with nutrients. English oaks historically thrived in open grassland or pastures, but industrial scale farming has caused them to disappear, along with the habitats they provided for countless species of lichens, fungi, insects, bats, and birds, and the acorns which fed birds, squirrels, mice, deer, and wild boar. (The word "acre," a measure of land, is related to aecer, the Old English word for "acorn," or an area of oak trees.)

After restoring Repton Park, the owners divided the estate into three large blocks and allowed it to revegetate itself with native plants. They removed internal fences and fenced the perimeter of each block, then gradually introduced three kinds of deer — Roe, Fallow, and Red — plus Longhorn cattle and Exmoor ponies, prototypes for the auroch (wild ox) and tarpan (wild horse), large prehistoric browsing/grazing animals once native to Sussex. Then they added Tamworth hogs in place of wild boar.

The process was influenced by Dutch ecologist Franz Vera, author of *Grazing Ecology and Forest History*, who wrote that "animals are drivers of habitat creation, the impetus behind biodiversity." Contrary to accepted ideas about plant succession in England, Vera maintained that the "forest primeval" before human habitation was not a closed canopy, but open wood pasture, a fitting habitat for prehistoric grazers/browsers and for the deer, sheep, and cattle of medieval England.

Grazing, browsing, trampling, digging and distributing seeds in manure drove vegetative transformation over the next 16 years, and in the rainy Sussex climate, the Knepp fields gradually became grassy scrub, a mixture of hawthorn, blackthorn, dog rose, bramble, and expanding hedge. Acorns planted by jays and protected by thorny vegetation produced young oak trees. The owners were excited that this vegetative diversity created habitat for small mammals and birds not seen for decades at Knepp, such as turtle doves, nightingales, and skylarks. Mayflies, moths, dragonflies, the rare purple emperor butterfly, bees, and wasps showed up. Then dung beetles and earthworms turned their attention to the soil. In fact, a chapter entitled "Rewilding the Soil" is an extended essay on soil health, with the conclusion: "The great concerns of our time — climate change, natural resources, food production, water control and conservation, and human health —all boil down to the condition of the soil."

Predators of the large herbivores were still missing, but introducing lynx and wolves was out of the question since people and their dogs still used the traditional public walking paths on the estate. So, as human predators, Burrell and Tree culled the herds of Longhorn cattle and Tamworth pigs and sold the meat, which developed into an important income. By 2019, cash flow from renting farm buildings to commercial tenants, operating the Knepp Wildland campsite and safari business, and grants from private and government agencies, as well as meat sales, surpassed potential traditional farming income.

Although Knepp was receiving awards for creating habitat that attracted diverse wildlife species, West Sussex locals deemed it "immoral" that they allowed scrub and weeds (native plants) to replace farm fields. People believed that agricultural land should be kept in production to "feed the world," even though surpluses and low prices were driving farms out of business.

Projects to rewild agricultural land in the U. S. have not been popular either. A proposal in 1987 by geographers Frank and Deborah Popper to turn marginal farmland on the Great Plains into a "Buffalo Com-

Wilding, *see page 29…*

…Wilding, *from page 28*

mons" grassland greatly angered regional residents. The American Prairie Foundation is currently facing vigorous opposition to purchases of private land in northeastern Montana to create a large prairie grassland reserve managed for bison and other wildlife. And, in February 2020, commissioners in Lac qui Parle County, Minn., blocked a farmer from selling 80 acres of unproductive land (originally wet prairie) to the Minnesota Department of Natural Resources because "Conservation had removed too much county land from agriculture," even though the state owns only 4% of the county, and an additional 2% is in federal ownership. USDA crop insurance payments to farmers also keep marginal land in production.

It's clear we can't convert all our farms to nature to the extent Tree and Burrell did, but *Rewilding* provides some exciting inspiration, joining the ranks of other books that show how we can "rewild" farmland to various degrees and in ways that balance food production and ecological health.

Rewilding is going to be placed on my bookshelf next to *A Sand County Almanac*, *New Roots for Agriculture*, *Meeting the Expectations of the Land*, *Farming in Nature's Image*, *The Farm as Natural Habitat*, *Farming and the Fate of Wild Nature*, and *Wildly Successful Farming*. ❐

Former Land Stewardship Project associate director Dana Jackson is on the Advisory Board of the Wild Farm Alliance.

Grocery Story
The Promise of Food Co-ops in the Age of Grocery Giants

By Jon Steinman
304 pages
New Society Publishers
www.newsociety.com

Reviewed by Dale Hadler

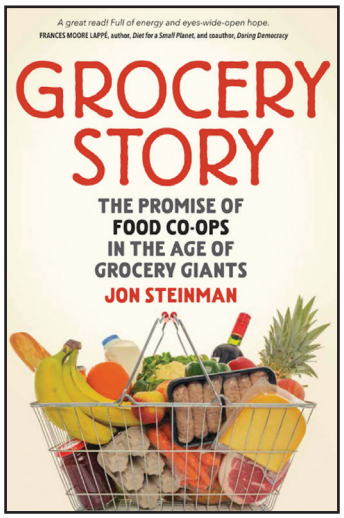
Grocery Story: The Promise of Food Co-ops in the Age of Grocery Giants is an account of the rise of large grocery chains in Canada, the United States, and to a lesser extent, the United Kingdom, as well as a history of the co-op movement in these countries. It's also a book about the way these two food retail systems interact with each other and the communities they impact.

The author, Canadian Jon Steinman, makes it clear where his loyalties lie. He describes a number of co-ops across North America and draws on his experience as a board member of the Kootenay Co-op in Nelson, British Columbia. Overall, he depicts co-ops as positive community resources due to their capacity to develop jobs, provide local markets for producers, and serve as education centers.

In contrast, Steinman argues, large chain grocers export wealth out of local communities to their corporate headquarters.

The author goes into great detail describing the rise of food giants and the many federal, state, provincial, and local efforts to minimize their power. He then describes how the weakening of these laws has led to the rise of such food giants as Walmart.

Steinman links the power of these giants to the creation of urban and rural food deserts, as well as the farm crisis, both today and in the 1980s. He cites extensive research showing that the rise of the big grocery players has led to a smaller portion of the food dollar being available to farmers, thus contributing to the farm income crisis in Canada and the United States. Food truly connects farmers and consumers, and when it comes to concentration in the grocery business, that link is not always positive.



"Not surprisingly, a direct correlation can be found between the concentration of power among grocery giants and the prices we pay for food," writes Steinman. "Similarly, as mergers among grocery retailers increase, prices paid to farmers decrease."

This is particularly relevant these days, with the coronavirus pandemic revealing how vulnerable we all are — consumers and farmers alike — to food chains controlled by a handful of giants.

Steinman sees co-ops that emphasize buying from local producers as one remedy to the farm price crisis, as well as a possible solution to the food desert problem. A locally based cooperative is more likely to stay committed to a low-income community than a grocery chain that has long-distance profit obligations due to stockholders and management considerations.

The author also addresses threats to the co-op movement such as under capitalization, competition from chains such as Amazon-owned Whole Foods, and a hazy definition of "locally grown." He sees several remedies to these threats, such as engaged and informed member-owners, responsive boards and management, and greater community outreach to educate the public about the benefits of co-ops. In spite of these challenges, he's positive about the future of the co-op. People want more control over how their food dollar is spent, and this is one way to grab hold of a decision that we all must make on a regular basis.

Writes Steinman, "Rather than look outside of ourselves for the leader, the most solid security to be found in the future of our grocery stores is entirely in our hands." ❐

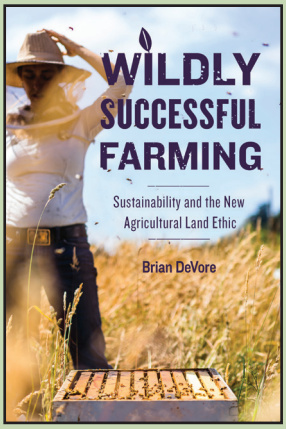
Land Stewardship Project member Dale Hadler lives in Winona in southeastern Minnesota.

Wildly Successful Farming Out in Paperback

Wildly Successful Farming: Sustainability and the New Agricultural Land Ethic has been issued as a paperback by the University of Wisconsin Press.

Written by *Land Stewardship Letter* editor Brian DeVore, the book, which was originally released as a hardcover in the fall of 2018, tells the stories of farmers 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 farmer-members are featured in *Wildly Successful Farming*.

For information, see www.wildlysuccessfulfarming.com or call 1-800-621-2736.



LAND STEWARDSHIP PROJECT

Membership Update

Thanks to Our Breakfast Sponsors

The 15th Annual Land Stewardship Project Family Farm Breakfast at the Capitol, scheduled for March 31, was canceled due to the coronavirus pandemic. However, before the cancelation, several businesses and organizations generously chose to support this event and our work with an advertisement in the official breakfast program. LSP would like to take the opportunity to thank them for their support, and we ask that you support them in turn. To view this year's breakfast ad book and all the local businesses and organizations committed to supporting LSP's work, see https://bit.ly/39Ws3Z4. Thanks to:

- A Couple of Gurus
- Albert Lea Seed House
- Baker's Field Flour and Bread
- Birchwood Cafe
- Blue Heron Coffee House
- Bluff Country Co-op
- Citizens State Bank Waverly
- Clancey's Meat Market
- Common Roots Cafe
- Cook County Whole Foods Co-op
- Coop Credit Union
- CTUL
- Dangerous Man Brewing Company
- Eastside Food Co-op

- Falk's Seed Farm
- Farmers' Legal Action Group, Inc.
- Foresight Bank
- Institute for Agriculture and Trade Policy
- ISAIAH
- Izaak Walton League
- Lakewinds Food Co-op
- Lorentz Meats and Deli
- May Day Cafe
- Minnesota Center for Environmental Advocacy
- Minnesota Environmental Partnership
- Minnesota Farmers Union
- Minnesota Nurses Association
- Mississippi Market Natural Foods Co-op
- Nettle Valley Farm
- Niagara Cave
- Niman Ranch
- Northern Sun
- Organic Valley
- Parks & Trails Council of Minnesota
- Pesticide Action Network North America
- Prairie Moon Nursery
- SEIU Healthcare
- Seven Corners Printing
- Seward Co-op Grocery and Deli
- Sprowt Labs
- St. Peter Food Co-op
- Sustainable Farming Association of Minn.
- TakeAction
- The Book House in Dinky Town
- The Good Acre
- Thousand Hills Cattle Company
- Velasquez Family Coffee
- Voices for Racial Justice

In Memory & in Honor…

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

In Memory of Paul Holt
- Linda Holt

In Memory of Bruce Miller
- Joan & Nick Olson

In Memory of Laureen Rupprecht
- Evin & Kiley Lantz

In Memory of Dick Gruenhagen
- Loretta & Martin Jaus

In Memory of Rachael, Diana, & Jeff
- Kathleen & David Sekhon

In Memory of Mary & Leonard Makarewicz
- Matthew & Jane Makarewicz

In Honor of Mark Schultz
- David Nocenti

In Honor of Jan Newman
- Betsy Goodman

In Honor of Joe & Chrissy Christenson
- Kathy & Dave Christenson

In Honor of Donald Simpson
- Anonymous

In Honor of Linda Ingrens
- Patricia Maffei

In Honor of Ron & Penny Forst
- Cody Forst

In Honor of Brett & Lorie Kissela Family
- Marcia Allard

In Honor of Organic Farmers on Hoosier Ridge, Watopa Township, Minn.
- Jessie Pinney

In Honor of the Klitz Family — 12 Generations & Counting of Family Farmers
- Anonymous

In Honor of Spencer Snyder
- Leslie Martin
- Robin Goeberg

In memory of Mark & Kate McManus
- Richard & Marjorie McManus

To donate to LSP in the name of someone, contact Mike McMahon at 612-722-6377 or mcmahon@landstewardshipproject.org. Donations can be made online at www.landstewardshipproject.org/home/donate.

Support LSP in Your Workplace

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

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

MINNESOTA Environmental Fund

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.

Volunteer for LSP

Volunteers are key to the Land Stewardship Project's work. If you would 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. ❐

Making the Call

During a recent Land Stewardship Project meeting in Preston, Minn., participants contacted members of Congress and encouraged them to support policies that will help farmers deal with the current crisis in agriculture.

Canton, Minn., Dairy farmer Bonnie Haugen, shown here with Mark Bauman of Delano, Minn., had some advice for making your voice heard by policymakers: "When I first started calling lawmakers, I would take my flip phone and go to one of my favorite spots on the farm because I could get confidence when I was looking at *my* hills, *my* cows, *my* grass. And I'm immediately reminded of why it was important that I call to support a certain conservation program. If you need to, find your own space."

Membership Questions?

If you have questions about the status of your Land Stewardship Project membership, give us a call at 612-722-6377, or e-mail Clara Sanders Marcus at cmarcus@landstewardshipproject.org. To renew, mail in the envelope included with this *Land Stewardship Letter*, or see www.landstewardshipproject.org/home/donate. ❐

Get Current With *LIVE WIRE*

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

Land Stewardship Talk

The Land Stewardship Project's award winning *Ear to the Ground* podcast features over 230 episodes. Check them out at www.landstewardshipproject.org/posts/podcast. *Ear to the Ground* is also available on iTunes, Stitcher, and Spotify. ❐

LSP Fact Sheets

Want a quick primer on everything from regenerative farming techniques and the negative repercussions of factory farming to how to write a letter-to-the-editor and make sure a lease agreement meets your stewardship goals?

Check out LSP's collection of fact sheets at www.landstewardshipproject.org/about/libraryresources/factsheets. For information on obtaining paper copies, contact Brian DeVore at 612-722-6377 or bdevore@landstewardshipproject.org. ❐

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STEWARDSHIP CALENDAR

➔ *JULY 23* — **Land Stewardship Project 18th Annual Potluck Cookout**, 5:30 p.m.-8:30 p.m., LSP Minneapolis office. Contact: Elizabeth Makarewicz, LSP, 612-722-6377, emakarewicz@landstewardshipproject.org

➔ *AUG. 1* — **Early Bird Discount Application Deadline for LSP's 2020-2021 Farm Beginnings Course** (*see below*)

➔ *SEPT. 1* — **Final Application Deadline for LSP's 2020-2021 Farm Beginnings Course** (*see below*)

➔ *LATE OCTOBER* — **LSP Farm Beginnings Classes Begin**, Red Wing, Minn. (*see below*)

➔ *JAN. 7-8* — **Minnesota Organic Conference**, Saint Cloud, Minn. Contact: www.mda.state.mn.us/environment-sustainability minnesota-organic-conference, Cassie Dahl, MDA, 651-201-6134

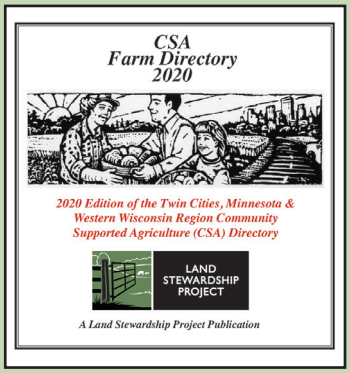
➔ *JAN. 21-23* — **Grassworks Grazing Conference**, Wisconsin Dells, Wis. Contact: www.grassworks.org, Heather Flashinski, Grassworks, 715-289-4896, grassworksheather@gmail.com

➔ *FEB. 13* — **Sustainable Farming Association of Minnesota Annual Conf.**, St. Joseph, Minn. Contact: www.sfa-mn.org, 1-844-922-5573

➔ *FEB. 25-27* — **MOSES Organic Conference**, La Crosse, Wis. Contact: www.mosesorganic.org/conference, 715-778-5775

Join a CSA Farm in 2020

During these uncertain times brought on by the coronavirus pandemic, buying a share in a Community Supported Agriculture (CSA) farm makes more sense than ever. The Land Stewardship Project's 2020 edition of the *Twin Cities, Minnesota & Western Wisconsin Region Community Supported Agriculture (CSA) Directory* lists over 40 farms that provide vegetables, as well as meat and other products, to shareholders throughout the growing season (approximately June to October). These farms have a variety of delivery and pick-up options available.



The *Directory* includes farm descriptions and contact information. It also includes tips on picking the CSA farm that's right for you.

It's at: **www.landstewardshipproject.org/stewardshipfood/csa**.

Applications Open for 2020-2021 LSP Farm Beginnings Course

The Land Stewardship Project's Minnesota-Wisconsin region Farm Beginnings Program is accepting applications for its 2020-2021 class session. The location will be in Red Wing in southeastern Minnesota.

The Farm Beginnings course is marking its second decade of providing firsthand training in low-cost, sustainable methods of farm management.

Over the years, more than 860 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 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 late October 2020, run until March 2021, followed by an on-farm component that includes farm tours and skills sessions.

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 (www.landstewardshipproject.org/morefarmers/beginningfarmertaxcredit).

For application materials or more information, see www.farmbeginnings.org. You can also get details from the Land Stewardship Project's Annelie Livingston-Anderson at 507-523-3366 or annelie@landstewardshipproject.org. ❐