

The Land Stewardship



LAND
STEWARDSHIP
PROJECT

36 Years of Keeping the Land & People Together

Letter

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Photo by Ilisa Ailts Photography, www.ilisaailts.com

Get rooted in the land by joining a Community Supported Agriculture farm in 2018 (page 25).



- *Climate Change's Threat to Sustainability* —
- *Crop Insurance: A Torn Safety Net* —
- *Creating a Positive Future for Rural Communities* —
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The *Land Stewardship Letter* is published by the Land Stewardship Project, a private, nonprofit organization. The Land Stewardship Project's mission is to foster an ethic of stewardship for farmland, to promote sustainable agriculture and to develop healthy communities. Members of the Land Stewardship Project receive this publication as a benefit. Annual membership dues are \$35.

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Climate Change, Agriculture & Energy

Editor's Note: Periodically, the Land Stewardship Project's board of directors develops policy statements on issues of particular relevance. Working with LSP science and special projects leader George Boody, the board recently approved a policy statement on climate change, agriculture and energy, which we have included here. For more information, contact Boody at 612-722-6377 or gboody@landstewardshipproject.org.

To foster an ethic of stewardship for America's farmland, the Land Stewardship Project advances regenerative farming and food systems that protect soil, water and wildlife resources; promote fairness and economic opportunities for family farms and rural communities; and provide safe and healthful food for all people. However, dangerously high levels of atmospheric carbon dioxide and other greenhouse gases, which are continuing to rise, seriously threaten future progress.

We have reviewed published literature in LSP's "Climate Change, Farming, Food and Energy" white paper. That white paper serves as background for this statement. Additionally, in October 2017 LSP published *Soil Health, Water and Climate Change: A Pocket Guide to What You Need to Know*, which connects real-life farming systems and practices that build soil health with mitigating climate change and improving water quality. From discussions with LSP members and our literature review, we conclude that farmers and society as a whole can and must act to limit the damaging impacts of climate change. There are real solutions that regenerative agriculture offers, and implementing them will create positive opportunities for farmers and rural communities.

Whereas:

- Farmers readily acknowledge that weather is changing;
- Fossil fuel use, farming without living roots in the ground year-round, and excessive tillage all accelerate buildup of carbon dioxide and other greenhouse gases in the atmosphere, resulting in climate change;
- Risks from increased extreme weather events, temperature and changes in humidity that result from climate change are being seen in the Upper Midwest and across the globe, with impacts that include increased erosion from more in-

tense storms, frequent droughts, flooding of low lying communities, dangerously severe storms, outbreaks of diseases and pests, and loss of species diversity;

→ In addition to directly impacting farm families in the Upper Midwest, climate change will disproportionately affect vulnerable people without the financial means to protect themselves, people of color, and indigenous peoples in rural and urban areas of the region, the nation and beyond;

→ Our food system is fragile and can only be as stable as the earth's ecosystems, our climate and the human societies on which we are interdependent;

→ Climate change and inequity both result from economic and political systems that reward excessive corporate profits enabled by government policies that make the public pay for the social and ecological costs, while economic gains are privatized; and

→ Innovative farmers are showing that not only can they reduce carbon emissions and remove excess carbon dioxide from the atmosphere, but with those same soil health strategies they can build into their farm system resilience to the extreme weather and other disruptions from climate change. Continuous living cover is required from diverse plants above the ground and their well-developed, year-round living root structures below ground, along with decreased tillage.

Soil Health & Speaking Out

We consequently understand that improved soil health is vital for dealing with climate change. Soil health regenerates the biological activity in the soil and increases organic matter, leading to deeper carbon storage in the soil. Systems that build soil health can also reduce greenhouse gas emis-

sions from agriculture. Co-benefits are just as important and include healthful food, more wildlife and pollinator habitat, cleaner water and diversified income sources for farmers if markets are developed.

However, soil health is not a silver bullet. Businesses, cities and governments must do more to reduce reliance on fossil fuels by adapting low carbon energy use through conservation, improved efficiency and renewable energy. These efforts have begun, but much more is needed.

To create climate-friendly forms of agriculture and energy production, fundamental structural changes are needed in policy and markets, along with practical changes on the land. One of those changes is true cost accounting that includes the associated costs of production, such as greenhouse gas emissions, environmental degradation and social injustice, that are now born by the public.

Therefore, we urge LSP's programs to directly address the issue of climate change, its causes, and what can and must be done to stabilize our climate, adapt to impacts, store carbon through soil health and substantially reduce societal greenhouse gas emissions. We must also speak out about required structural changes in our economic systems which are needed to reduce greenhouse gas emissions. These same systems must also be restructured to provide economic fairness and racial equity.

We urge LSP to speak out emphatically, in ways we have not previously done. We must use this opportunity to advance food and farming systems in society that provide solutions to the escalating costs of climate change and that address the unfairness of our current system, thereby helping to lead the way towards a society based on stewardship, sustainability, racial equity and a shared prosperity. □

On the Web

This policy statement is available at <https://landstewardshipproject.org/lsp-boardstatements>. There, you will find a link to the "Climate Change, Farming, Food and Energy" white paper, which serves as a background document for this statement.

Give it a Listen

On **episode 191** of the Land Stewardship Project's *Ear to the Ground* podcast, LSP's George Boody talks about climate change and the role agriculture can play in sequestering carbon: <https://landstewardshipproject.org/posts/podcast/978>.

Farmers Talk Climate Change

For more on how farmers are dealing with climate change, see page 14.

Myth Buster Box

An Ongoing Series on Ag Myths & Ways of Deflating Them

→ **Myth: Working Lands Conservation Programs Don't Pay**

→ **Fact:**

Almost since their inception, federal farm conservation programs have served a double purpose. For example, soon after the U.S. Supreme Court ruled an early form of crop and livestock production control—the Agricultural Adjustment Act—unconstitutional, then-secretary of agriculture Henry Wallace pushed through the Soil Conservation and Domestic Allotment Act of 1936 as a way to get around the decision. Through this act, farmers were paid to replace soil-depleting crops with grasses and legumes. Since such perennial plant systems prevent erosion and build soil biology, one could call this a conservation policy. But it was also a blatant attempt to prop up crop prices by limiting production. It was an effective way to address two catastrophes American farmers were grappling with during the 1930s: an economic depression and the Dust Bowl.

Since then, federal programs that are ostensibly developed to protect soil, water and wildlife habitat have consistently served double-duty as ways to control commodity production, and thus support sagging prices. Sometimes it's difficult to tell where conservation begins and supply suppression ends when it comes to implementation of such programs. For example, when the Conservation Reserve Program (CRP) was launched in 1986, it was a way to pay farmers to “retire” highly erodible acres. It was no coincidence that this land retirement program came about at a time when overproduction of corn and other commodity crops had helped tank the agricultural economy.

The Conservation Stewardship Program is a new twist on agricultural policy. The precursor to this program, called the Conservation Security Program, was the brainchild of the late Minnesota farmer Dave Serfling and other members of the Land Stewardship Project's Federal Policy Committee; it was launched by the 2002 Farm Bill. CSP, as it's called, pays farmers to put in place practices on working farmland that can help protect water quality and build soil health, while producing habitat for pollinators and other forms of wildlife. Practices that get rewarded under CSP include managed rotational grazing, integrated pest management, cover-cropping and systems that in general

reduce reliance on chemical pesticides and fertilizers. Farmers enrolled in five-year CSP contracts are rewarded for actively managing current conservation practices, as well as implementing additional ones.

CSP, along with the Environmental Quality Incentives Program (called EQIP, this latter program provides cost-sharing to farmers who want to, for example, set up rotational grazing systems), are bright spots of diversity in an otherwise monocultural farm policy landscape.

And despite problems with red tape and complaints that the program too often emphasizes payment for practices that a farmer promises to put in place rather than current stewardship methods, CSP has proven to be very popular with farmers, and is now the USDA's largest conservation program. Currently, 72 million acres across the country, representing roughly 8 percent of all agricultural land, is enrolled in the program. In recent years, government officials have had to turn away as many as 75 percent of qualified candidates because of lack of funding resources.

But because programs like CSP and EQIP are used on working farmland, in some ways they have a hard time being justified in the bigger economic picture. Usually, cover crops are planted in conjunction with—not in place of—row crops like corn and soybeans. Managed rotational grazing systems are often established on pastures that already exist. In short, these are not the kind of programs that can be used to manipulate grain supplies, and thus grain prices.

That may be one reason CSP is so vulnerable to the budgetary chopping block. The 2014 Farm Bill reduced CSP's annual enrollment from 12.8 million acres to 10 million acres, which resulted in thousands of qualified farmers being turned away from the program. There have been repeated attempts on the part of Congress to gut the CSP budget completely. As Congressional agriculture leaders begin drafting the 2018 Farm Bill, CSP may face its biggest threat yet. There are indications it could be severely cut or even eliminated.

Undervaluing a conservation program's worth based on its inability to manipulate markets is shortsighted, and reinforces the myth that there's nothing wrong with our farm economy that a higher price for corn won't fix. It goes against what good farm policy should be about: promoting diversity—agronomically

and economically.

And it turns out a program like CSP produces numerous economic benefits. For example, there's the millions of dollars it sends straight into the pocketbooks of farmers—farmers who are managing working agricultural acres that remain on the tax rolls. In 2016, LSP and other members of the National Sustainable Agriculture Coalition successfully advocated for the minimum CSP payment to be set at \$1,500 per year for all successful applicants. That helps make going through the application process worthwhile for small farmers who may be raising specialty products or produce. Under the 2017 sign-up, more than 800 contracts included the minimum payment option.

But getting too focused on the direct economic impact of an initiative like CSP ignores why it was created in the first place: to improve the environment. Ecological services produced by sustainable farming practices are often hard to gauge, but we do know that practices supported by CSP—managed rotational grazing and cover cropping, for example—produce significant benefits in terms of greenhouse gas sequestration and cleaner water. Pollution is costly, so indirectly, that's money in the bank.

The journal *Environmental Research Letters* published a study in 2015 showing that nitrogen pollution imposes a median annual cost on the U.S. of \$210 billion per year in the form of massive algal blooms, fish kills and contaminated drinking water, among other problems. Agriculture contributes 75 percent of that nitrogen pollution. In the European Union, it's estimated damages from agricultural nitrogen pollution exceed economic benefits of increased agricultural production by up to fourfold. As LSP's publication *Soil Health, Water and Climate Change* (see page 32) reports, cover cropping and diverse rotations have proven to be extremely effective at reducing the “leakage” of nitrogen and other pollutants into water. Therefore, any government program that supports such techniques is money well spent. As economist Erik Lichtenberg wrote in an analysis of farm conservation programs, “There are clear economic efficiency grounds for policies that address

Myth Buster, see page 5...

...Myth Buster, from page 4

environmental externalities in agriculture.”

But working lands farm conservation programs can go beyond cleaning up a local lake, river or aquifer. They can also be a long-term investment in the very people that will be putting in place good stewardship practices for decades to come. The 2008 and 2014 Farm Bills required that 5 percent of enrolled CSP acres be reserved for beginning farmers and ranchers, and another 5 percent for socially disadvantaged producers. The percentage of total CSP acres controlled by these groups of farmers has been on an upward trend during the past half-dozen years. In 2017, 13 percent of CSP acres were enrolled by beginning farmers and ranchers, and 15 percent socially disadvantaged producers. As surveys of graduates of LSP’s Farm Beginnings course show, it’s that younger generation that will be more likely to adopt and maintain innovative systems that are good for the environment.

Given all those benefits, CSP should be,

if anything, expanded and strengthened. That’s why in this next Farm Bill LSP is calling for a bigger CSP, as well as improvements such as putting greater value on “existing” conservation practices. The program could also be made accessible to more farmers by closing loopholes and enforcing the \$40,000 annual contract limit. The point of a working lands initiative like the Conservation Stewardship Program is, as its name implies, to “conserve” and “steward” the environment. Sometimes you can’t put a financial price tag on such benefits.

More Information

- The NSAC report, “Analysis of CSP Enrollment in FY 2017” is at <http://sustainableagriculture.net>.

- “Cost of reactive nitrogen release from human activities to the environment in the United States” is in the Feb. 17, 2015, edition of *Environmental Research Letters*, <http://iopscience.iop.org>.

- “The Farm Bill, Conservation, and the Environment,” by Erik Lichtenberg is at www.aei.org/publication/the-farm-bill-conservation-and-the-environment.

aei.org/publication/the-farm-bill-conservation-and-the-environment.

- For more on LSP’s work related to federal farm policy, see pages 12-13.

More Myth Busters

More Land Stewardship Project *Myth Busters* on a variety of topics are available at <https://landstewardshipproject.org/about/libraryresources/mythbusters>. Paper copies are available by contacting Brian DeVore at 612-722-6377 or bdevore@landstewardshipproject.org.

Give it a Listen

On episode 204 of the Land Stewardship Project’s *Ear to the Ground* podcast, LSP executive director Mark Schultz talks about how members “working from the ground up” helped create the Conservation Stewardship Program: <https://landstewardshipproject.org/posts/podcast/1050>.



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LSP News

LSP Staff Changes

Steve Ewest has wrapped up five years of doing geographic information systems (GIS) work for the Land Stewardship Project. Ewest joined LSP’s staff in 2012 after serving an internship with the organization. He worked with the Chippewa 10%

Project, a partnership involving LSP and the Chippewa River Watershed Project, among others. The Chippewa 10% Project is working with farmers and other landowners in west-central Minnesota to develop and support profitable farming systems that keep the land covered in plants year-round, protecting water quality and building soil health.

While at LSP, Ewest utilized sophisticated technology to develop mapping tools that help farmers and other land managers pinpoint parts of the landscape most prone to runoff and erosion (*see page 17*).



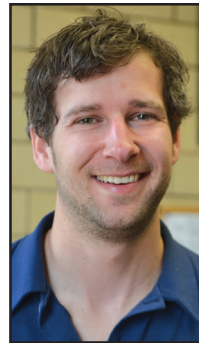
Steve Ewest

Mark Rusch has departed as LSP’s Individual Giving and Membership Program membership assistant. Over the past year-and-a-half, Rusch helped build LSP’s membership significantly by managing the organization’s membership records, fielding member inquiries and helping with public outreach and events such as the Twin Cities Summer Potluck Cookout.

Emily Minge is serving an internship with LSP’s Policy and Organizing Program. Minge has a bachelor of arts degree in international studies, medical anthropology and global health from the University of Washington. Minge has also worked on an organic farm in India, as an organizer for the Minnesota Fair Trade Coalition and as an intern for the Washington Fair Trade Coalition.

During her LSP internship, Minge organized the 13th Annual Family Farm Breakfast at the Capitol.

Elizabeth Makarewicz has joined LSP’s

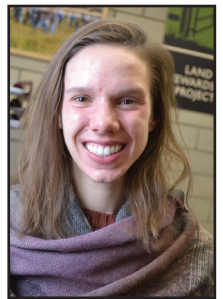


Mark Rusch

staff as an Individual Giving and Membership Program membership assistant. She has a bachelor of arts degree in anthropology and Spanish from Beloit College, and has worked at Stone’s Throw Urban Farm, Prairie Drifter Farm and Good Earth Food Co-op. Makarewicz is a graduate of LSP’s Farm Beginnings course and participated in the organization’s first Racial Justice Cohort. Through FoodCorps/AmeriCorps, she worked with the Northeast Iowa Food and Fitness Initiative.

In her position at LSP, Makarewicz is helping grow LSP’s membership through recruitment, annual membership renewals and telephone bank drives. She is also working on managing membership records and assisting with community outreach.

Makarewicz can be contacted at emakarewicz@landstewardshipproject.org or 612-722-6377. □



Emily Minge



Elizabeth Makarewicz

Crop Insurance: A Torn Safety Net

New LSP Report Calls for Reforms to Farm Bill's Biggest Ag Program

The nation's biggest farm "safety net" has evolved into a program that harms family farms, the land and rural communities, while bolstering profits for major insurance companies, including one headquartered in Minnesota, said farmers and Supplemental Nutrition Assistance Program (SNAP) recipients during a press conference held March 12 in front of the headquarters of NAU Country Insurance in Ramsey, Minn. The group had gathered to announce the findings of a Land Stewardship Project special report, "Crop Insurance: A Torn Safety Net—Why the Farm Bill's Biggest Program is a Boon to Corporations and a Bust for Family Farmers and the Land." NAU, like many insurance companies, has made billions of dollars in profits off federal crop insurance, even as rural economies suffer.

While federally subsidized crop insurance is an important safety net for farmers, the report used public documents and interviews with farmers to show that the program is broken and that it needs reforms such as placing caps on how much of a crop insurance premium subsidy each farm can receive from the government.

"Crop insurance is the only Farm Bill program not subject to any limits on the amount of support any one operator can receive. It is uncapped," said Randy Krzmarzick, who raises corn and soybeans near Sleepy Eye, Minn. "It gives the most aggressive farm business operators access to more financial resources when renting or buying land, putting beginning farmers or small- and mid-sized diversified farms at a competitive disadvantage. We need limits."

Federal crop insurance was started in 1938 as a way to prevent U.S. farmers from being wiped out by weather disasters. However, as a result of lobbying on the part of the insurance industry and commodity groups, in recent years it has become a program that in fact puts family farmers at a competitive disadvantage while incentivizing agricultural practices that erode the soil and cause water pollution, according to the LSP report.

Budget-wise, crop insurance is now the biggest agricultural program in the federal

Farm Bill. Needed reforms in the 2018 Farm Bill would help free up public funds for other programs like conservation and nutrition assistance, concludes the LSP report.

Read the Report

To download "Crop Insurance: A Torn Safety Net—Why the Farm Bill's Biggest Program is a Boon to Corporations and a Bust for Family Farmers and the Land," see <https://landstewardshipproject.org/organizingforchange/cropinsurance>. For more information, contact LSP organizer Ben Anderson at 612-722-6377 or banderson@landstewardshipproject.org.

"They write laws to benefit corporations, even though the farmers are the ones who make the food," said Deborah Howze, who lives in Minneapolis and participates in SNAP. "And they're slashing SNAP benefits for poor people, things people rely on. I support farmers. We want to feed our families good too, not just soda pop and potato chips."

NAU Country Insurance is one of the 15 authorized insurance companies that can sell federally subsidized crop insurance. NAU, and its parent company, Australia-based QBE, have been vocal advocates for resisting reform of crop insurance. Minnesota politicians have been top recipients of QBE campaign donations.

"Do politicians work for family farmers and people, or do they work for agribusiness and insurance companies?" asked Franklin, Minn., dairy farmer James Kanne. □

Billion-Dollar Boondoggle

During the press conference at NAU Country Insurance March 12 (bottom photo), James Kanne narrated while LSP members (left to right) Mary Sullivan, Dick Moudry and Al Kruse performed a play to demonstrate how billions of dollars is channeled to giant insurance companies through the crop insurance program, hurting family farmers and communities. Minneapolis resident Deborah Howze (right photo) described how reforms to Farm Bill programs like crop insurance could give farmers a better safety net while improving initiatives like the Supplemental Nutrition Assistance Program. (Photos by Rebecca Wasserman-Olin)



Healthcare's Uncomfortable Ride

As Healthcare Industry Resists Reform, People Pay the Price

Paul Sobocinski

The past few years have been a roller coaster when it comes to healthcare policy, both on the local and national level. Unfortunately, this is people's lives we're talking about, not an amusement ride. Such dramatic shifts in the way we provide people with what should be a basic human right—quality medical care that is affordable—have had severe negative impacts in our communities, on our farms and in our homes. The Land Stewardship Project is particularly concerned about how farmers and other rural residents attain affordable, quality healthcare.

In a 2017 University of Vermont survey of 1,062 farmers from across the country, 45 percent said they worried they would have to sell land or other assets to pay for healthcare-related costs. Seventy-three percent of the respondents said that having affordable health insurance was an “important or very important” means of reducing their business risk.

Unfortunately, as we head deep into 2018, the healthcare situation for farmers and others is looking more precarious than ever, and it's mostly because insurance companies and other players in the healthcare industry have successfully lobbied on the state and federal level to put in place policies that put profits over people.

For example, such profit-driven efforts have put at severe risk the effectiveness of one of the bright spots on the Minnesota healthcare scene: MinnesotaCare. This program covers Minnesotans on the individual market whose income is between 133 percent and 200 percent of the federal poverty level. MinnesotaCare is for working, lower-income Minnesotans—including many farmers and rural people—who have no other viable options. Through changes brought about by the federal Affordable Care Act, MinnesotaCare was recently made available to more Minnesotans.

But the federal government has announced it will not honor its previous commitment to provide Minnesota a certain level

of funding for programs like MinnesotaCare. According to the Minnesota Department of Health and Human Services, this decision will cost the state \$807 million in MinnesotaCare funding for fiscal years 2018-2021. In addition, the Minnesota Legislature has eliminated nearly \$1 billion of funding in



LSP organizer Paul Sobocinski discussed healthcare issues with farmers and other rural residents during a recent meeting in Staples, Minn. (LSP Photo)

coming years for Minnesota's Health Care Access Fund reserve. This was set up 25 years ago as a dedicated fund that pays for MinnesotaCare and Medical Assistance. It is maintained by a small 2 percent tax on healthcare providers, which the Legislature has chosen to let expire after 2019. All of this jeopardizes the financial stability of MinnesotaCare and Medicaid (healthcare funding for the very poor).

Misdirected government policy has reared its ugly head in the form of another situation called “55 clawback.” In 1993, Congress required states to recover the cost of long-term care for Medicaid recipients 55 and older by taking over their estates after their death. States were also given authority to recover from estates expenses that had been tallied up by Medicaid health expenses. But in Minnesota, recipients of Medicaid were subject to an asset test, meaning that in the eyes of the law if you qualified for Medicaid, you basically were too poor to have estates that were recoverable. However, when Minnesota opted for Medicaid expansion in 2014 under the Affordable Care Act, the income level for Medicaid—called “Medical Assistance” in Minnesota—was

raised. Suddenly, many Minnesotans became vulnerable to being subject to asset recovery. That included small farmers, which tend to be land rich, but cash poor.

As a result, we had a situation where Minnesotans who had been directed to enroll in Medical Assistance could be subject to having a lien placed on their property for purposes of medical insurance recovery. This provision took many Medical Assistance enrollees by surprise. By utilizing one of the few healthcare options available to someone in their situation, they were putting their assets at risk.

Through legislation put in place in 2016 and 2017, Minnesota lawmakers were able to clarify that the state doesn't intend to place liens on Minnesotans for the purposes of medical health insurance recovery. That's a good start. But in order to ensure the clawback provision is eliminated permanently, we will need federal legislation. LSP has sent a letter to Minnesota U.S. Representative Rick Nolan asking him to lead an effort to clarify that Minnesotans who are making use of Medical Assistance for health insurance are not subject to a lien being imposed.

Healthcare Bright Spots

We do have a few positive developments to build on as we look ahead to how we can create a more humane healthcare system. For example, 116,000 people—a new record—purchased insurance for 2018 through the MNsure insurance exchange. MNsure is a state-funded health insurance marketplace where individuals, families and small businesses can shop, compare and choose coverage that meets their needs and financial situation. Thirty percent of current MNsure enrollments are new, and on average 60 percent of MNsure enrollees qualify for a healthcare credit of \$7,000. Despite major technical glitches that plagued MNsure early on, the initiative is proving we can use insurance exchanges to provide people with significant premium assistance.

In addition, a new healthcare cooperative, 40 Square Cooperative Solutions (<https://40square.coop>), is showing signs it could be a viable option for farmers and others involved in agriculture. Launched in 2017, the cooperative enrolled more than

Healthcare, see page 8...

...Healthcare, from page 7

1,000 people for 2018. Through its health plan consortium, 40 Square offers six health insurance plans with a variety of deductibles and prescription drug benefits. This option could help farm families that don't qualify for premium assistance through MNsure.

Minnesota officials recently provided significant premium relief to farmers, small businesspeople and others whose income was above the 400 percent poverty level in the individual market. Minnesotans in this group received relief in 2017 that amounted to 25 percent of their premium costs, but unfortunately that assistance will not be available in 2018, unless the Legislature and the Governor act on this issue.

Another positive situation is that strong navigator assistance continues to be available for Minnesotans experiencing difficulty working with MNsure (see LSP's **Affordable Healthcare for All** page at <https://landstewardshipproject.org> for navigator assistance in addressing healthcare questions).

What's Next?

It seems that in Minnesota, as well as nationally, we take a few steps forward on healthcare and then several major steps back. The elections in 2016 appeared to be a vote about how many people—especially rural residents—are hurting, fed up and without hope. In healthcare, the pain of a new system and the huge increase in premiums drove many of the decisions of voters desperate for change. But change for the sake of change isn't enough. We need long-term reforms that will stop treating people like expendable participants in a carnival ride. No matter what side of the political aisle we might identify with, we need to recognize that in many cases government decisions got us into this healthcare mess, and it will take policy changes on the state and federal level to get us on the road to long-term recovery.

But before change can happen, decision makers need to hear a consistent message: it is time for a system that provides quality, affordable healthcare for everyone, no exceptions. Shouldn't we have a healthcare system that treats each person with dignity and respect, and provides for their basic needs, without regard to economic measure?

LSP's recently published "A Vision for Rural Minnesota" (see story below) document has as one of its cornerstones the

development of a high-quality healthcare system that takes care of everyone and frees us to pursue meaningful lives.

Such a vision forms a basis for sharing common ground, and we must use that common ground to change government policy. Because state and federal government plays such an integral role in our healthcare system already, we must build the kind of governing power that can give people's lives priority over corporate profits and power.

We may have fewer financial resources than big business—according to Oxfam, 82 percent of the global wealth generated in 2017 went to just 1 percent of the world's population—but we outnumber its executives and apologists in every other way. LSP's healthcare organizing work in 2018 is about reminding corporations and their political allies that there are human faces behind those numbers. Contact me to learn how you can be among the counted. □

LSP organizer Paul Sobocinksi can be contacted at sobopaul@landstewardshipproject.org or 507-342-2323. More on LSP's **Affordable Healthcare for All** campaign is at <https://landstewardshipproject.org>.

A Vision for Rural Minnesota

LSP Members Create a Statement Committed to Vibrant Rural Communities

By Jonathan Maurer-Jones

"A Vision for Rural Minnesota" was developed from input given by hundreds of Land Stewardship Project members last fall. We held five meetings across Minnesota, and members weighed in online and in response to a mail-in form included in the *Land Stewardship Letter*. In January, 25 LSP leaders took part in shaping, developing and finalizing "A Vision for Rural Minnesota."

This statement, which we are presenting on the next two pages, is designed as a tool to use in conversations with neighbors, candidates for public office, and others about our values, challenges and vision for the future of rural communities and our state. Let us know what you think, and look for more information on using this vision to raise a powerful voice in our communities. An online version is available at <https://landstewardshipproject.org>.

Values We Share

We are rural Minnesotans. We love our communities and take pride in them, and we are stewards of the land and world around us. We also acknowledge the challenges we face, in our communities and across the state. We do not see our interests or struggles as separate from those of other Minnesotans, but connected by shared values and shared goals. We are hopeful and committed to building a strong future, working together within our communities and with people across the state, both rural and urban.

→ When we think about the future we want, we start with our core values and beliefs:

- Every person has value that can't be earned or taken away. Similarly, there is inherent value in the land, water and natural world that gives us life.
- Being part of a community brings meaning and richness to our lives.
- We depend on each other and on the world around us to survive and thrive.
- We are stronger when no one is left

behind and everyone has opportunity to contribute fully. We all have something to offer.

- We care for each other, and we prioritize protecting and improving our surroundings, to leave things better for our children and grandchildren.

Challenges We Face

When we look around the countryside, we see things we know are not right, and that do not fit with the future we want for ourselves and the generations to come. We know that our concerns are connected to those of people in all parts of the state, and we know we need to work together to solve them.

→ It is hard for us to look around our rural communities and see things that go against our values:

- We see the land being degraded, rivers and lakes polluted, drinking water depleted, and extreme rains, temperatures and droughts becoming "normal."
- Huge companies controlling seeds and chemicals, buying grain and processing

Vision for MN Future, see page 9...

livestock are making large profits, while paying farmers less. This is making it harder for farmers to both succeed and take care of the land.

- High land prices drive more consolidation and block new farmers from changing the landscape.
- People in our communities are left out and left behind. We have seen before that times of economic uncertainty can fuel division, anti-immigrant sentiment, and racist acts and policies, and we see these threats again.
- Our local businesses struggle or close, while large corporations that are not invested in our communities take over, or abandon us if there is not enough profit to be made.
- Health insurance premiums and deductibles are unaffordable, while hospitals are closed and services cut in our communities.
- Young people are told that opportunity is somewhere else.

The Communities We Envision

It is clear that change is needed so that rural people and communities, and all of Minnesota, can succeed.

→ **This is the rural Minnesota we are committed to building:**

◆ Vibrant communities that are a place of belonging and opportunity for everyone.

We love living in small towns and rural areas. It should not be a sacrifice, or be viewed as one. Long-term and new residents, people of different races and from different backgrounds, young and old, all have a place in our communities. Building a strong future will take all of us working together.

◆ A countryside where the soil, water, air, and natural world are healthy.

We are close to the land in rural communities, and caretakers of the world around us that nourishes us all. The soil and landscape, lakes and streams, plants and wildlife, as well as a stable climate, are all critical, both because they sustain life and because they

deserve respect on their own. Building soil and farming sustainably are part of tackling the major challenges we face, including climate change. We must protect and improve the world around us for the future, not abuse and exploit it.

◆ Strong local economies where all can succeed.

We depend on each other, and we're



Rural residents discussed the “A Vision for Rural Minnesota” statement during a Land Stewardship Project meeting in Staples, Minn. (LSP Photo)

invested in each other's success. Rural communities are stronger with more farmers making a living on the land, and with successful local businesses that are committed to the community. We need opportunities for meaningful work with pay that allows families to flourish, along with quality housing, services and infrastructure that connect us and allow for innovation. We envision stronger connections with people who live, work and eat in urban and suburban communities to build a shared prosperity together.

◆ A farming system that cares for farmers and the land and makes healthy food available to everyone.

Minnesota is an agricultural state, where raising livestock and crops shapes the economy and our daily lives. Our health is connected to the health of the soil, the wellbeing of the land and the way we grow food. We need it to be possible for more farmers to access land, and for farmers to be able to succeed economically while caring for and healing the land. We

must prioritize small- and moderate-sized farms and invest in local and regional food systems in which healthy food is accessible for all people.

◆ A high-quality healthcare system that takes care of everyone and frees us to pursue meaningful lives.

Having the security of knowing we can easily receive needed medical care when we are sick or hurt, and that we can afford it financially, would create new freedom for all of us. Removing worries about healthcare allows people to start new businesses, engage more deeply in our communities, and pursue happiness. We need healthcare coverage that is comprehensive, life-long and not tied to a person's work. This coverage must be available at a cost that each family can truly afford. We need quality medical care to be available close to home and when we need it.

◆ Communities that grow our future by valuing families and children.

Our current actions shape what is possible for our children and grandchildren.

We want rural communities where young people can see and build a future and where families want to move. Families and children need excellent care and support throughout their lives, in our communities. This includes prenatal care, parental support, childcare, quality schools and activities for families. We need strong public schools that provide opportunity for all our kids, and access to higher education.

◆ Where people have a say and shape our own future.

We want engaged and active communities shaped by a diversity of voices. We need community leaders and elected representatives who take guidance from us, and who act courageously in the best interests of the people they serve. We are committed to building the communities and state we want to live in. □

LSP organizer Jonathan Maurer-Jones can be reached at 218-213-4008 or jmaurer-jones@landstewardshipproject.org.

Racial & Economic Justice

Good Intentions Are Not Enough

LSP's Racial Justice Cohort asks, 'What kind of community do we want?'

By Nick Olson

With our long track record of fighting for the land and the people, the Land Stewardship Project is well positioned to advance social justice in all aspects of our society. Because we have deep connections with rural communities, LSP has the unique ability, and responsibility, to engage our rural members in deep and meaningful conversations and actions. Racial justice is a key component of this work, and by addressing it, our rural communities will be more resilient.

That's why our 2018 Racial Justice Cohort is focusing on building the leadership capacity of LSP members who can engage additional rural leaders—everyone from a member of the local township or school district board to a candidate for public office—in very specific ways. Like the first Racial Justice Cohort we held in 2017, our current cohort consists of LSP members and staff participating in trainings that are providing them with skills, tools and confidence to work toward advancing racial justice within their communities and within the broader food and farming system. Each month from December to April, members of the cohort have been participating in trainings led by partner organizations such as the Anti-Oppression Resource and Training Alliance, Voices for Racial Justice, Centro de Trabajadores Unidos en Lucha, Hmong American Farmers Association, Shared Ground Cooperative and the Red Lake Nation. These trainings are an invaluable way to learn about the victories and the barriers people of color and indigenous people are facing on institutional, community and personal levels.

In this work, we need to be both intentional and careful. LSP's Racial Justice Cohort isn't just about getting informed and patting ourselves on the back for engaging in internal reflection around important issues. All the awareness and good intentions in the world do little good unless we find ways to take real action and have an impact that counts. And having an impact is more critical than ever as our country comes face-to-face with a series

of events that expose just how much bigotry and racism is present in all of our communities. That's why we are giving cohort participants the tools and the practice to engage on these issues in their communities.

That means getting as well informed as possible, of course. But it also means looking for opportunities to have those kinds of conversations that go beyond griping over the current state of affairs. It requires making opportunities for having truly meaningful conversations around race and inequality and how these issues are extracting power from our own communities. This is particularly key in rural areas where we need to empower all of our community members in order to increase our resilience.

What kind of community do we want to live in—one where we all have an equal chance to be heard and attain our dreams, or one where some people advance at the expense of others? At a recent training, Pakou Hang, the executive director of the Hmong American Farmers Association, reiterated a fact that we have heard from multiple presenters. It is not Hang's job to talk to white leaders in my rural community about the need for racial and economic jus-

tice—it's mine. During the cohort trainings, we are very explicit about that fact, and are asking participants to directly engage leaders in their communities. We help facilitate that engagement by going through various scenarios in which these conversations can take place. Are you attending a school board meeting or a county commissioner's hearing? Is a candidate for office holding a town hall meeting? These are just some of the opportunities we can utilize to connect with leaders around these issues.

Cohort participants are already starting to look for and take advantage of such opportunities. As the story on page 11 shows, one can be surprised at how those "uncomfortable" conversations go—don't underestimate your neighbors' ability to have their eyes opened to someone else's reality.

LSP's Racial Justice Cohort and the Organizing and Social Change Leadership Cohort fall under our general "Leadership Development Umbrella." Both cohorts represent a concerted effort to develop the kind of community leadership that creates the change we will need if our food and farming system, and the communities within which it operates, is truly to be sustainable. □

LSP organizer Nick Olson is coordinating LSP's Racial Justice Cohort. He lives and farms near Litchfield in south-central Minnesota and can be reached at nicko@landstewardshipproject.org or 320-269-2105. For more information, see LSP's Racial Justice web page at <https://landstewardshipproject.org/about/racialjustice>.



LSP's Racial Justice Cohort recently held a meeting at the headquarters of the Hmong American Farmers Association in St. Paul. Pictured, back row (l to r): Rachel Henderson, Robin Moore, Dori Eder, Lebo Moore, Jo Ann Thomas, Jenna Sandoe, Rachel Stoll and Rachel Orville. Front row (l to r): Nick Olson, Johanna Rupprecht, Karen Stettler and Linda Wilfahrt. Not pictured: Steven Skalman, Deborah Allan, Lisa Heldke and Madeline Neenan. (LSP Photo)

Comfortable with being Uncomfortable

Sometimes it's not how the words are spoken, but that they are spoken at all

When Rachel Henderson attended her local Wisconsin Farmers Union chapter meeting last fall, she was slightly apprehensive. The purpose of the meeting was to develop policy proposals that would be sent on for consideration by the organization as a whole during its state convention in February. Henderson had scanned the Farmers Union's book of current policy statements, and felt the organization needed to come out strongly against racial injustice, to go beyond just voicing generic support for "cultural diversity." Such conversations can be hard in an all-white setting, which was what this meeting would be. But after enrolling in the Land Stewardship Project's Racial Justice Cohort (see page 10), she had become even more convinced that white people like herself need to speak out about racial equity in their communities, even when it's not the easiest thing to do.

"One of the things that was on my mind when I went into the Racial Justice Cohort was to look at how we have a food economy based on slavery and exploiting land," says Henderson. "Agriculture in this country is based on exploitation of people and land all the way across the board."

These days, Henderson, 36, thinks a lot about the intersection of race, immigrant labor, rural communities and farming. After graduating from LSP's Farm Beginnings course a decade ago, she and her husband Anton Ptak launched Mary Dirty Face Farm (www.marydirtyface.com), a fruit operation in western Wisconsin's Dunn County. They market their production through a local food co-op, a farmers' market and a fruit CSA enterprise. Henderson and Ptak built up their operation literally from scratch, and while they were getting the infrastructure set up commuted out to the farm from their home in Northeast Minneapolis. Since 2014, they've lived fulltime on the land, and they have two children—Cecil, who is 4, and Marcel, 18 months.

Henderson says she feels a particular urgency to address racial equity issues now that she has children. She has already had to have some hard conversations with Cecil as a result of news coverage of white supremacist rallies and other incidents related to

racial injustice.

"I felt unequipped to talk to my kids about racial justice," she says. "I had to get comfortable with being uncomfortable."

• • •
"You can't change things if you're not there."

—Rachel Henderson
• • •

During cohort meetings, Henderson and other participants not only learn about the history of racial and economic injustice, but take part in role playing scenarios that provide people the tools to have those "uncomfortable" conversations within white spaces.

"It was uncomfortable and unpleasant,



Rachel Henderson farms in western Wisconsin's Dunn County. She says it's important to speak out on racial equity in the "all-white spaces" she often finds herself in. "I feel privileged being white in a rural community struggling with unpleasant truths, and I think, 'What about the challenges that a farmer of color would face?'" (LSP Photo)

which made it worthwhile," recalls Henderson of the role playing. "What is great about the Racial Justice Cohort is it creates a comfortable space to talk about uncomfortable things."

Overcoming Fear

Just a few weeks before the Farmers Union chapter meeting, Henderson had participated in her first cohort gathering, where Autumn Brown of the Anti-Oppression

Resource and Training Alliance talked about the entanglement of white supremacy and capitalism and how rural white people are often oppressed by the same forces that hurt people of color and new immigrants.

So, when she attended that WFU chapter meeting, Henderson felt equipped to put forth policy language that would highlight and recognize the intersection of the struggles and systems of oppression of capitalism and white supremacy that impact people of color in our communities. But when the time came to present her proposal, she almost chickened out.

"I got a sense that I may get a negative response from some people in the room, but then I remembered the cohort training and how the point is to speak out in these all-white spaces," says Henderson. "So I felt it was my job to speak out, even if I did it poorly and it didn't have much of an impact."

To her pleasant surprise, the nine other people at the meeting, which included a mix of older and younger Farmers Union members, nodded their heads in agreement and in general were receptive to the proposal. The main discussion point was around how to write the proposal in the formalized language required for it to be considered at the state convention. Once it was written up, it was sent on to the state Wisconsin Farmers Union meeting, where it was adopted without further discussion.

Henderson is adamant about the fact that presenting a proposal on racial equity at a chapter meeting of a mostly white farm organization is not a "change maker." In fact, she feels the content of the proposal and its language are almost irrelevant. The point is not what the farmer said or wrote, but that she was able to get over that fear of making herself and others uncomfortable and speak out at all. The issue of racial justice is too important to allow a little personal anxiety stand in the way. This gives her confidence to take advantage of other opportunities to bring up the issue of racial equity in her community.

"The biggest change was in me—it helped me feel more secure about the truth of what I was doing. You can't change things if you're not there." □

LSP Board Statement on Racial Equity

You can read the Land Stewardship Project board of directors' policy statement on racial equity at <https://landstewardship-project.org/lspboardstatements>.

Farm Bill 2018

Reminding Lawmakers of CSP's Importance

As Farm Bill Negotiations Heat Up, LSP Takes the 'Our Farm Bill' Message to D.C.

By Ben Anderson

Almost two decades ago, a group of Land Stewardship Project farmer-members sat around a kitchen table imagining what a Farm Bill program that rewarded conservation and good stewardship of the land would look like. Later, many of them traveled to Washington, D.C., to help create the initiative known today as the Conservation Stewardship Program (CSP).

This nationwide program is the most expansive effort ever undertaken by the United States government to reward farmers for existing conservation practices and to help farmers build comprehensive plans for stewardship on their farms. It's a program that benefits not only the land and farmers themselves, but also communities beyond their field borders.

"It is the gem of the Farm Bill and the best of working lands conservation efforts," says Bill Gorman, who was part of that original group of farmers who traveled to Washington to talk to lawmakers about creating a program like CSP.

In January, Gorman once again traveled to our nation's Capitol to talk about the Conservation Stewardship Program, but this time rumors were in the air about how some

Congressional leaders want to merge it into other conservation efforts, in effect eliminating it as a stand-alone initiative.

Amidst a government shutdown and a snowstorm, Gorman, who is a southeastern Minnesota farmer and a member of LSP's Federal Policy Committee, joined me in several meetings with legislators and their staff. We went to Washington at a time when the 2018 Farm Bill is starting to be drafted by Congressional leaders in the U.S. House. A version of that legislation is expected to be released this spring. The Senate is expected to follow by releasing a version of its bill in late spring or early summer. The current Farm Bill expires September 30.

We came to those D.C. meetings carrying LSP's "Our Farm Bill" message. This proposal was developed last year with the help of LSP members and supporters. It calls for a Farm Bill that does not support the status quo of bigger and fewer farms, diminished soil health and shuttered Main Streets. Instead, "Our Farm Bill" is demanding policy that supports conservation and beginning farmers, while implementing significant reforms to programs such as government subsidized crop insurance.

In Washington, Gorman told the story of how CSP was created and emphasized to every Congressional office that it needs to remain as a stand-alone program. "It has

its own unique philosophy and needs to be strengthened, not diminished or merged with something else," says Gorman. " 'John Q. Public' gets the most bang for their buck out of this program because of all the benefits it provides for the land and the water."

We met directly with Rep. Tim Walz, a U.S. Representative from Minnesota. Rep. Walz shares LSP's conviction that CSP needs to be protected and strengthened and he committed to putting out a bill that would strengthen it (*see page 13*).

LSP's D.C. trip coincided with a meeting of the National Sustainable Agriculture Coalition (NSAC). LSP plays a leadership role within committees that are part of this coalition, and has worked with other coalition leaders and staff, as well as Minnesota Representatives on the House Agriculture Committee and a strong base of LSP members and leaders, to introduce legislation supporting key LSP Farm Bill priorities. Examples include the Beginning Farmer and Rancher Opportunity Act, introduced by Rep. Walz, and the Crop Insurance Modernization Act of 2018, introduced by Minnesota U.S. Rep. Rick Nolan (*see page 13*).

LSP members and staff will continue to forcefully advance the "Our Farm Bill" priorities with lawmakers in the coming months. Stay tuned for action alerts about timely opportunities to make your voice heard in calling for a Farm Bill that puts people, communities and the land first. □

LSP organizer Ben Anderson can be reached at 612-722-6377 or banderson@landstewardshipproject.org. You can read LSP's "Our Farm Bill" policy statement at <https://landstewardshipproject.org/organizingforchange/federalpolicy>.

Action Alert: Call to Save the Conservation Stewardship Program in the Farm Bill

The Conservation Stewardship Program (CSP) is the main Farm Bill initiative that supports farmers who are using stewardship practices on working farmland. As the 2018 Farm Bill is being drafted, CSP is under threat of being severely cut or eliminated altogether. Please make two telephone calls today to protect and strengthen CSP in the 2018 Farm Bill. Call U.S. Rep. Mike Conaway and U.S. Rep. Collin Peterson at the telephone numbers listed below:

- Rep. Mike Conaway — 202-225-3605 — Chairman of the U.S. House Ag Committee
- Rep. Collin Peterson — 202-225-2165 — Ranking Democrat on the U.S. House Ag Committee

Please tell them something like this:

Hello, my name is (your name) and I live/farm in (name your town and state). I am calling to tell Chairman Conaway/Rep. Peterson that the Conservation Stewardship Program is valuable to me and my community, and I'm asking for Chairman Conaway's/Rep. Peterson's continued support of this important program in the 2018 Farm Bill. Will you give my message to them?

If you have a sentence or two to add about why CSP is important to you, add that too.

For more details and to let the Land Stewardship Project know you made the calls, go to: <http://bit.ly/ProtectCSPNow>. You can also contact Ben Anderson at 612-722-6377 (banderson@landstewardshipproject.org) or Tom Nuessmeier at 507-995-3541 (tomn@landstewardshipproject.org).

'Crop Insurance Modernization Act' Introduced

The Land Stewardship Project applauded introduction of the "Crop Insurance Modernization Act of 2018" by Minnesota U.S. Representative Rick Nolan on Jan. 19. Rep. Nolan is the Ranking Member of the House Agriculture Committee's General Farm Commodities and Risk Management subcommittee, which is currently crafting the 2018 Farm Bill.

The bill was conceived in a February 2017 meeting involving Land Stewardship Project farmer-members and Rep. Nolan. At that meeting, LSP members talked about the importance of reforming the crop insurance program and asked Rep. Nolan directly if he would write a bill.

After months of work involving Nolan's staff, LSP and the National Sustainable Agriculture Coalition, the proposed legislation was formally introduced in the U.S. House of Representatives.

The bill represents significant positive steps forward in fixing the federal crop insurance program, which is used by farmers across the country. For example, the bill

would coordinate conservation efforts between the Risk Management Agency (RMA) and the USDA's Natural Resources Conservation Service (NRCS). Currently, farmers often have to choose between implementing conservation efforts and receiving crop insurance subsidies. Soil-friendly techniques like cover cropping have been viewed by RMA as not qualifying under its "good farming practices" guidelines, although there is ample evidence that building soil health with continuous living cover makes fields more resilient.

"It is common sense that conservation efforts are coordinated and promoted through the crop insurance program," says Darwyn Bach, a southwestern Minnesota corn and soybean farmer and member of LSP's Federal Policy Committee. "Practicing good conservation on your farm is the best risk management practice and this bill will help farmers like me implement those practices."

The bill:

→ Creates a pilot program to study the effects of providing premium subsidy

enhancements to farmers engaged in advanced conservation activities.

→ Expands access to insurance premium discounts for beginning farmers.

→ Directs the Secretary of Agriculture to reduce the paperwork for Whole Farm Revenue Crop Insurance policies and create policies that work for diverse crop farms.

→ Revises cover crop termination guidelines, which will allow more farmers to utilize cover crops to build soil health.

→ Strengthens conservation compliance spot checks conducted by the USDA.

→ Fixes a loophole that allows farmers to transfer historical yield data to lower quality land.

"This bill is a positive step forward for family farmers and the land," said Tom Nuessmeier, a southern Minnesota farmer and an LSP organizer. "We will continue working with Representative Nolan to advocate that these reforms pass as part of the 2018 Farm Bill." □

LSPer Testifies at Congressional Soil Health Hearing; SOIL Act Introduced

Building healthy soil on agricultural acres doesn't just benefit rural communities, said a southern Minnesota farmer during a special Congressional hearing on soil health that was held in Washington, D.C., Feb. 14. And that's why it's key that the next Farm Bill encourages and supports farming systems that can build the biology of crop fields and pastures, said the farmer, Jon Jovaag, who raises crops and livestock on a diversified operation near Austin.

"Soil health impacts everyone, both rural and urban," said Jovaag, who is a member of the Land Stewardship Project's Federal Policy Committee. He added that one of the most exciting benefits of increased soil health is that it allows the land to better manage water, an important issue for him since a mile of his family's farm borders the Cedar River.

"I have seen firsthand what poor soil health and management can do," he said. "But if we can increase our soil organic matter by 1 percent, that soil can hold an additional 1 inch of water. That saves farmland, crops, urban housing and taxes."

The Congressional hearing was organized by Minnesota U.S. Representative Tim Walz. Besides LSP, presenters at the hearing included the Soil Health Institute, the National Sustainable Agriculture Coalition

and General Mills.

The hearing was the result of on-farm meetings Walz held in 2017 with Jovaag and other LSP members. During those meetings, farmers made it clear that economically viable innovations in cover cropping, managed rotational grazing, diverse crop rotations and no-till production have made it possible



LSP farmer-member Jon Jovaag testified at a special Congressional hearing on soil health. (Photo by Ben Anderson)

to build soils that are able to manage water well while sequestering greenhouse gases. However, in order for such practices to become more prevalent, federal programs need to provide increased technical and financial assistance to farmers.

SOIL Act Introduced

Two weeks after the soil health hearing, Rep. Walz introduced the Strengthening Our Investment in Land Stewardship Act. Called SOIL for short, the proposed legislation would enhance critical working lands conservation programs like the Conservation Stewardship Program and the Environmental Quality Incentives Program.

During an LSP member meeting in May 2017, Walz agreed to push legislation that would support efforts to build soil health and improve water quality through working lands conservation on farms.

The SOIL Act would:

→ Provide funding to ensure working lands conservation programs can support the growing demand for financial and technical conservation assistance.

→ Ensure payments reflect the farmer investment and conservation benefits resulting from the adoption of key practices and programs.

→ Increase program accessibility through better coordination between programs, while also encouraging higher levels of stewardship.

→ Increase commitment and conservation support for historically underserved participants in federal farm programs. □

Climate Conversation

Generational Regeneration

Editor's Note: Starting with this issue, the *Land Stewardship Letter* is periodically featuring interviews with farmers who are talking about climate change and the role soil health can play in mitigating its impacts.

By Lynnea Pfohl

Farmers possess a kind of ground-level common sense that seems increasingly rare in today's fast-paced, technologically-driven world. Farmers develop this common sense from a real, experiential understanding of their land. Mike Krause is one farmer who not only understands the generations' worth of knowledge behind his family farm, what the land has been through, and what it needs to continue to be healthy and profitable, but also how his farming practices impact the larger world beyond his property.

Krause owns 800 acres near Utica in southeastern Minnesota. He has about 500 acres in corn, soybeans and hay. He also rents out 100 acres of pasture to another farmer and has around 200 acres of woods. His grandparents moved to the property in the 1940s and started farming with hogs and dairy cows. Eventually, the family quit dairying and by the time Krause's dad was involved with the farm, hogs, beef cows and crops were the main commodities being raised on the land. When Krause himself was a teenager, he began farming with his dad. He took a break to attend college for a few years, but since his return, he's been farming on the same land his grandparents started with almost 80 years ago.

Krause has a deep understanding of his farm, based on a lifetime of firsthand experience and two generations of family history before that. This intimate knowledge has kept him aware of how changes in weather and climate, both on and off the farm, have impacted his own farming practices.

When he saw a need on his farm to, as he puts it, "try to do more to prevent erosion," Krause set out to learn more about soil health. He understood that improving soil health could go a long way toward not

only preventing erosion and building the long-term resiliency of his land, but also ultimately increasing his yields.

In order to learn how to go about accomplishing these goals, Krause attended a couple of Land Stewardship Project field days last year. These experiences, combined with reading and research, experiments with no-till, improvements in machinery, and some number-crunching, have prepared him to try cover cropping. He's excited to start building his soil in this way on 30 or 40 acres, and then expanding from there.

Soil health benefits and the productivity of his land are not the only reasons the farmer feels it is important to use cover crops, however. Krause recognizes that the frequency and intensity of erosive rainfall



Mike Krause sees building soil health as a necessity and an opportunity. (Photo by Crystal Hegge)

events have increased in the past 10 or 15 years, and he cites climate change as the reason for these increases. He understands that these events exacerbate the area's erosion problems and are making it necessary for farmers to adopt methods like cover cropping in order to keep soil in place. But Krause also sees these changes as an opportunity for farmers to contribute to the larger collective solution to climate change.

In fact, he has a hard time understanding why some farmers still think climate change is a hoax. Once again, Krause relies on his common sense, pointing out that looking at a graph of temperature increases in the past 30 years makes the reality of climate change both scientifically obvious and simple to understand. The farmer notes that a steady growth in temperature readings that should normally take thousands of years is now happening in a matter of decades.

"Something is definitely going on there, and it's definitely related to the release of carbon and the burning of fossil fuels," he says.

The farmer also understands the complex relationship between humans and fossil fuels, and most importantly, the enormous benefits building soil health and using cover crops can provide farmers while stabilizing the climate.

"We got on this cycle with carbon-based fuels; it's a hard cycle to break, but...for the health of the planet, it's going to have to be changed somehow," he says.

Mike thinks cover crops are one way to make this change. If we're storing more carbon in the ground through the use of cover crops, he notes, we're not only mitigating climate change, but we're also producing fewer greenhouse gases since the resulting healthy soil requires less intense tillage, and thus less fuel to manage.

Building soil health and implementing cover crops makes a debate about climate change unnecessary. When done right, these practices help farmers reduce costs and increase yields, all while protecting their farmland for future generations.

Mike Krause is in the process right now of ensuring that his farm will not wash away, and will continue to produce profitably for still more generations of his family. In the end, his contribution, along with those of others like him, will also help to mitigate the global challenge of our time—climate change—and will make this challenge less burdensome for our grandchildren.

Krause has a small granddaughter. She's still too little to have the faintest understanding of climate change, but that's no excuse for the rest of us. Maybe she will be the fifth generation of his family to farm the Krause land one day. Wherever she's living and whatever she's doing, her grandpa will have made his farm, and our climate, more stable, healthy and resilient. □

Lynnea Pfohl has been an LSP intern, staff member and volunteer in the organization's southeastern Minnesota office. She also served on LSP's Winona County Organizing Committee.

Video: Talking Climate Change

In *Farmers Talk About Climate Change*, a new Land Stewardship Project video, farmers discuss the challenges posed by extreme climate conditions and how building soil health can help make their operations more resilient: www.youtube.com/user/lspnow.

Ramping Up a Resource's ROI

Loran Steinlage's Constant Drive for Soil Self-Sufficiency

Loran Steinlage farms 750 acres of corn, soybeans and small grains near West Union in northeastern Iowa. He started experimenting with cover cropping a decade ago and today utilizes methods such as interseeding, companion cropping, relay planting and highly diverse cocktail mixes to keep his land covered all year round and thus produce as much of a return on investment as possible from each acre. Steinlage has traveled overseas to talk about his intricate, always-changing system, and is known for his willingness to push the envelope, adapting his equipment, and management system, to fit the situation. He's already gotten three crops off some of his fields in a single season, and he's now trying to figure out how to get as many as five "cash crops" off each acre by adding enterprises like honey bees and sheep. In mid-February, Steinlage spoke at a Land Stewardship Project Soil Builders' Network workshop in Preston, Minn. Following are some highlights of his presentation:

Compounding Companions

Steinlage flashed a slide showing corn, beans and squash growing together in the "three sisters" system developed by Native Americans generations ago. What these traditional farmers knew is that planting a diversity of species in the same spot creates a collaborative growing environment, one that benefits all the plants involved. Steinlage is using this type of companion cropping as a model by growing what he calls a "jungle mix" in some of his fields.

"It's an evolving system that just keeps supporting itself," he said of the three sisters system. "I don't want to reinvent the wheel, I'm just trying to see if I can implement this kind of system in nooks and crannies."

Such a system not only provides continuous living cover for the soil, but makes it more productive than if it was just monocropped. Steinlage described how he has harvested soybeans and buckwheat off the same field during the same pass with a combine. He later separates the two crops with a grain cleaner before marketing them.

Getting in Gear

Steinlage is an obsessive tinkerer: he uses computer assisted design to custom build his implements and he's on the ninth prototype of a double-row drill that can apply fertilizer while seeding his cover crops and soybeans. But farmers shouldn't put off trying something new because they feel they don't have

the right equipment, he said.

Indeed, during a panel discussion after Steinlage's presentation, three local farmers made it clear they have been utilizing unconventional methods to get into cover cropping, and don't see lack of top-notch equipment as a barrier. For example, in March 2017 Stewartville, Minn., farmer John Meyer dug two old seed drills out of a shed and seeded oats on 200 acres in a couple inches of snow. He planted corn into those oats when they were knee high, and ended up with a good crop. That success prompted him to plant all of his 400 acres to cover crops in the fall of 2017.

"I just had old drills that had been sitting in the shed and hadn't been used for 10 years," recalled Meyer. "It was nothing special. It can be done."

Give it a Listen

On **episode 205** of the Land Stewardship Project's *Ear to the Ground* podcast, farmer Loran Steinlage talks about getting a good return on investment from his soils: <https://landstewardshipproject.org/posts/1051>.

Episode 206 features farmer John Meyer talking about how cover crops are helping his no-till system reach its full potential: <https://landstewardshipproject.org/posts/podcast/1052>.

The ROI

Steinlage's system is paying off in two important ways: environmentally and economically. For example, during the summer of 2017, his farm experienced 21 inches of rain in one week. He showed a slide of severe erosion coming off a neighbor's field, but Steinlage's acres experienced virtually no damage since his use of continuous living cover had built the soil's health to the point where it was able to soak up and manage the precipitation.

Economics-wise, the farmer has realized that focusing on bushels-per-acre is not the key to financial success; he prefers to consider what his "return on investment" is.

"By building resilience into our system, we're not focused on how many bushels are produced," he said. "I'm focused on what we have left when we're done."

For example, Steinlage had a plot that was growing soybeans and cereal rye together. It sat in the middle of a corn field that had an average yield of 236 bushels per acre that year. The test plot produced 40 bushels of soybeans and 40 bushels of cereal rye per acre. The financial return on the soybean/rye planting, which required minimal inputs, was 25 percent better than the corn acres.

"And when you see that, it's like, why am I risking \$100 an acre in seed, \$100 an acre in nitrogen, when I can do more, with less?"

AMF Network

Steinlage believes strongly that farmers should glean information on increasing their soil's return on investment from other farmers and soil experts, rather than input suppliers. He calls his own list of advisers his AMF—"All My Friends"—network.

"Why are we allowing input suppliers to tell us what to do? We're the farmers," he said. "Learn how to farm again. Learn how to build from within."

The Next Generation

Steinlage has two daughters who have shown an interest in coming back to the farm. One way to make room for them would be to add livestock to the mix (the farm was originally a dairy, but hasn't had animal production in several years). They can't afford to rent pasture in the area, but Steinlage has been considering ways they could graze livestock on the farm's crop fields year-round. This could help him execute his "master plan" of eventually stepping away from active farming.

"When they told me they wanted to come home and farm, that's one of the proudest days I've had," he said. "My dad stepped out of the way for me to thrive farming and I'm hoping to pay that forward and step out of the way, because they have some pretty neat ideas." □



"Learn how to farm again. Learn how to build from within," said Loran Steinlage. (LSP Photo)

Weaving a Web of Willing Workers

Elaine Ingham Describes a Soil World Full of Drama & Untapped Potential

It's been said that "dirt" is just soil that's in the wrong place—on your kitchen floor or in a local stream, for example. Microbiologist Dr. Elaine Ingham maintains it is much more complex than that. Dead soil is dirt, no matter where it's located, including a farm field. Living soil, on the other hand, is full of the stuff that characterizes biological activity: birth, death, predators, prey, decay, rebirth and good old-fashioned teamwork. And plant roots play host to all this drama.

"It shows how dynamic a system it is," said Ingham during a February Land Stewardship Project Soil Builders' Network workshop in Rochester, Minn. "It's like a zoo."

Imagine when all that activity is put to work creating fertility, the kind that can grow healthy plants of all kinds? That, say scientists, is the definition of a self-perpetuating system, one that doesn't require artificial inputs to stay productive. But the bacteria, fungi, protozoa and other organisms that make up a community of "willing workers," as Ingham calls them, are often not utilized to their full potential, thanks to farming systems that kill them off through tillage, intensive chemical use and growing schedules that maintain living roots in the soil only a few months out of the year.

But it doesn't have to be that way, argued Ingham, who showed the three-dozen farmers, natural resource professionals, educators and students participating in the workshop how to identify when a soil's food web is out of balance, and how to right the ship.

"We need to learn how nature manages these systems and stop pretending we know better," she said.

Ingham co-authored, in 1985, the first scientific paper on the soil food web, wrote the USDA's *Soil Biology Primer* and now runs her own international soil health consulting business and laboratory, Soil Foodweb (www.soilfoodweb.com). She teaches classes around the world on assessing and improving soil health.

It doesn't take a doctorate in microbiology to recognize when a field's soil food web is out of balance, said Ingham. Com-

paction and a general lack of good, aerated structure are telltale signs of sick soil. And the results are predictable: fields that are unproductive without intense tillage and the regular addition of chemicals like fertilizer and herbicides. Unfortunately, tillage and agrichemicals destroy the microorganisms that make up a healthy soil biome.

Thus, said Ingham, out-of-balance soil becomes a kind of self-fulfilling prophecy: our fields need more chemical inputs to



Dr. Elaine Ingham talks to farmers about the soil food web during a recent LSP workshop. "Stop killing your organisms, because they will do the work for you," she said. (LSP Photo)

provide fertility and control pests because the biology is not present to generate plant food and fend off diseases. And the more chemicals that are applied, the more the soil becomes dependent upon them, and so the more that must be applied. Agrichemical companies argue that crops can't be grown without their products. And in a sense, they are right, as long as we accept as inevitable a dysfunctional soil food web, said Ingham.

"Why do we go out and apply inorganic fertilizers? Because we've destroyed the biology in our soils," she said. "There is no reason to apply inorganic fertilizers; there is every reason to bring back the biology. So stop killing your organisms, because they will do the work for you."

Bringing the soil food web back into balance means identifying what organisms—good and bad—are present, something conventional soil tests don't do. Ingham gave a primer on identifying different soil microorganisms by color, size and shape, even the way they move, under a microscope, and how to determine what their presence, or absence means. While she spoke, microscopic images of a soil sample were being projected on a large screen at the front of the room. Ingham interrupted herself periodically to walk over to the screen and point out life in the soil.

"Nematode!" she shouted at one point as a roundworm whipped itself across the screen. She then described how nematode-trapping fungi can help control these pests.

Ingham has worked with farmers as far away as Australia to help them bring balance back to their soil's food web. The use of compost is one way to build that biology and get off the chemical treadmill, she said. But adding healthy biology will mean little if that soil biome lacks a key element: living roots. All that feeding, dying and recycling has to take place in a habitat that not only serves as a home, but also a source of food in its own right. That means it's critical to keep living plant roots in the ground 365-days-a-year.

"Roots! Roots! Roots!" Ingham exclaimed as she wrapped up the day-long workshop. "From now on, when you think of your favorite plant, you're going to think of the roots, right?" □

LSP's Soil Builders' Network has purchased a microscope and is inviting farmers to learn more about using the tool to assess soil health. See below for details on how to contact and join the Network.

LSP's Soil Builders' Network

If you are a crop or livestock farmer in southeastern Minnesota, the Land Stewardship Project invites you to join the Soil Builders' Network to receive regular updates on workshops, field days and on-farm demonstrations related to the latest in soil health and cover cropping. The Soil Builders' Network was launched to establish an extensive collaboration of farmers interested in building back their soil using innovative crop and livestock systems. To join the network, sign up at <https://landstewardshipproject.org/lspsoilbuilders>, or contact LSP's Shona Snater at 507-523-3366 or ssnater@landstewardshipproject.org.

Cropping Systems Calculator Rebooted

Regional, Organic, Soil Erosion Components Being Added to Online Tool

By Rebecca Wasserman-Olin

The Land Stewardship Project's Cropping Systems Calculator is leading the way in helping farmers look at the financial ramifications of diversifying crop rotations and undertaking other practices that build soil health.

The Calculator, originally designed as part of the Chippewa 10% Project (<https://landstewardshipproject.org/chippewa10project>), is an Excel-based tool which allows users to compare two different crop rotations, each up to six years in length. Default crop financials gathered from the FINBIN database are built in. Originally, the defaults were for a 10-county region in west-central Minnesota's Chippewa River watershed and included row crops, small grains, cover crops, hay fields and perennial pasture.

With many crop budget tools already in existence, the Cropping Systems Calculator is unique in that it allows users to directly compare row crops such as corn or wheat to various grazing systems. In addition to annual or perennial forage options, the Calculator allows users to select what type of cattle they are interested in raising, as well as what type of management style they use. The frequency with which cattle are moved in a grazing situation can have a dramatic impact on how many animals can be sustained on an acre of land, and that stocking rate, in turn, greatly impacts possible financial returns.

An Updated Version Released

The Cropping Systems Calculator received a major update this winter. The updated version now includes additional default values for southeastern Minnesota, including organic and non-organic options.

We've also made major improvements in user friendliness based on feedback from Land Stewardship Project staff and partners, as well as users of the tool. In addition to a simplified grazing interface, there are also easy-to-follow instructions throughout the Calculator.

On the Horizon

Keep an eye out this spring for one more update to the Cropping Systems Calculator: the addition of a soil erosion estimator. Integrated into the same Excel file, this tool will help users estimate soil loss in different types of cropping situations without the need

to understand the ins and outs of geographic information systems (GIS) technology.

Giving results in pounds, dump truck loads, and inches of topsoil loss, this tool will give a sense of what the soil health impacts are from various farming practices.

Ways to Use the Calculator

◆ Intergenerational farm transitions

Is there tension between how things have always been done and new ideas as a farm transitions to a new generation? No matter if it is within the same family or not, this transition is always difficult. You can help make it a little smoother and give financial backing to new ideas by using the Cropping Systems Calculator to model the returns of new rotations or integrating livestock.

Give the Calculator a Try

The Cropping Systems Calculator is at <https://landstewardshipproject.org/chippewa10croppingsystemscalculator>. Give it a test drive—we welcome feedback.

◆ Beginning farmers with a couple of seasons under their belt

The Cropping Systems Calculator is perfect for beginning farmers with a couple of seasons farming under their belt. The Calculator can help you look back at what you've been doing while also helping forecast how changes in your operation would impact your farm's financial future.

◆ Looking to transition to livestock?

If you have ever thought about integrating cattle into your row crop operation, but were intimidated by how complex grazing

Conservation Lease Resources

Are you a landowner who wants to develop farm leases that reflect your stewardship values? For fact sheets, sample leases and other resources related to developing stewardship-based farm leases, see the Land Stewardship Project's Conservation Leases web page at <https://landstewardshipproject.org/stewardshipfood/conservationleases>.

For more information, contact LSP's George Boody at gboody@landstewardshipproject.org or 612-722-6377.

systems are, the Calculator can help provide a picture of the financial risks and benefits involved. The tool's built-in defaults can help you begin to look at the finances of a cattle operation without having to jump in feet first.

◆ Thinking about organic?

With the addition of organic crop defaults for southeastern Minnesota, the Calculator is a great resource when thinking about making the transition to a certified organic system. The Calculator allows you to look at the financial returns of a non-organic rotation and an established organic rotation.

◆ Earning income from cover crops

Including cover crops in a rotation is becoming a popular practice for improving soil health. While it is effective on its own, the practice is even more viable when paired with short-term livestock grazing. The Calculator is a great tool for determining how you could earn income by allowing a neighbor to graze cattle on your cover cropped land through a custom grazing agreement. □

Land Stewardship Project economics researcher Rebecca Wasserman-Olin is at 612-722-6377 or rebeccaw@landstewardshipproject.org.

Tools for Calculating Soil Loss

The Land Stewardship Project has developed a soil erosion toolbox for making comparison maps that display distributions of soil erosion losses under different cover and management practices on individual agricultural fields. This toolbox, which was created by geographic information systems (GIS) expert Steve Ewest, contains two soil erosion tools: RUSLE and MUSLE.

Using the toolbox, scenarios can be run and then maps classified and visualized together to create comparison maps for the farm field. The RUSLE erosion tool generates tons/acre/year soil loss for sheet and rill erosion. The MUSLE tool models soil erosion from a large single storm event. You can check out the soil erosion tool at <http://arcg.is/u1O8G>.

For more information, contact George Boody, LSP's science and special projects leader, at gboody@landstewardshipproject.org or 612-722-6377.

Applications Open for 2018-2019 FB Course

Minnesota-Wisconsin Region Class to Begin in Fall 2018

The Land Stewardship Project's Farm Beginnings Program is accepting applications for its 2018-2019 class session. Classes will be held in the Rochester, Minn., region.

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

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

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

Over the years, approximately 800 people have graduated from the Minnesota-Wisconsin region Farm Beginnings course. Graduates are involved in a wide-range of agricultural enterprises, including grass-based livestock, organic vegetables, Community Supported Agriculture and specialty products.

The Farm Beginnings class fee is \$1,500, which covers one "farm unit"—either one farmer or two farming partners who are on the same farm. A \$200 deposit is required with an application and will be put towards the final fee. Payment plans are available, as well as a limited number of scholarships. For application materials or more information, see www.farmbeginnings.org. You can also contact the Land Stewardship Project's Karen Benson at 507-523-3366 or karenb@landstewardshipproject.org. □

Farm Beginnings in Other Regions

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

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

LSP's Farm Dreams: Is Farming in Your Future? Find Out July 29

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

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

LSP holds Farm Dreams workshops at locations throughout the Minnesota-Wisconsin region during the year. The cost is \$20 for LSP members and \$40 for non-members.

The next workshop is scheduled for Sunday, July 29. The workshop will run from

1 p.m. to 5 p.m., and will be held at LSP's office in Minneapolis.

For more information, see the **Farm Dreams** page at www.farmbeginnings.org. Details are also available by contacting LSP's Dori Eder at 612-578-4497 or dori@landstewardshipproject.org. □

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

The new Minnesota Beginning Farmer Tax Credit (*see the No. 3, 2017, Land Stewardship Letter*) went into effect in January. Under this initiative, there is now a Minnesota state tax credit for owners of agricultural assets—land, livestock, facilities, buildings

or machinery used for farming—who agree to sell or rent those assets to a beginning farmer who is not a family member. There is also a Minnesota state tax credit available for beginning farmers who participate in a financial management program.

For details on the Beginning Farmer Tax

Credit initiative and to sign up for the Land Stewardship Project's Tax Credit Update List, see <https://landstewardshipproject.org/beginningfarmertaxcredit>. More information is also available by contacting LSP's Karen Stettler at 507-523-3366 or stettler@landstewardshipproject.org. □

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

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

sustainable land stewardship.

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

profiles of farmers who are in various stages of transitioning their enterprises to the next generation. An online version of the *Toolkit* is at <https://landstewardshipproject.org/morefarmers/farmtransitiontools/farmtransitionstoolkit>; paper versions can be purchased by calling 800-909-6472.

The Grass Master's Apprentice

An Innovative Farming System Requires Innovative Training

By Brian DeVore

One sign that you're a solid employee is that the boss hates the idea of you walking out the door, never to return. So let's consider the case of Ryan Heinen, who has worked on the west-central Minnesota dairy farm of Nate and Angie Walter for the past two years. He's a quick learner and has proven to be skillful at everything from herdsmanship to fencing. Heinen was even able to step in when Nate had a medical emergency and kept the dairy enterprise going during the farmer's recovery. A good employee to keep around for the long term, right?

"Then we've failed," says Angie on a recent fall morning while sitting at her farmhouse's kitchen table.

Nate, who has just come in after doing the morning milking with Heinen, nods his head emphatically. "If he's here, you know, five years from now doing the same thing, then yes, we've all failed."

Heinen, sitting across the table, smiled in agreement. After thousands of hours of milking, fence moving, crop work and calf-care, it's time to move on, equipped with new skills, and a few reality checks. The Walters are "Master Graziers" through the Dairy Grazing Apprenticeship (DGA), which sets up wannabe grass-based dairy farmers with veteran graziers for a two-year work-based training program. Heinen is one of dozens of beginning farmers who have

enrolled in the program during the past few years, getting in return full-time employment, along with hands-on training.

The Apprenticeship has proven to be an invaluable way for farmers who want to dive into grass-based milk production to get the kind of on-the-ground experience such a management intensive production system requires. For a farmer like Heinen, 36, the Apprenticeship has been part of a progression towards someday becoming a full-time farmer. He is a graduate of the Land Stewardship Project's Farm Beginnings and Journeyperson courses (*see page 18*), which both provide training in Holistic Management, business planning and goal setting. Now, he's ready to take the next step.

"The Farm Beginnings and Journeyper-

son courses gave me some good background knowledge about planning and running a farm business, but to have the confidence to start my own dairy I needed to work on a farm where they're not just trying to get work out of you, but they are also willing to teach you," says Heinen.

And part of teaching is acknowledging it's time for the student to move on.

Outclassed by Grass

The Dairy Grazing Apprenticeship was launched in 2011, and for the first couple of years, was Wisconsin-focused. In 2015, the DGA became a national program, and its training program is now registered with the U.S. Department of Labor as a formal "Apprenticeship" initiative, similar to what's



Nate Walter (left), shown here with beginning farmer Ryan Heinen, says the DGA helped his family get good help while contributing to the community. "This secures not just labor, but labor with a goal in mind: a successful new farmer," he says. (LSP Photo)

available for people seeking on-the-job training in carpentry or plumbing. It currently has Master Dairy Graziers in Iowa, Maine, Massachusetts, Missouri, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Vermont and Wisconsin.

The DGA was started for a couple of reasons. For one, although producing milk on a mostly forage-based diet can be a low cost, financially viable way to dairy farm, it is also management intensive. It's centered around utilizing managed rotational grazing, which breaks pastures and other sources of growing forage into smaller paddocks. The cattle are rotated through the paddocks on a regular basis, sometimes being moved as often as twice-a-day. These rotations distribute manure and urine more evenly across the

Fresh Faces-Fresh Farming



farm and help eliminate overgrazing while extending the grazing season. Such a system means a farmer must pay attention not only to herd health and animal behavior, but have the skills to manage perennial grasses, as well as fencing and watering infrastructure.

"That's something you don't get from a book," says Bonnie Haugen, who, along with being the Minnesota education coordinator for the DGA, has a grass-based dairy herself in southeastern Minnesota. "You can't watch the grass grow while sitting in a classroom."

The other main impetus behind the program is the need to establish the next generation of dairy graziers, which is key if certain innovative elements of the dairy industry are to expand. Being out on pastures means the cattle are healthier, and thus grass-based dairy operations do not rely on antibiotics and other drugs to keep herds productive. Because it can produce milk with a minimum of inputs, managed rotational grazing is seen as the foundation for certified organic dairying, which, besides prohibiting agrichemical, hormone and drug use, requires that a certain proportion of the cows' diet comes from pasture.

But setting up and managing a grass-based dairy operation requires years of hard work and planning. Many of the pioneers in this method of farming are nearing retirement age, and Haugen says it's important that they see there is a new generation willing and prepared to take up the baton, that their innovative way of farming won't end with them.

"The passion that they have for keeping their farm a grazing operation and not have it be gobbled up by corn and soybean farms is really fun to see," she says of veteran grass-based dairy farmers. "But grazing farmers need to have a credible option for transitioning the farm."

Master Graziers agree to pay Apprentices at least \$8 an hour for 4,000 hours. Some of that pay can come in the form of housing and food, as well as the passing on of heifer calves to build an Apprentice's herd. But from the beginning, the program has strived

Apprenticeship, *see page 20...*

Farm Beginnings

...Apprenticeship, from page 19

to not just be a source of labor for dairy farmers. Apprentices must also be allowed to attend pasture walks, field days and workshops. Although hands-on learning is the focus of the program, six online courses are also required. Through an arrangement the DGA has with technical colleges, apprentices study such subjects as soils, pasture management, herd health and milk quality.

Master Graziers agree to teach all the skills listed in the DGA "Job Book," a manual which covers just about everything one needs to know to run a pasture-based dairy. Education coordinators visit the farms on a regular basis—up to once-a-month at first—to check in on the arrangement.

Shared Goals

There are 45 active Master Grazer-Apprentice pairs across the country, and since 2015 DGA has graduated 17 Apprentices. Of those graduates, two have started their own farms, six are in farm transfer situations and one is in an equity earning situation (earning heifer calves to build up their own milking herd as part of their compensation). Seven others are in management level roles on dairy farms or elsewhere in the dairy industry.

Overall, there are 151 Master Graziers and more than 200 Apprentice candidates seeking to be hired. Bridget O'Meara, the communications director for the Dairy Grazing Apprenticeship, says it's not so much a case of finding the right number of mentors to match up with mentees, as it is finding the "right" matches.

"The program is a serious life-altering commitment on the part of both Masters and Apprentices and often involves relocation and a change in lifestyle as well as occupation for Apprentices," she says.

Haugen says it isn't just about matching an eager, hardworking student with a top-rate grass farmer. "You've got personality issues that go beyond production skills."

As a result, DGA personnel focus a lot of their energy on setting up good Master Grazer-Apprentice relationships. There is an extensive application process for both parties and to be certified a Master Grazer, a farmer must have been utilizing managed rotational grazing for at least five years. They must also be able to show they can provide safe working conditions, among other things. Each partnership comes with

a six-month probation period, during which the parties involved can decide if it's a good fit for the full two years.

The interviews Master Graziers conduct with Apprentice applicants are a key way to figure out if it will be a good match. Sometimes it's the little things that make a difference. During their interview with Heinen, the Walters were impressed that he had specific goals in mind and had previous grazing experience. And it turns out he had dressed for success as well.

"He showed up with work boots on—that was a good sign," says Nate.

That interview turned out to be a precursor to what both parties say has turned out to be a good working relationship, one built on clear communication and personalities that blend well. But most importantly, it's a relationship built on a shared goal: launching a new dairy farming enterprise—one built on grass. It turns out perennial forages play a key role in Ryan's, as well as his mentors', view of the future of farming.

Pasture Partners

Nate Walter, 42, remembers how from a young age his family's dairy, which is near the town of Westport in Pope County, utilized pasture extensively to produce milk. Like many small dairy farms, the Walter operation always had permanent pasture where the cows could freely roam and get some of their nutrition from grass. When Nate was 10, paddocks were set up in that pasture, allowing the family to rotate the cows.

In 2002 he and Angie took over the farm from Nate's dad. There was a lot to like about grazing rotationally—healthier cattle and less labor were the two main advantages the Walters saw right off. In addition, by getting a big portion of their cowherd's nutrition from grazed forages, they didn't have to invest as much in expensive cropping equipment.

Over time, the Walters tweaked their grazing system to the point where now they move the portable poly-wire fencing twice-a-day during the growing season. Because they had always grazed and in general used minimal inputs, it seemed to make sense that the farm become certified organic. So, in October 2013 they shipped their first load of organic milk to Organic Valley Cooperative. Today, they milk 110 cows and farm 350 acres, some of it rented.

Heinen didn't grow up on a farm, but he had it in his family lineage—his grandparents and cousins dairy farmed. Still, he never really gave farming serious consideration when he was in high school and college. He got a degree in ecology and wildlife management from St. Cloud State and for a dozen years worked in conservation. Along

Give it a Listen

On **episode 203** of the Land Stewardship Project's *Ear to the Ground* podcast, Ryan Heinen talks about using the Dairy Grazing Apprenticeship to take the next step toward farming fulltime: <https://landstewardship-project.org/posts/podcast/1049>.

the way, he became passionate about prairie restoration. It was while working on an 8,000-acre prairie preserve owned by The Nature Conservancy that Heinen got the idea that maybe he could blend farming and his interest in habitat restoration. He saw how the grazing of cattle was being used to control invasive species and keep grassland habitat healthy. Under the grazing system, there was more diversity of plant species and wildlife seemed to thrive. Maybe, he thought, there was a way of using livestock to make restoration of natural grasslands economically feasible.

Heinen shared his passion for finding a way to blend farming and habitat restoration with Bryan Simon, a high school classmate. Simon also has an academic and professional background in ecology, and is also convinced that farming can be done in a way that improves natural habitat. In 2009, the friends took the Farm Beginnings course, where they learned from other farmers how to use Holistic Management and goal setting to set up an operation that balanced environmental and quality of life goals with the need to stay economically viable. The two later took LSP's Journey person course, a follow-up to Farm Beginnings.

In 2012, Heinen and Simon launched Lakeside Prairie Farm, a grass-based beef operation in Grant County, Minn. The two ecologists learned a lot about grazing and grassland restoration, but by the end of 2015 it became clear that the 195-acre farm was not going to produce enough income from grass-fed beef to support two families (Heinen and his wife Barbara have two children, Joseph, 2, and James, 6 months). Heinen started thinking about returning to his dairy farming roots and began looking for opportunities to get experience with managing milking cows on grass. He was attracted to the Dairy Grazing Apprenticeship because of its requirement that the Master Graziers provide a certain number of hours of education and training.

"I'm there to work, but also to learn, so Nate and Angie are open to explaining why they do things a certain way or giving me time to go to a pasture walk," says Heinen of the relationship he has with the Walters.

Apprenticeship, see page 21...

Angie and Nate concede that part of the attraction of the DGA was the opportunity to have good, consistent labor. They are at that stage in their career where retirement is far down the road—Angie is 38—but they'd also like to have more time to spend with their children—Laureen, 13, and Levi, 9. Just as importantly, they think a lot about ways of not just producing milk, but creating, in a sense, more neighbors. They see the DGA as a way to provide a helping hand to the next generation.

"I've always wanted to help people get started," says Nate. "This secures not just labor, but labor with a goal in mind: a successful new farmer."

Nate and Angie feel part of that success hinges on giving a new farmer insights, warts and all, into what it takes to survive and thrive economically. That's why they have an open book policy when it comes to sharing their financial records with Heinen. The beginning farmer says getting a look at the numbers has been invaluable.

"I think that's the most important part, because you can go to a farm and they can teach you how to make hay or feed calves, but it has to make sense financially, otherwise you aren't going to be doing it very long," he says.

A Reality Check

Another critical component of the apprenticeship is that it's given Ryan and Barbara an up-close look at the quality of life issues related to dairy farming. On the one hand, they've seen the reality of having to milk cows twice-a-day, seven-days-a-week. On the other, they've also seen that running a farm means being your own boss and having the family present on the land. Ryan says it's been a huge plus that the Walters have another house available on the farm, which has provided a place for his family to live.

"I can go in for lunch, or if we're working all day I'll grab Joseph and we'll go and get the cattle," he says. Of course, there can be a downside to living at the work site.

"One night I had showered and cleaned up and Barb looked out the window and said, 'There's a cow in the yard!'" Ryan recalls with a laugh. "I was like, 'Don't look out the window!'"

Heinen has also gotten other reality checks through the Apprenticeship. For ex-

ample, one of his goals is to produce milk on a 100-percent forage-based diet. That dovetails nicely with his desire to eventually use cattle to improve natural grassland habitat. The Walters supplement their herd's forage-based diet with corn. They have discussed going 100-percent grain-free, but Nate says that they're not quite ready for such a major change—it requires balancing the cows' dietary requirements with the condition of the pastures, all of which can be affected by weather, production needs and labor availability. Heinen says he realizes now that going 100-percent grain free isn't just a matter of covering the entire farm in grass.

"That's not something I would have considered before working on a dairy farm and

twice as much now," says Nate. "I would have never done that if Ryan wasn't here."

Economic Uncertainty

As Ryan wraps up the two-year Apprenticeship this spring, he is reflecting on what he's learned and the realities of setting out on one's own—there's just so much that can be gleaned from even the best on-the-job training experience.

"It will be a big step to start on my own, but for me, there are some things I have to learn just by trying them," he says.

As with so many beginning farmers, one of his biggest challenges is gaining access to affordable land. That's tough at a time when big cropping operations have bulldozed

houses, barns, fences and the other infrastructure needed to set up a dairying enterprise. The Walters are on the lookout for a farm that would fit the beginner's needs. After all, they'd love to have Ryan make that full transition from employee to neighbor.

Another challenge is that the market situation for dairy farmers is far from ideal. Milk prices are in the middle of a major multi-year slump, and the impact has been devastating in dairy farming communities. Wisconsin reportedly lost 500 dairy farmers in 2017 alone, and in February a dairy cooperative sent a letter to members that listed contact information for crisis hotlines. Although prices paid to organic farmers are well above conventional prices, even that sector of the

industry is hurting from oversupply.

The Walters acknowledge that the financial situation is more challenging than it was when they got into organic dairying. However, Nate says in some way farmers like Ryan are already able to roll with the punches, given that they are used to not doing things that are part of the norm.

"The biggest single factor in success is thinking outside the box," he says, "and grazing is thinking outside the box." □



Ryan Heinen says the skills he's learned through the DGA have been invaluable, and now it's time to put them to the test. "For me, there are some things I have to learn just by trying them." (LSP Photo)

seeing the realities firsthand," he says.

But the discussion over creating a 100-percent forage-based diet has brought up another important element of these kinds of relationships—sometimes the teacher can learn from the student. Heinen returned from one pasture walk with an idea for getting more low-cost grazing out of a few acres: plant an annual cover crop that could be grazed. He and Nate tried the idea out on 10 acres that was set to be planted to corn. The land had thistle problems and several wet spots, making getting a good corn crop iffy at best. Instead, they planted a grazing mix of sorghum Sudan grass and red clover. They were able to graze it twice in 2017, including during the heat of the summer when cool season forages go into a slump. Last fall, they planted the 10 acres to winter rye and plan to graze it this spring before seeding it to permanent pasture.

"It worked out well and I wish we had

More on DGA

For more information on the Dairy Grazing Apprenticeship, including details on applying to be a Master Grazer or Apprentice, see www.dga-national.org or call 715-560-0389. In Minnesota, contact Bonnie Haugen at 507-421-7170 or bonnie@dga-national.org.

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 <https://landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse>. You can also obtain forms by e-mailing LSP's Dori Eder at dori@landstewardshipproject.org, or by calling her at 612-578-4497. Below are excerpts of recent listings. For the full listings, see <https://landstewardshipproject.org/morefarmers/seekingfarmersseekinglandclearinghouse>.

Seeking Farmland

◆ Amy Covington is seeking to rent or rent-to-own a hobby farm or farm operation with a house—preferably 5 acres with a mixture of tillable land, pasture, woodlot and outbuildings for animals **within 1 hour, 15 minutes of Minnesota's Twin Cities**. Covington is enrolled in the Minnesota Food Association's beginning farmer training program and she is seeking a small amount of land to grow organic vegetables and fruit on. Covington would prefer land that has not been sprayed for several years, and that has a water source as well as a house and outbuildings such as a hoop house and shed. Contact: Amy Covington, 415-860-6453, amycovington@gmail.com.

◆ Donna Martinson is seeking to purchase 10 or more acres of farmland in **Minnesota**. Land with 4 acres pasture, 1 tillable acre and 2 forested acres is preferred. Land with a machine shed, small barn, chicken coop and house is preferred. Land that has not been sprayed for several years is preferred. Martinson is interested in starting a small permaculture/market garden operation. Contact: Donna Martinson, 651-402-2161, djmartinson@gmail.com.

◆ Eric Heins is seeking to purchase or rent 10-30 acres of farmland in **Minnesota**. He is seeking old pasture lands or tillable land that he can develop for rotational grazing. It can be a combination of tillable, pasture and woods. No house is required. Contact: Eric Heins, 507-259-0611, erichains312@gmail.com.

◆ Christina Bolles is seeking to purchase 5 acres of farmland in **Minnesota or Wisconsin**. Land with 3 pasture acres and 2 forest acres is preferred. No house is required. Contact: Christina Bolles, 612-200-3429, bolleschristina@gmail.com.

◆ Maiyee Vang is seeking to rent 2 acres of farmland in **Minnesota**. Land with water access is preferred; no house is required. Contact: Maiyee Vang, 651-500-8774, mai.vang034@gmail.com.

◆ Jeanie Ferguson is seeking to purchase 4 acres of farmland in **Minnesota**. Land with 1 acre pasture, 1 acre tillable and 1 acre forest is preferred. Land that has not been sprayed for several years and that has water, fencing and a shed, and is

on a dead-end road, is preferred. No house is required. Contact: Jeanie Ferguson, 218-216-3248, 622bossb@gmail.com.

◆ Brady Olander is seeking to rent farmland in **north-central Minnesota** (near the town of Staples). Land with pasture, fencing and water is preferred. Contact: Brady Olander, 218-296-2306.

◆ Brian Workman is seeking to purchase 15-40 acres of farmland in **Minnesota, South Dakota, Nebraska, Iowa, North Dakota or Illinois**. Land with 2+ pasture acres, 2+ tillable acres and 10+ forest acres is preferred. No house is required. Contact: Brian Workman, 630-378-3123, workmanbrian@comcast.net.

◆ Taylor Stewart is seeking to purchase 250+ acres of farmland in **Wisconsin**. Land with 80+ acres of pasture, and up to 160 tillable acres is preferred. Land with a machine shed/shop, a well, electricity and a house is preferred; livestock housing would be nice, but is not necessary. Stewart can build infrastructure on rented land if needed. Stewart has built and managed large certified organic pasture-based operations on the East Coast and is open to a joint partnership for production of high value livestock, food grain crops/certified organic grain. Stewart has market contacts in Chicago and Madison, Wis. Contact: Taylor Stewart, 217-621-6786, tstewr@gmail.com.

◆ Marcus Erickson is seeking to rent 5-10 acres of tillable farmland in **Minnesota**. A house is required. Contact: Marcus Erickson, 417-773-6661, marcuslisboa@yahoo.com.

◆ Josh Horvat is seeking to purchase or rent 20+ acres of farmland in **north-western Wisconsin (as close as possible to Cadott)**. Land with pasture and a forest is preferred. Contact: Josh Horvat, 715-828-4577, uplandnut@gmail.com.

◆ Jazmin Martinez is seeking to purchase a minimum of 10 acres of farmland in **Illinois**. Land with 5 pasture acres and 5 tillable acres is preferred. Land that has not been sprayed for several years and that has a barn, a greenhouse, a septic system, electricity, water and a house is preferred. Contact: Jazmin Martinez, 773-996-3638, jasmindj89@gmail.com.

◆ Kaleb Anderson is seeking to rent 20-100 acres of perennial pasture in **southeastern Minnesota (specifically in Goodhue County)** for grazing a beef herd. Fencing is preferred, but not required. A water source is required.

No house is required. The land carrying capacity will dictate the number of animals placed on the pasture and the herd will be rotated weekly. Pasture rest days of 30+ days will be maintained. Anyone interested in converting "tillable" acreage to perennial pasture? Contact: Kaleb Anderson, 651-334-3366, bellecreekcattle@gmail.com.

◆ John Stoltz is seeking to purchase 10-20 acres of farmland in **northeastern Minnesota or northwestern Wisconsin (within a one-hour drive of Duluth-Superior)**. He would prefer that 5-10 acres be tillable. Ideally the property would include a barn or pole shed. Contact: John Stoltz, 608-738-9210, stoltzjm@gmail.com.

◆ Heidi Harrabi is seeking to purchase 22 acres of farmland in **Minnesota**. Land that has not been sprayed for several years and that has 2 pasture acres, 10 forest acres and 10 tillable acres is preferred. Land with a house and an outbuilding is also preferred. Contact: Heidi Harrabi, 507-434-4397, heidharrabi@yahoo.com.

◆ Matt Paden is seeking to purchase 10-100 acres of tillable farmland in **Minnesota**. A house is required; fencing would be a bonus. Contact: Matt Paden, 507-517-4612, Camochevytruck@gmail.com.

◆ Lois Kelzer Loeser is seeking to purchase 10-15 acres of farmland in **Minnesota**. Land with a pole barn/shop is preferred. Contact: Lois Kelzer Loeser, 952-261-4401, lois_kelzer@hotmail.com.

◆ Danny Kraft is seeking farmland sites for his small-scale honey bee operation. He is based in Minnesota's Dakota County and is looking for sites in **central, eastern or southern Minnesota**. Contact: Danny Kraft, 952-393-8839, Kraft.danny@gmail.com.

◆ Gina Martinez is seeking to rent 2 acres of farmland in **Minnesota, Wisconsin, South Dakota, Nebraska, Iowa, North Dakota, Illinois or Ohio**. Land with 1 tillable acre and 1 forest acre is preferred. A house is required. Contact: Gina Martinez, 859-592-5862, hopenmartinez0520@gmail.com.

◆ Mary Albrecht is seeking to rent 1 acre of tillable farmland in **Minnesota**. Land that is certified organic and that has a water source for irrigation and cleaning vegetables

Clearinghouse, see page 23...

...Clearinghouse, from page 22

is preferred. No house is required. Contact: Mary Albrecht, 651-353-7111, mea610@msn.com.

◆ Kevin and Christine Ballman are seeking to purchase 40-160+ acres of farmland in *southeastern Minnesota or southwestern Wisconsin*. Land with fenced pasture, outbuildings, a house, productive soils and a conservation plan is preferred. Contact: Kevin Ballman, 651-385-0321.

◆ Timothy Standaert is seeking to purchase a quarter-acre to 2 acres of tillable farmland in the *Twin Cities, Minn., region (Dakota or Scott County)*. Land that has not been sprayed for several years is preferred. Access to water is also preferred. No house is required. Contact: Timothy Standaert, 651-230-5891, stilzinc@gmail.com.

Farmland Available

◆ Michael Diehn has for sale 2.7 acres of farmland in *southeastern Minnesota's Houston County*. There are 2 acres of pasture, an updated barn, a hay shed and a cattle shed, as well as a house with heated garage and an outdoor wood stove plumbed for a heated greenhouse. The asking price is \$185,000. Contact: Michael Diehn, 507-993-1956, Michael.diehn@hotmail.com.

◆ Brandon Wiarda has for rent 20 acres of certified organic farmland in *northwestern Wisconsin's Polk County (near Amery)*. Seven acres is tillable and the farm is currently set up for small-scale vegetable production. There is a greenhouse with in-floor heating, and a pack shed with a walk-in cooler, washtubs, spray tables and a concrete floor with a drain. There is also a house. There is deer fencing around the vegetable fields and an irrigation well. A tractor, field equipment and tools may also be available for use. Wiarda is willing to be flexible and work within the budget needs of a tenant. Contact: Brandon Wiarda, 715-607-1096, bcwairda@gmail.com.

◆ Koopman has available 10 acres of farmland in *southeastern Minnesota's Rice County (near Northfield)* for rent as hay ground. The land has not been sprayed for several years. It's a hay field—primarily orchard and timothy grass with some alfalfa. No house is available. The rental rate is \$100 per acre, and it's available June through August. Contact: Koopman, 608-739-3271.

◆ Jack McCann has for sale or rent an operating 23-acre pasture-based livestock farm *30 minutes from the Twin Cities, Minn., western metro area (Montrose area)*. The land is certifiable organic and includes an option of continuing farming

for TC Farm with guaranteed sales. There is also the option for access to all the equipment needed for a livestock operation. There is a 55 x 60 pole barn with stalls, electricity and water. The 3,000-square-foot house was built in 2001. There is space to add vegetable production. An additional 60 acres is available for rent nearby if desired. Pricing, photos and more information on the property are at <https://tc.farm/LSP>. Contact: Jack McCann, Jack@tc.farm, 612-217-1770.

◆ Sharon Brown has for rent 56 acres of farmland in the *Twin Cities, Minn., region (Hennepin County, near the town of Independence)*. The land consists of 10 pasture acres and 26 tillable acres. There are garages but no house. The rental price is \$140 per acre (negotiable). Contact: Sharon Brown, 218-340-9517, tobrown7@msn.com.

◆ Kent Scheer has available 3 acres of farmland in *north-central Minnesota's Wadena County*. The land is available free to the person with the most innovative business plan which factors in the issues of location and travel time and identifies a perennial crop and process most appropriate to the location. The land has not been sprayed, fertilized or tilled in 75 years. Contact: Kent Scheer, 218-631-3084, kentscheer@outlook.com.

◆ Kurt Schulz has for sale 7 acres of farmland in *south-central Minnesota's McLeod County (near Glencoe)*. Four acres have been in hay for 17 years; no chemicals have been applied to the farm during that time. One acre is in pasture. There is a house and outbuildings include a steel shed, granary and another shed that can house two vehicles. The hay field could easily be fenced for pasture. The asking price is \$140,000. Contact: Kurt Schulz, 320-510-2147, ayerstein@gmail.com.

◆ Kurt Schulz has for sale 40 acres of farmland in *south-central Minnesota's McLeod County (near Glencoe)*. The 40-acre parcel could be sold together with the 7 acres listed above (the two parcels are adjacent to each other). Thirty-four acres have been in hay for 14 years, and no chemicals were applied during that time. Three acres are forest. There is a 32 x 60 barn, a concrete platform in the cow yard and two super hutchers. There is no house. The asking price is \$280,000. Contact: Kurt Schulz, 320-510-2147, ayerstein@gmail.com.

◆ Andrew Novak has for sale 80 acres of farmland in *eastern Minnesota's Pine County (near Pine City)*. It consists of 35 pasture acres and 40 forest acres and it has not been sprayed in four years. There is two- and three-wire electric fence around the pasture; water lines run to each paddock. The pasture could be tilled if fencing is removed. There is a lean-to and pole barn that is half-heated, with an office. There is a house. The asking price is

\$600,000. Contact: Andrew Novak, 612-723-2773, michelle_miller27@yahoo.com.

◆ Dori Plansky has for rent 160 tillable acres in *west-central Wisconsin's Clark County (near Thorp)*. There is good field access from a main road; no house is available. Contact: Dori Plansky, 715-773-1714, dori.plansky@gmail.com.

◆ Azher Mahdi has for rent 60 acres of farmland in *Minnesota*. It consists of 20 tillable acres, 20 pasture acres and 20 forest acres. The land is fenced and there is water and electricity, along with a house. Contact: Azher Mahdi, azhermahdi@yahoo.com.

◆ John Soderstrom has for sale 120 acres of farmland in *northeastern Minnesota's Pine County (near Pine City)*. The land includes 30 pasture acres, 76 tillable acres and 10 forest acres. There is a 30-stall, two-story dairy barn, three pole sheds, a garage, a well house and a farm house. There is new fencing around the perimeter of the farm, along with cross fencing and cattle waterers. The asking price is \$550,000. Contact: John Soderstrom, 320-515-0047, jtsattle@gmail.com.

◆ Martina Chamberlain has for sale a 108-acre certified organic farm in *southwestern Wisconsin's Vernon County (near Westby)*. The land has 52 tillable acres and 23+ pasture acres. There is a handicap-accessible house, 30 x 80 pole shed, corn crib with a 20 x 40 shed attached, and a 30 x 80 two-story barn. The pasture is fenced and a trout stream runs through the pasture. Contact: Martina Chamberlain, 608-632-9145, mack54639@yahoo.com.

◆ Juliet Tomkins has for rent certified organic farmland in *western Wisconsin's Pierce County (near River Falls, 45 minutes east of Minnesota's Twin Cities)*. Tomkins is a retired grass-fed beef farmer who wants to help beginning farmers get started by renting smaller fields (between 1-25 acres) for vegetable production and/or rotational grazing on her 100-acre farm. Ten acres of certifiable organic fields with access to water are ready for vegetable production in 2018. Existing pastures, certifiable organic, fenced with electric (needing some work) and with access to water, are also available for rotational grazing in 2018. A small barn is available. This will be the fourth year that Tomkins and Prescott Bergh have rented out to beginning farmers. Two of the original four sets of farmers that rented the land have purchased their own farms and relocated to them. The rental price depends on type of farming operation. Contact: Juliet Tomkins, 715-821-2323, juliettomkins@gmail.com.

Young Gardeners in Infinite Motion

The 'Youth Stewards' of Hope Forge their own Paths on the Land & in the Community

By Abé Levine

In ballroom dance there is this unspoken, calcified rule that the men lead and the women follow. While the dance may be an extravagant and dazzling showcase of twists, passes and dips, the fixed hierarchy of roles limits the possibility for alternative movement and improvisation. What would a more fluid dance reveal, where in certain moments the roles of leader and follower switch? And what if instead of a dance, we were talking about a community

new connections. For example, last season, as we moved deeper into the work during the summer, Bernardo asked if we could take more photos. He and a buddy, Paris, wove through rows of kale and calendula to take up-close snapshots of participants in a permaculture tour. Youth have expressed a desire to explore artistry, engage with food, and manipulate (in a constructive sense) the world around them. They've painted signs, dug into worm compost, and trellised melons, among other tasks. With help from STEP-UP interns (a work-readiness program coordinated by the City of Minneapolis), youth constructed a hoop house, which we used to grow an additional round of spinach.

Youth have grown a variety of crops this past season, beginning with onion bulbs and then moving to broccoli and eventually corn, tomatoes and fine herbs. Overnight, it seemed, we had a full, thriving garden fed by rich, healthy soil. Not all experiments fared well. The Oaxacan dent corn was too shaded to thrive and ended up being ravaged by squirrels. And our potato leaves were damaged by hot, humid weather. However, as author Adrienne Maree Brown references in *Emergent Strategy: Shaping Change, Changing Worlds*, these are

prime examples of "tender data" for the following season.

At Hope, gardens are not valued solely for their output, but also for their ability to hold community. The garden may be a place to share tea, to walk and play and discern the landscape. It is a place to build relationships. Older youth come with younger siblings in tow, and grandparents whose faces hold memory like the very Earth itself come to observe what all their grandchildren were growing, as they had done in Africa. Racing back and forth with cilantro in hand, then tomatoes and mint, youth are nourishing a bond between generations.

Like water flowing wildly over the ground, young people have begun to form their own paths. In "ReGeneration: Young People Shaping Environmental Justice," a report on youth organizing published by the

Movement Strategy Center, one organizer explained, "Even though there are a lot of stereotypes of youth as slackers, young people hold a big sense of possibility. They are able to have an idea and make it come alive." Young people, despite having limited experience, have the desire to fight for their families and communities on the path to liberation. To what degree are young people honored as leaders in our community?

In response to this impetus, Hope piloted our first-ever youth research project to survey neighbors on how they wish to see open spaces better utilized. Priorities that were expressed included: better recreational facilities, more spaces for gardening and murals, and new local businesses. This spring, we will be hosting our second iteration of youth research focusing on how photography can be used as a tool to tell one's own story when mainstream media has it wrong. In this case, youth will use photography to share their own relationship to food and community. We look forward to cultivating this youth presence as stewards of the natural, social and human-built environments.

In addition to resident participants, STEP-UP interns have played an instrumental role in our programs. Every summer, Hope hosts two-to-four teen interns who support our programming. This year, our four interns—Ayub, Amina, Fadumo and Asha—guided our younger youth while honing their own horticultural acumen. Some days got hot while maintaining the youth "Full Moon" garden as well as the larger space at the Rose, a 5,000-square-foot

Youth Stewards, see page 25...



Youth participated in a recent food program at Hope Community. To what degree are young people honored as powerful leaders in our community? (Photo by Bruce Silcox, www.brucesilcoxphotography.com)

garden, one where youth lead the way and adults responded?

Once- or twice-a-week during the growing season, kids as young as 4 gather at a garden behind the Hope Community Center in the Phillips Community of South Minneapolis to take delight in the land—to find worms, express their inner artist, and immerse themselves in the colors, scents and sensations of our gardens. This offering is known as "Youth Stewards," and the group is an ever-emerging organism—much like the land itself. As a facilitator, my job is to create opportunities for learning and team building, as well as for young people to step into positions of leadership, which embeds them into the broader activity of all that transpires during our agricultural cycle.

Youth are consistently yearning for greater responsibility and opportunities to build



Gardens are not valued solely for their output, but also for their ability to hold community. (LSP Photo)

community garden that sits across the street from the Hope Community Center. The interns also participated in the social life of the community by attending events such as Shaax iyo Shaako (Tea and Conversation), where they had the opportunity to share their thoughts on topics ranging from healthcare

to self-care.

Although we instruct youth on the right depth to plant seeds and correct time to water, they have their own wisdom. This may mean allowing the plants to find their own order as adults stress about getting everything in a line; it also may mean shedding light in unforeseen ways on complex issues. So, we continue to dig and unearth the resources that lie within and between members

of the youth garden team. □

Abé Levine is a program assistant for Food, Land and Community at Hope Community. The Land Stewardship Project and Hope are working to build community power and capacity to shape a strong neighborhood scale system that ensures reliable, affordable and equitable access to healthy food.

Join a CSA Farm in 2018

LSP Community Supported Ag Farm Directory Now Available

The 2018 edition of the Land Stewardship Project's *CSA Farm Directory* is now available at <https://landstewardshipproject.org/stewardshipfood/csa>. The *Directory* lists farms that provide eaters in the Twin Cities, Minnesota and western Wisconsin region an opportunity to buy a share, and in return receive regular deliveries of produce, meat and other food throughout the growing season.

What is CSA?

At their most fundamental level, Community Supported Agriculture (CSA) farms provide a weekly delivery of sustainably produced food to consumers during the growing season (approximately June to October). Those consumers, in turn, pay a subscription fee. But CSA consumers don't so much "buy" food from particular farms as become "members" of those farms. CSA operations provide more than just food; they offer ways for eaters to become involved in the ecological and human community that supports the farm.

The farms listed in LSP's directory have paid a fee to be included. The Land Stewardship Project is not a certification agency for CSA farms and does not guarantee customer satisfaction.

Please keep in mind that while membership in a CSA farm means sharing in the bounty of the season, it also means sharing in the risks. At times, raising food in the Upper Midwest can be made quite challenging by inclement weather, pest infestations and other factors beyond the farmers' control. We encourage you to contact the farms directly and ask questions to determine what best fits with your needs, lifestyle and schedule. We recommend reading the "Selecting a CSA Farm" and "Questions to Ask a CSA Farmer" guides on this page before beginning your search for a CSA operation that fits you best.

Selecting a CSA Farm

While membership in a CSA farm includes a weekly share of fresh produce (and increasingly, meat and other products), other factors may vary from farm-to-farm. You may want to refer to the following list when choosing a farm (ideas and wording used for this list taken from FairShare Community Supported Agriculture: www.csacoalition.org):

→ **Location:** The CSA farms listed in this directory are located throughout Minnesota and western Wisconsin. You should keep in mind the driving distance to the pick-up site or the farm when considering your level of involvement and the involvement expectations of the farm.

→ **Pick-up site/Delivery Day:** The CSA farms listed have various delivery or pick-up dates. Most farms deliver shares to a common pick-up site, but a few

will deliver shares to your door, while others require you to pick up your share at the farm or help with deliveries.

→ Length of Season/Number of Deliveries:

The length of season and number of deliveries varies among the farms. Most begin in May or June and run through September or October. Some farms have an optional fall and/or winter delivery for an additional cost.

→ Types of Produce and Other Food Items:

Most of the CSA farms offer a wide variety of seasonal produce. Some farms offer unusual varieties while others may add extras to their standard shares. Some farms may give members the option to buy honey, fruit, eggs, meat or other specialties at an additional cost.

→ Opportunities for Involvement:

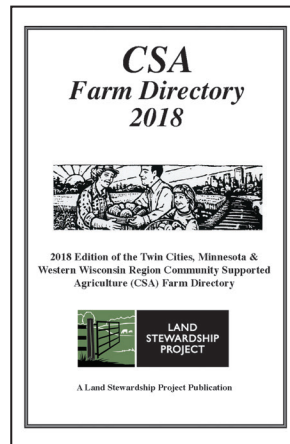
Community building is an important part of the CSA approach; most farms encourage you to become involved. Some farms plan seasonal festivals or special events while others encourage their members to just "drop by."

Questions to Ask a CSA Farmer

As the number of CSA farms has grown in the region over the years, eaters interested in knowing the faces behind their food have been offered more choices than ever. However, increased choice can bring with it some challenges. How do you choose the farm that best fits your needs and is most likely to provide a satisfying experience?

Below are a few questions that can be asked of any farmer you are considering entering into a CSA relationship with. Potential CSA members should not be shy about asking such questions—and a good CSA farmer should be forthcoming with answers. After all, this is about creating a trusting relationship built on food, stewardship and friendships.

- ✓ How many years have you been farming?
- ✓ How many seasons have you been doing a CSA?
- ✓ Have you ever worked or trained on another CSA farm?
- ✓ What vegetables or other food items do you plan to provide to shareholders?
- ✓ What is the size of a share? Do you offer half-shares?
- ✓ What is your system for storing and transporting the share once it is harvested?
- ✓ At the drop-off locations, is the share left in a sheltered area?
- ✓ How do you view the CSA notion of shared risk/shared bounty?
- ✓ Are farm members welcome on the farm? What community events are held?
- ✓ Is there a farm work requirement? □



Companion Cropping Compatriots

LSP Members Make Connections in the Heart of Mexican Agriculture

By Nick Olson

Before the streets begin to bustle with activity, we hop on a small bus early in the morning to head out of the city toward the nearby mountains in the north. We leave earlier than planned because, the day before, we ran into roadblocks put up by the nurses who are organizing to express their frustration with low wages and a lack of resources. As our bus leaves the outskirts of the city, the vendors and the markets are coming to life, but our early departure puts us ahead of any forced route changes.

We are 13 farmers from Minnesota and Wisconsin traveling through the heart of agriculture on this continent—the state of Oaxaca, Mexico. As members of the Land Stewardship Project, we have come to Oaxaca as part of a Witness for Peace exchange to connect with farmers and to learn firsthand about critical issues affecting communities in both Mexico and the United States, especially land access, food sovereignty, trade policies and immigration. To Midwesterners, Oaxaca represents a deep connection to our main commodity crop. It is a state in southern Mexico that is home to more than 30 varieties of corn (maize) and 16 different indigenous groups who have been cultivating these varieties for hundreds of years.

As our bus winds its way into the mountains, the landscape changes dramatically. It is the dry season in Oaxaca, but this region, known as the Mixteca, seems unusually dry, almost arid. We learn that this region is still struggling to reverse the extreme environmental degradation caused by the Spanish over 400 years ago. The forest had been clear-cut and goats were introduced to graze the steep hillsides. These destructive practices resulted in a loss of over 15 feet of topsoil in certain regions.

Just as we are starting to adjust to this arid landscape, the bus takes a sharp turn

onto a narrow, single-lane gravel road and within minutes we are entering a lush forest interspersed with small parcels utilized for agriculture. The contrast is incredible. The organization CEDICAM (Center for Integral Campesino Development of the Mixteca) has been actively working in the Mixteca region for over 30 years on reforestation while creating opportunities for community members to build wealth and strengthen



Farmers from Oaxaca showed participants in the recent Land Stewardship Project-Witness for Peace exchange corn raised in a system called “la milpa.”

their communities through sustainable agriculture. CEDICAM’s work has earned it acclaim from around the globe.

Our bus finally comes to a stop in front of a farm in the small community of San Isidro Yukuyoko Tilantongo. It is a community of about 18 families tucked into a steep but lush mountainside dotted with houses, corn fields and a surprising number of greenhouses. We are met in the driveway by a small group of friendly farmers. We immediately feel at home because there is something very familiar about being on a farm with farmers. There is a universal connection, despite the cultural and language differences.

The farmers of Yukuyoko are working together to embrace their traditional ways of farming while simultaneously incorporating new techniques such as raising tomatoes and peppers in greenhouses. The knowledge in this community is passed on from one farmer to another. This farmer-to-farmer informa-

tion and knowledge exchange is something that farmers of the Land Stewardship Project are familiar with. For over 30 years, LSP has been providing space for farmers to learn from one another through workshops, field days and mentorships. It was great confirmation to see that the utilization of farmer-to-farmer exchanges is truly the best way for local farming communities to remain strong and resilient.

After a series of brief introductions, the farmers of Yukuyoko were excited to show us one of the most long-standing farming practices of this region. The name for this production system is called “la milpa,” which refers to a companion method of planting where corn, beans and squash are raised together in the same fields. This method of farming has been described as one of humankind’s greatest inventions by researchers like H. Garrison Wilkes at the University of Massachusetts-Boston. The Dakota people of central Minnesota have utilized a similar method of planting called “three sisters” for hundreds of years. The three plants complement each other—the corn provides a stalk for the beans to climb, the beans supply nitrogen to the corn, and the squash shade out competitive weeds. This system also produces more food per acre than planting the same area in only one of these crops.

As we headed up to one of the milpa fields, the questions we as farmers were eager to ask were answered one-by-one by the farmers of the community. We spent hours in the field, farmer-to-farmer, talking about everything from planting techniques and climate change to the challenges of maintaining a viable farm in today’s global economy. Our joys and challenges were similar. Our relationship to the land and to growing food for our communities connected us in a unique way that went beyond language and borders. It was the deepest, most transformational, farmer-to-farmer connection I have ever experienced.

This region has a dry season and a rainy season—each consisting of about six months. The rainy season, which actually does not bring a lot of rain annually, begins in mid-May; the dry season begins in Mid-October. The particular corn grown in this

Oaxaca, see page 27...

region for hundreds of years has adapted and been selected by farmers to thrive in this environment and climate. The ancient variety, called “cajete,” is extremely drought resistant and unaffected by poor soils. In fact, cajete is actually planted at the end of February, the middle of the dry season, using a local hand tool that allows the seed to be planted over 12 inches below the surface, where there is a small amount of moisture. By mid-May, this corn has grown up to eight inches tall without any rain. The summer rains take this plant to a height of over 10 feet, as well as provide the moisture needed to grow the beans and squash to complete the milpa system. This corn variety, along with the knowledge of how to plant it, has been passed on from one farmer to the next over countless generations.

What would a farm visit be without sharing food together? After several hours of learning and sharing in the fields, we were invited into one of the farmer’s houses for a meal. We were able to eat all of the crops that we had just spent time becoming familiar with. We ate the cajete corn in the form of tortillas and tostadas. The squash



Despite the cultural and language differences, there is a universal connection between farmers. Here, Román Kruz describes his production methods and the challenges farmers in his region face.

was served in a soup and the beans as a main dish. This meal was the ultimate way to steep ourselves in an agricultural tradition that has been rooted for so many generations in this farming community. The three food plants of the milpa system have been sustaining this community for hundreds of years and will continue to sustain it for future generations. This transfer of knowledge

and traditions from farm-to-farmer and from one generation to the next is essential to the survival of agrarian communities across the world—including here in the Midwest. □

Land Stewardship Project organizer Nick Olson farms in central Minnesota and works with LSP’s Farm Beginnings Program and its Racial Justice Cohort.



The southern Mexican state of Oaxaca is home to more than 30 varieties of corn and 16 different indigenous groups who have been cultivating these varieties for hundreds of years.

Background on the LSP-Witness for Peace Delegation

The Land Stewardship Project-Witness for Peace delegation to Oaxaca, Mexico, took place Feb. 4-13. This was the second delegation LSP has sent to the region; the first was in 2016.

Participants in the 2018 trip met with Mexican farmers working on reforestation efforts, protection of native crops and promotion of local markets and food consumption. Specific goals for the 2018 trip included:

1) Deepen LSP’s pool of members who

can speak effectively from their own experience about critical issues affecting communities in Mexico and the United States, especially as they relate to land access/land rights, food sovereignty, globalization and trade, immigration, and models of rural vitality and sustainable food and farming systems.

2) Advance a public narrative about justice and solidarity and provide people in the Upper Midwest with a better way to consider their values and think about these critical issues.

3) Educate and engage policy makers and

community leaders at various levels around critical issues such as land access/land rights and food sovereignty.

4) With people in Mexico and the Upper Midwest facing similar issues and opponents, express, spread and act on solidarity across borders.

Overall, LSP is hoping to use these trips as a way to deepen our ties to organizations working with farmers in Oaxaca. For more information, contact LSP’s Nick Olson at nicko@landstewardshipproject.org or 320-269-1057. □



Drawdown The Most Comprehensive Plan Ever Proposed to Reverse Global Warming

Edited by Paul Hawken

2017; 256 pages

Penguin Books

www.drawdown.org

Reviewed by Dana Jackson

The simplicity of a popular slogan some years back, “Think Globally, Act Locally,” was deceptive. How does one possibly think globally? I can’t even wrap my mind around what’s going on in the one little town where I live! Paul Hawken, author of *The Ecology of Commerce* and *Natural Capitalism*, needed to think globally to find out what it would take to reverse global warming within three decades, so he recruited 70 research fellows with impressive credentials in science and public policy from 22 countries to gather data and do detailed climate models, and he brought together a 120-person advisory board to review the analyses. Then he edited the results.

Hawken’s success in thinking globally produced *Drawdown: the Most Comprehensive Plan Ever Proposed to Reverse Global Warming*, a notebook-sized book, with lots of beautiful photographs. And since the data is dynamic, connected to the book is an impressive website (www.drawdown.org) that is updated regularly with new data.

“Drawdown,” in atmospheric terms, is “that point in time at which greenhouse gases peak and begin to decline on a year-to-year basis.” In this book, it means reducing atmospheric carbon. *Drawdown* is packed with descriptions of what the editor calls “solutions”—technological, ecological and social—that could draw down greenhouse gases, not just reduce emissions, although we still need to do that as well.

Tom Steyer, founder and President of NextGen Climate, says in the foreword: “We need a rigorous plan to draw down carbon, and Project Drawdown’s team... has modeled and chronicled one hundred creative ideas.” Steyer later refers to Project Drawdown as a “road map with a moral compass,” and says that it is a “living breathing

plan updated continually by its growing online community.”

In a second introductory section, Hawken further explains what they mean by a plan, admitting the subtitle “may sound a bit brash” and explains that his organization “did not create or devise a plan,” but that in conducting the research, they “*found a plan*,” a blueprint that already exists” through all the “applied, hands-on practices and technologies that are commonly available....” So these practices and technologies form the “plan” in *Drawdown*. It contains eight sections: “Energy,” “Food,” “Women and Girls,” “Buildings and Cities,” “Land Use,” “Transport,” “Materials,” and “Coming Attractions.” Each section describes solutions that could significantly draw carbon out of the atmosphere by 2050, and an overall rank for results is assigned to each.

DRAWDOWN
THE MOST COMPREHENSIVE
PLAN EVER PROPOSED TO
REVERSE GLOBAL WARMING
EDITED BY PAUL HAWKEN

Numbers people will love this book. There’s a page in front that explains how solutions are ranked and a section in the back explaining the methodology and what the numbers tell us, plus several pages charting solutions by ranking and sector.

One might expect that the top-ranking solutions are technological, but actually just six of the top 20 are. Wind turbines and solar farms predictably rank high (three and eight) but surprisingly, refrigeration is number one. Current hydrofluorocarbons (HFCs) in air conditioners and refrigerators—which, by the way, are replacing compounds that caused the ozone hole—warm the atmosphere at a rate that is 1,000 to 9,000 times greater than carbon dioxide. Phasing them out in existing and new units as demand for air conditioning soars (an irony of global warming) is a gargantuan task, but an amendment to the Montreal Protocol in 2016 provides hope by setting goals for replacing them with natural refrigerants such as

propane and ammonia, starting in 2019.

Two social solutions rank number six and seven: “Educating Girls” and “Family Planning.” Without family planning, another billion people beyond the medium current projection of 9.5 billion could be added to the planet by 2050, all requiring energy, buildings, food and transportation. This will result in greater carbon dioxide emissions. Girls who are educated have fewer, healthier children when they are adults. According to the Brookings Institute, “The difference between a woman with no years of schooling and with 12 years of schooling is almost four to five children per woman.”

In the “Food” section, *Drawdown* declares: “...what we eat turns out to be the number one cause of global warming.” What we don’t eat is also important, because “Reduced Food Waste” is number three in the hierarchy of strategies. To reduce food waste in lower income countries, better storage, processing and transportation are needed. In higher income countries, waste must be curtailed at the retail and consumer levels. The number four solution is a plant rich diet—eating more vegetables, fruits, grains and legumes, and much less meat. Adults require an average of 50 grams of protein a day, but in the U. S. and Canada, the average adult consumes more than 90 grams. An industrial meat system has developed to drive and satisfy this demand, and it depends on huge amounts of fossil fuel energy to raise millions of acres of grain that hogs and cattle eat in factory farm facilities. In addition, petroleum-based fertilizer applied to fields emits nitrous oxide and ruminants such as cows emit methane, both powerful greenhouse gases.

Because, according to *Drawdown*, “No other mechanism known to humankind is as effective in addressing global warming as capturing carbon dioxide from the air through photosynthesis,” various kinds of food production offer solutions. Trees in food systems are ranked fairly high in their ability to drawdown greenhouse gases. Silvopasturing, tree intercropping and other forms of utilizing trees in agricultural settings all have great capacity to store carbon both above and below ground.

More familiar to *Land Stewardship Letter* readers are sections on “Regenerative Agriculture” and “Managed Grazing,” which rank 11th and 19th, respectively, in their potential for taking carbon dioxide out of the atmosphere. *Drawdown* confirms conclusions in LSP’s *Soil Health, Water & Climate Change* pocket guide (see page 32) that systems focusing on regenerating soil health are not only productive, but highly

Drawdown, see page 29...

effective in capturing carbon. Not surprising, North Dakota farmer and soil health pioneer Gabe Brown is featured in *Drawdown*'s discussions of cover crops and mob grazing. The researchers differentiate regenerative from the less ecological, but better ranked, "Conservation Agriculture" (number 16 on the list), which is essentially planting cover crops instead of tilling the soil after harvest, but continuing the use of synthetic fertiliz-

ers and herbicides. But let's not dismiss the power of what *Drawdown* calls conservation agriculture. To put it in perspective, if just 10 percent of the 3 billion acres in annual crops worldwide retains some carbon by not releasing it through tilling, that makes a huge contribution to carbon sequestration.

Drawdown is an optimistic book. Most readers will be convinced that these practices and technologies could draw carbon out of the atmosphere to reduce global warming. But to employ them at scale, we need not only scientists and data and capital, we

need elected officials to make public policy that initiates and supports the solutions. And that will require the most important solution of all—political will. That's something not modeled and ranked in this book. □

Former Land Stewardship Project associate director Dana Jackson is an active member of Citizens' Climate Lobby, a nonprofit, non-partisan, grassroots advocacy organization focused on national policies to address climate change.

Ten Plants that Changed Minnesota

By Mary Hockenberry Meyer
& Susan Davis Price

Foreword by Arne Carlson

2017; 224 pages

Minnesota Historical Society Press

www.mnhs.org/mnhspress

Reviewed by Dale Hadler

In 2012, a group of experts was convened to take on an unenviable task: make a list of the 10 plants that have had the biggest influence on the state of Minnesota. Plants were to be judged by their impact—both positive and negative—in six areas: environmental; economic or industrial; cultural/spiritual; historical; sustenance; and landscape. The committee based its work on over 100 different plants nominated by the public. The final list contains few surprises: alfalfa, American elm, apples, corn, purple loosestrife, soybeans, turf and lawn grass, wheat, white pine and wild rice.

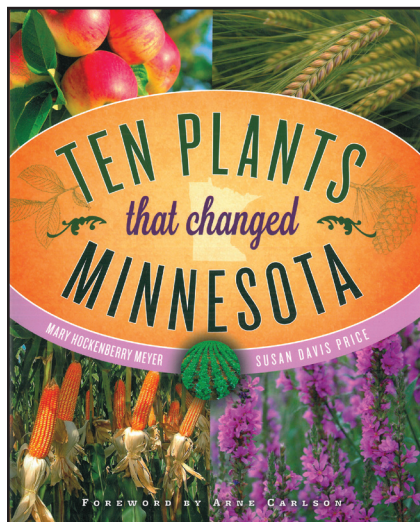
This project has resulted in *Ten Plants that Changed Minnesota*, a fascinating and eye-opening summary of each plant's history, development and impacts. The book, which is made quite accessible to the general reader thanks to straightforward writing and a mix of graphics and sidebars, was authored by horticulture professor Mary Hockenberry Meyer and gardening writer Susan Davis Price. It includes a companion website (<http://top10plantsmn.org>) and a freshman seminar at the University of Minnesota. As Meyer writes in her introduction to the book, the project is based on the idea that people need to know something in order to appreciate its impact. And let's face it, most of us "see" plants like corn or lawn grass every day, but we don't really think about these plants' impacts on our daily lives.

And the impacts are significant. Alfalfa,

corn, soybeans, apples and wheat helped make Minnesota the agricultural giant that it is. Plants like the American elm and turf grass influence the way our cities, parkways and lawns look. Plants like white pine and wild rice have become botanical symbols of Minnesota, as well as economic engines. And we shouldn't forget plants like purple loosestrife, which was imported with the best of intentions but evolved into an invasive nightmare that threatens wetlands.

The chapters are set up to clearly provide the history of each plant and its impact, with fascinating anecdotal stories thrown in to add color. For example, there's a short piece on how some Stearns County farms became famous for a time because they were the source of "Minnesota 13," a premium quality corn liquor moonshine.

To its credit, the book doesn't avoid controversy. It describes in a balanced and dispassionate manner not only the economic advantages of plants like corn and soybeans, but the negative environmental impacts as well. The authors even delve into the controversy surrounding genetically modified crops, explaining their agronomic advantages while addressing the concerns and drawbacks.



It would be easy to dismiss a work like this as a pure piece of entertainment for fans of natural, or "unnatural," history. But the timing of *Ten Plants* has wider implications, as we debate the impact humans have had on the landscape in states like Minnesota. As this work makes clear, it turns out that which plants we choose to favor doesn't just determine what we eat or manufacture—it also sets in place the kind of landscape we have. The impact these plants have had on the state wasn't by accident—humans have long influenced which flora dominates the landscape, and which is shoved aside, ignored, or outright destroyed.

"Utilizing these plants is not a neutral activity but one that has consequences," Price writes in her introduction to the book.

For example, the authors take the reader through corn's history, which can be traced back thousands of years to Mexico, as Land Stewardship Project members who travelled to Oaxaca (see page 26) recently learned. The Mayas, Incas, Olmec and Aztecs cultivated varieties of corn throughout Mesoamerica, and its cultivation in the Mississippi River Valley is partially credited with the population "explosion" of Native American cultures in places like the Upper Midwest.

Meyer and Price provide a nice description of how a combination of economics, policy, cultural influences and scientific innovation brought us to where we are today when it comes to corn: it has replaced the prairie and become a multi-billion dollar industry. It dominates the landscape in the food aisle as well—75 percent of all grocery items contain some form of corn.

We deliberately chose to make this row crop king, and, as we consider the economic and environmental downsides of monocultural agriculture, a book like this reminds us that we can unchoose such a myopic approach to the natural, economic and cultural landscape as well. □

Land Stewardship Project member and frequent volunteer Dale Hadler lives in southeastern Minnesota.



LAND
STEWARDSHIP
PROJECT

Membership Update

Monthly Giving's Monthly Impact

Josh Journey-Heinz

The Land Stewardship Project's greatest asset lies in its roughly 4,000 dues-paying members who know that in order to build a farm and food system that values people and the land, it is often necessary to stand up to moneyed interests. It is the engagement, leadership and stable financial backing from these many individuals that powers LSP toward carrying out that mission.

That's why LSP members know that maximizing their support by contributing financially in a variety of ways makes a difference. While many LSP members renew their membership annually through a one-time donation, there is a growing group that has found there is another way to maximize their support by giving a preset monthly contribution.

LSP member Eric Nelson from Winona, Minn., shared with me why he makes a monthly gift: "I've found that it's important for nonprofits like LSP to have stable funding and so giving monthly is a good way for me to make sure they have that." Monthly pledgers like Eric have found that giving this way allows for more flexibility to do gift amounts that might have otherwise been a heavier lift if done all at once yearly. "Giving to the groups that need the help is easier for me to do monthly, and if I happen to have something extra, I can still make an additional gift if I like," he says.

Those who give in this way like that it can pack a bigger punch through manageable installments. Reoccurring monthly gifts such as \$10, \$20, \$50 or even \$100 a month can amount, respectively, to \$120, \$240, \$600 or \$1,200 when viewed in a yearly snapshot.

As a monthly pledger, your membership is current as long as your pledge is active, and you may choose to alter or discontinue your monthly pledge at any time. Knowing there is support coming in each and every month allows LSP to put a greater focus on the organizing, education and training necessary in carrying out our mission.

Contributions of all types and amounts have an impact and are deeply appreciated. If you are interested in learning more about

a monthly pledge, contact me. I would be happy to answer your questions or help you set up a new monthly pledge. I can be reached at jjourney-heinz@landstewardship-project.org or 612-722-6377. You can also set up a new pledge at <https://landstewardshipproject.org>. Thank you. □

Josh Journey-Heinz is a major donor fundraiser for LSP.

Membership Questions?

If you have questions about the status of your Land Stewardship Project membership, give our Individual Giving and Membership Program a call at 612-722-6377, or send an e-mail to Clara Sanders Marcus at cmarcus@landstewardshipproject.org. □

Volunteer for LSP

A big "thank you" goes out to the volunteers who generously donate their time and help the Land Stewardship Project in all

aspects of our work. LSP literally could not fulfill its mission without the hard work of our volunteers. They help us do everything from stuff envelopes and make telephone calls to enter data and set up logistics for meetings. If you'd like to volunteer in one of our offices, for an event or at a meeting, contact:

• Montevideo, Minnesota

Terry VanDerPol, 320-269-2105,
tlvdp@landstewardshipproject.org

• Lewiston, Minnesota

Karen Benson, 507-523-3366,
karenb@landstewardshipproject.org

• Minneapolis, Minnesota

Amelia Shoptaugh, 612-722-6377,
amelia@landstewardshipproject.org. □



Support LSP in Your Workplace

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

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

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

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



Getting the Word Out

In order to advance the Land Stewardship Project's mission of creating a new food and farming system that is good for our land, communities and people, we need members and allies who are willing to give voice to this passion for a just and sustainable society. Through interviews, public meetings, letters-to-the-editor and other means, we have members who are doing just that. Here are a few recent examples.

"This organization has really accompanied us on our farm dream and supported us."

— Kate Droske, a beginning farmer from Sauk Centre, Minn., speaking at a recent LSP state policy meeting

"I think farmers since day one have been talking about the weather because their whole life revolves around the weather. It's hard to plan even three-four days out, and now it may be bringing in a little bit of fear."

— Caledonia, Minn., farmer Greta Mierau, speaking on the LSP video *Farmers Talk About Climate Change*

"One of the largest challenges to those beginning farmers is having access to land, so when we were looking out over our fields on our small farm in western Wisconsin, we realized well, we do have some land that could be farmed, should be farmed...and we wanted to make it accessible to those smaller operations that needed a place to start."

— Juliet Tomkins, a retired farmer from River Falls, Wis., speaking on a recent LSP podcast

"We're killing off our biology, which used to be our bank account."

— Stewartville, Minn., farmer John Meyer, speaking at an LSP Soil Builders' Network workshop

"It's up to us to achieve this vision through organizing, conversations and commitment."

— Alexandria, Minn., resident Sylvia Luetmer, speaking at an LSP meeting about "A Vision for Rural Minnesota"

"Make [crop insurance] an insurance program and not a vehicle to advance the production of certain commodities."

— Goodhue, Minn., farmer Bill Gorman, speaking on WNAX Radio

"The so-called emotionless scientists had better get emotional about ruining our soil."

— Minneapolis resident Barbara Vaile, writing in the *Star Tribune* newspaper

"Soil is really a bunch much more precious than oil. Not many people stop to think about that, but we really till the soil of our own graves and we just have to start paying way more attention to the soil that we've got left."

— Kelley O'Neill, a Rushford, Minn., farmer, speaking on the LSP video *Farmers Talk About Climate Change*

"When I come to these meetings, I feel my voice is being heard, I feel democracy is working. In other places, I don't feel my voice is being heard. When I'm busy in the fields, I feel better knowing LSP is out there working on these issues."

— Tyler Carlson, a farmer from Sauk Centre, Minn., speaking at a recent LSP state policy meeting

Illustration by Josh Journey-Heinz



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STEWARDSHIP CALENDAR

→ **APRIL 21—Twin Cities Seward Co-op Community Supported Agriculture (CSA) Fair**, 11 a.m.-2 p.m., Minneapolis. Contact: <https://seward.coop/events/item/2671> (see page 25 for information on joining a CSA)

→ **APRIL 27-29—"New Farmer U" LSP, MOSES & Renewing the Countryside workshop**, Wisconsin Dells, Wis. Contact: <https://mosesorganic.org>, 715-778-5775

→ **MAY 2—Minnesota Water Action Day 2018**, Minnesota Capitol, St. Paul. Contact: www.wateractionday2018.eventbrite.com; Amanda Babcock, LSP, 612-722-6377, ababcock@landstewardshipproject.org

→ **MAY 3—Hope Community/LSP Green Zones 101 Session**, Minneapolis. Contact: <http://hope-community.org/greenzones101>; Eric Avery, LSP, eavery@landstewardshipproject.org

→ **SUMMER—LSP Soil Builders' Network Workshops & Field Days in southeastern Minn.** Contact: <https://landstewardshipproject.org/lspsoilbuilders>, 507-523-3366

→ **SUMMER—Chippewa 10% Workshops & Field Days in western Minn.** Contact: <https://landstewardshipproject.org/stewardshipfood/chippewa10project>, 320-269-2105

→ **JULY—LSP Twin Cities Summer Potluck Cookout**, LSP Minneapolis office (date and other details to be announced). Contact: LSP, 612-722-6377

→ **JULY 29—LSP Farm Dreams Workshop**, 1 p.m.-5 p.m., LSP office, Minneapolis (see page 18)

→ **AUG. 1—Early Bird Discount Deadline for 2018-2019 LSP Farm Beginnings Course** (see page 18)

→ **SEPT. 1—Final Deadline for 2018-2019 LSP Farm Beginnings Course** (see page 18)

→ **OCT. 2-3—Nobel Conference 54—Living Soil: A Universe Underfoot**, Gustavus

Step-up & Get Involved

There are plenty of opportunities to get in the thick of helping LSP "keep the land and people together." See <https://landstewardshipproject.org/home/upcomingevents> for the latest workshops, classes, field days and deadlines. Call our offices in Lewiston (507-523-3366), Montevideo (320-269-2105) or Minneapolis (612-722-6377) for details on ways to get involved.



Adolphus College, Saint Peter, Minn. Contact: <https://gustavus.edu/events/nobelconference/2018>

→ **OCTOBER—Classes for 2018-2019 LSP Farm Beginnings Course begin meeting in southeastern Minnesota** (see page 18)

The LSP Store

Pocket Guide to the Power of Soil

The Land Stewardship Project's *Soil Health, Water & Climate Change: A Pocket Guide to What You Need to Know* provides an introduction to the latest innovations in science and farming related to building soil health, and how implementing such practices on a wide-scale basis can make agriculture a powerful force for creating a landscape that is good for our water and our climate. The *Pocket Guide* is available as a pdf and online mobile app at <https://landstewardshipproject.org/smartsoil>. Single paper copies are available for \$5 at LSP's online store (<https://landstewardshipproject.org/store>) or by calling 612-722-6377.



Stewardship Fashion

Show your support for keeping the land and people together by wearing an LSP t-shirt featuring artwork by staff member Josh Journey-Heinz. The shirts are "avocado" green, and come in various sizes, with women's and men's cuts available. They are 100 percent organic cotton and made in the United States.

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