Building the Bridge to Soil Health:

The Power of Organizing Farmer-to-Farmer Engagement

October 15, 2020







By Doug Nopar, co-director, Bridge to Soil Health program

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Cover Photo: Minnesota farmer Duane Hager holding a sample of his biologically-rich soil, by Brian DeVore

Introduction —The Land Stewardship Project's Bridge to Soil Health

The Land Stewardship Poject's southeastern Minnesota-based *Bridge to Soil Health* initiative was spurred by the compelling and inspiring work of conservationists and farmer/ranchers in North Dakota's Burleigh County. In that area, people like Jay Fuhrer, Gabe Brown, Kristine Nichols, and Joshua and Tara Dukart banded together around the idea that we did not have to accept the degradation of our soil resource as an inevitable result of modern farming. The innovative team approach taken in Burleigh County was first reported on extensively in 2012 by LSP's newsletter, the *Land Stewardship Letter*, as well as in our *Ear to the Ground* podcast (https://bit.ly/2GYXSbn). Later, LSP staff and members observed firsthand how farmers and soil experts in Burleigh County created a community-based movement based on soil health, and in particular, how the combined effect of no-till farming, cover cropping, and managed rotational grazing could make farms much more profitable, and at the same time improve the landscape and withstand weather extremes (both drought and excess rainfall).

What we witnessed in Burleigh County was that the application of the soil-building principles implemented there could dramatically improve soil organic matter much more quickly than most people, including scientists, thought was ever possible. And that the financial, agronomic, and ecological benefits could start to be seen within a couple years, with dramatic changes occurring in the soil within 5 to 10 years. What inspired us even more was that some of the farms involved were bringing the next familial generation, or another beginning farmer, into the operation without having to expand their land base. They weren't farming bigger, just farming better.

We adapted the concept and principles being used in Burleigh County to the region of southeastern Minnesota, a location where LSP has had a presence (and one of our three offices) for almost 40 years. We focused in one geographic region because we knew that for farmers to make these soil health innovations on their farms, they needed peer support, needed to no longer feel isolated, and needed a soil health community to be part of. And that meant being able to easily drive to educational workshops and farm tours and to hear and see what others were trying on their own farms in an area with similar agronomic, soil, and weather conditions. We also brought to this work a 30+ year history of farmer-to-farmer educational work and extensive rural community organizing experience, applied that to the *Bridge to Soil Health* program, and then built on that history with new expertise and skills provided by staff and the farmers we work closely with.

It's important to note that LSP's *Bridge to Soil Health* didn't exist in a vacuum. It began at a moment in the Midwest when heightened attention was being given to soil health. We helped drive that interest and attention, but we're certainly not the only ones responsible for that. One can hardly pick up a farm magazine these days without seeing at least one article that connects soil health with improved profitability, cutting costs, sinking carbon into the ground and improving yields, even in this time of deeply challenging weather and finances. The *Bridge to Soil Health* initiative has benefited from this new and widespread attention to soil health.

After looking at this report, if you'd like to learn more about the *Bridge to Soil Health* program, please contact Shona Snater, program co-director, at ssnater@landstewardshipproject.org.

Acknowledgements

Huge thanks and admiration go out to the significant and growing number of innovative, stewardship-minded crop and livestock farmers determined to build the health of the soil and the land while faced with significant financial pressures and daunting weather challenges. We've learned from you and been inspired by you.

A deep and heartfelt thanks goes out to the very talented and committed core staff members that have served on LSP's southeastern Minnesota *Bridge to Soil Health* team: Shona Snater, Sarah Fillius, Alex Romano, Liana Nichols, and Connor Dunn. We worked hard, brainstormed and planned together, inspired one another, challenged, critiqued and supported one another, all aimed at making the work better and creating a better future for farmers, the land, and rural communities.

Thanks also to fellow staff members Richard Ness, Robin Moore, Karen Benson, Brian DeVore, Mark Schultz, Megan Smith, and George Boody, each of whom played key roles in the development and implementation of the *Bridge to Soil Health* program. Each of you have been, in your own way, with your own talents, crucial to the success of this effort.

The program has also been extremely well-served by a critical "supporting cast" of staff members, past and present, that work on LSP's administrative team, in our Membership and Individual Giving program, our Farm Beginnings program, our Community Based Food Systems program, and our Policy and Organizing program. That has included Julia Ahlers, Clara Sanders Marcus, Maddie Hyde, Elizabeth Makarewicz, Amanda Madison, Josh Journey-Heinz, Amanda Koehler, Tom Nuessmeier, Jess Kochick, Paul Sobocinski, Matthew Sheets, Johanna Rupprecht, Barb Sogn-Frank, Amelia Shoptaugh, Jess Anna Glover, Timothy Kenney, Mike McMahon, Amy Bacigalupo, Nick Olson, Scott DeMuth, Annelie Livingston-Anderson, Karen Stettler, Terry VanDerPol, Ben Anderson, Caroline van Schaik, Emily Jekot, Bryan Simon, Emily Minge, Maryan Abdinur, Rebecca Wasserman-Olin, Jonathan Maurer-Jones, Dori Eder, Maggie Wright-Racette, and Bobby King. The *Bridge to Soil Health*'s accomplishments are the result of your interest, commitment, help, and support.

The input and dedication from our soil health farmer advisory and steering committee members have been key to this work. That has included Bob Mierau, Eric and Ann Kreidermacher, Robb Miller, Curt Tvedt, Chuck and Sue Henry, Kaleb Anderson, Myron Sylling, Jared Luhman, Kelly Kalmes, Sandy Dietz, Jean Erpelding, Rory Beyer, Rick Sommerfield, and Connor McCormick. The Land Stewardship Project is grateful to the dedication, commitment and support of our 4,300-member households that provide us with financial support, guidance and the willingness to act on values based in stewardship, justice, democracy, health, and community.

We also wish to thank the foundations, businesses and organizations that have financially supported our work for improved soil health: Albert Lea Seed House, Zabel Seeds, La Crosse Seed, Prairie Creek Seed, Foresight Bank, Walton Family Foundation, Cedar Tree Foundation, Ceres Trust, Regenerative Agriculture Foundation, No Regrets Initiative, Patagonia, Food and Farm Communications Fund, Earth Cloud Fund, Fishers and Farmers Partnership/U.S. Fish and Wildlife Service, and the California Climate Action Network.

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Purpose of this report

The Land Stewardship Project shares our experience with the *Bridge to Soil Health* program with hopes that others might want to borrow or adapt some of the approaches we've used in your own work. Or even better, that what we've done inspires you to develop your own ideas and share them with the rest of the regenerative farming community.

To find this report on-line, go to: https://landstewardshipproject.org/soilbridge. That link gives hard copy readers full access to all of the resources and links listed in the report.



Ridgeway, Minn., farmer Mike Steinfeldt with his beef herd grazing a cover crop mix at a 2019 field day.

Goals, Vision, Overview

The goal of the Land Stewardship Project's *Bridge to Soil Health* effort, begun in 2015, has been to significantly scale-up the number of crop and livestock farmers in the Upper Midwest implementing soil building farming methods and talking publicly about what they are doing. Having more than just a handful of successful examples is critical to building the foundation for transformational change within agriculture. We believe that without more widespread success stories, the larger goal of farmers improving financial viability, water quality, soil productivity, climate resiliency, and carbon sequestration capacity will not occur.

Our target audience has been small to mid-sized crop/livestock farmers with strong conservation values and an interest in improving soil health. This is a specific class of people that have generally not been well served by agricultural policy, the research priorities of the university land grant system, nor the industry-dominated food buying habits of the general public. To put it bluntly, the stewardship values of these farmers have not been well-rewarded by our institutions. Their farms have been perpetually at a stage of financial risk and insecurity, in large part due to policies and priorities that have provided massive benefits to industrial agribusiness corporations with little regard for the needs of small to mid-sized farms, the land, water, and rural community economic and cultural vitality. We know as well that this audience is deeply skeptical of these public and private institutions that, despite having some fine, dedicated individuals that work within them, have as a whole, largely failed farmers.

We believe that small to mid-size farmers are, in many ways, isolated from one another, at least in talking about stewardship values and soil health. And our major job is to end their isolation, bring them out, connect them with other like-minded people, so they can change their farms, and for some, step forward and work with us to create policy change.

Since the program's inception, we've reached more than 2,000 farmers that have attended educational events and/or joined LSP's Soil Builders' Network. Even more important, however, is that we have featured more than 65 farmers in southeastern Minnesota as farm panel presenters or field day hosts on their farms, sharing with other farmers their innovative approaches to building soil health. Even more farmers have also been featured in how-to-video shorts, podcasts, blogs and news media coverage. This broad-based approach to experience-sharing has been crucial to this effort, avoiding what we dub "the pedestal effect" (described below).

We have initially geographically focused most of the work of the program in southeastern Minnesota. This was important so farmers could connect with others nearby that had similar agronomic, climatic, and soils conditions, and created the possibility of farmers visiting one another's farms, and building a local community of soil builders.



A May 2019 grazing field day at the Thicke-Crowley farm near La Crescent, Minn.

At All Costs, We've Avoided the "Pedestal Effect"

The "Pedestal Effect" refers to a common practice in agricultural circles of finding an exemplary farmer or two in any given field, and repeatedly and often exclusively, using them as the spokespeople and principal promoters and teachers of the given subject. We have consciously avoided this approach at all costs because we find that when so much attention is given to one farmer, resentment builds among the rest of the community.

It raises questions about the ego and humility (or lack thereof) of the chosen farmer-presenter, how much that farmer is getting paid by the sponsoring groups, and whether the farmer's own experimentation is being subsidized while all other farmers are doing their own innovative research at their own financial risk.

Furthermore, as an organization, it's important to note that no human being is perfect, including farmers, and at one point or another, any farmer put up on a pedestal is bound to "crash," and must grapple with the challenges of whatever life throws at them, be it a weather disaster, an unexpected financial loss, a crop failure, or an unanticipated family crisis. Additionally, we've seen that when a farmer, or any individual for that matter, receives undue adoring public attention, their ego can become quite outsized, and diminish their relations with other farmers and community members. Therefore, it is far healthier for our organization, and for the farmers themselves, to cultivate and nurture a broad and deep group of farmer spokespersons.

We have therefore aimed to feature dozens of farmers, trying to saturate the farming community in southeastern Minnesota with numerous farm voices advocating soil health, and literally keeping people's heads turning to the growing number of farmers embracing these innovative approaches. Him too? Her too?



Farm panelists Jordan and Rachelle Meyer, Valerie Luhman, Jennifer and Mike Rupprecht, and Eric Klein at a workshop on direct marketing grass-fed meat in Lewiston, Minn., December 2019

Conventional & Organic Together

We've involved both conventional and organic farmers, often advertising "whether we're conventional or organic, we can all benefit from improved soil health." Over the years, there has been division, finger-pointing, and blame between the organic and conventional camps, much of which has been fueled by industry. We found the topic of soil health to be a universal unifier among conventional and organic farmers and that they actually enjoyed being in the same room, learning things together and sharing ideas.

As Altura, Minn., organic dairy farmer, Ross Nelson says, "Soil health gives me something solid that I can talk about with my conventional farming brother-in-law." Certainly, conventional and organic farmers each have their own specific needs and approaches, and at times, it's necessary to caucus these specific groups by approach, so farmers can further tailor ideas to their own specific operation.

Paired Strategies

LSP pairs local and personal strategies with efforts to make structural change in agriculture. For example, we work closely with farmers in making changes to improve soil health on their farms AND work to get many of those same farmers involved in community organizing efforts to change public agricultural policy. You can read more about LSP's "paired strategies" approach on page 13 of our 2019-2024 strategic plan: https://bit.ly/2HaqnlZ.

Farmer First & Last

For more than 30 years, LSP's farmer-to-farmer stewardship education methods could be categorized by "Farmer First and Last." We've learned through experience that agricultural institutions have failed our primary constituency. We've seen the continued frustration with top-down research answers that haven't worked.

This approach is disrespectful of the local wisdom and ingenuity that so many farmers have. In response to that, we have made local farmers the primary presenters at our soil health events. Does this mean that we won't occasionally have a presenter from the university or from the USDA? No. But they'd better be excellent presenters and relate well to farmers as equals. In addition, those programs that feature university or government "experts" are always combined with strong farmer panels.

Readers that are interested in learning more about an egalitarian approach to agricultural research and extension can explore the writings of Robert Chambers and his associates. One place to start is his book from the late 1980s called *Farmer First: Farmer Innovation and Agricultural*

Research: https://bit.ly/2Ftrg8P.



University of Wisconsin researcher, Erin Silva, at soil health workshop in Rushford, Minn., March 2019.

B) Strategies: Breaking the Isolation

We employed a wide range of strategies to move us towards our goal throughout this program. It's important to note that we started small, with one-to-one farm visits and educational workshops, and then gradually added strategies, step-by-step, as we saw new needs emerge and as our capacity increased.

One-to-One Visits: The Importance of Organizing by Listening to Farmers

Five years into this initiative, we've done approximately 230 one-to-one farm visits with farmers in southeastern and south-central Minnesota, and about 50 of those farmers have been visited multiple times by our staff. The one-to-one farm visit is the beginning of an important relationship between the farmer and the organization. It's important to recognize that these are listening sessions, where our staff asks the farmer questions designed to hear their values, beliefs and interests, their goals about where they'd like to see their farm go, and their critique and suggestions for public policy change. This one-hour visit is not about LSP dispensing any farming advice or recommendations. We believe that farmers have been talked at for way too long by way too many experts. We want to develop a trusting relationship with them. That starts by hearing from them. This quote is an important touchstone for the way we approach our work with farmers.

"God gave us two ears and one mouth, and they should be used in that proportion."

 Attributed to various sources, including an old Irish proverb, the Greek philosopher Epictetus, and the Grammy Award winning musician and producer, Quincy Jones

We leave this one-to-one visit knowing what this farmer's interests are, and we can begin to plug them into other farmer-to-farmer learning possibilities. In some cases, we can involve them in public policy efforts with others that share their values. Typical questions that we use in one-to-one visits are included in the appendix at the end of this report. Ultimately, the one-to-one visit helps break the cycle of farmers with strong conservation and soil building values being isolated from one another.

The One-to-One Farm Visit: Organizing By Listening To What Really Matters

In the one-to-one, we aim to learn...

- What soil health methods the farmer is already trying on the farm
- What their challenges are, what barriers they're facing on the farm.
- What else they want to learn (helps determine what workshops we should have and what information we need to do them).
- About their values, asking what is driving them to farm in a different way, a conserving, regenerative way.
- Their concerns about farm policy (and if we should plug them into that work).
- If there are others they know with an interest in soil health and similar stewardship values that we should talk with.

We also want to...

- Deeply listen to them and have the farmer realize this is a different kind of relationship where we're not selling them anything, advising them, or trying to persuade them, just valuing what they have to say.
- Find common values between the farmer and the organizer.
- Identify if they want deeper participation and leadership on climate change and racial justice.

Getting Large Numbers

of Farmers Involved: Why is Big Turnout Important?

Many of the methods we use are focused on reducing the isolation felt by farmers with strong stewardship values and increasing their sense of peer support. It's common knowledge that, along with government incentives that implore farmers to plant row crops, the most significant barrier to farmers changing the way they farm is peer pressure.

We counter that peer pressure with a variety of methods that show there are a significant number of farmers genuinely interested in, and experimenting with, new soil health methods. Most importantly, working hard to turn large numbers of people out to our public events has been crucial to building positive peer support. Consistently solid turnouts are not accidental, and not just the result of a popular speaker (although that can help). Turnout takes determined and systematic work. It takes having a well-established mailing list or database that can be used to inform previous attendees of upcoming events, and a solid outreach plan and implementation.



"The Soil Guy," Ray Archuleta, at a soil health workshop in Lewiston, Minn., in 2018.

Keys to successful turnout

- A database with names, addresses, telephone numbers, and e-mails of all past participants, coded by previous events they've attended.
- A compelling flier, preferably an oversized 5 x 8 postcard or 8 x 11 postcard that can be bulk mailed through the postal service. See flier examples at https://landstewardshipproject.org/repository/1/3366/comb
 - <u>ined_soil_health_fliers.pdf</u>
 Telephone call invitations to past participants that live within
- 25 miles of the upcoming event
 E-mail and text reminders about the event to those that have received the flier in the mail.
- Social media publicity on Facebook.
- News release about the event sent individually to local reporters and followed up with a personal telephone call.
- Letter-to-the-editor in local newspaper promoting the event, ideally written by a farmer that plans to attend.
- Low-cost radio, newspaper and Facebook ads, as budget can afford.



Over 170 farmers and conservationists attended this January 2020 LSP workshop in Ridgeway, Iowa.

Promotional fliers that showcase multiple farmer presenters with a few details about their operations are important and compelling. Farmers want to know what farmers like them are doing and want to know how it is working for their colleagues. These kinds of fliers not only help publicize an event, but help inform the farming public about the growing number of examples of local farmers building their soil. Here are some examples of flyers we have used: https://bit.ly/351OuvF.

We have largely done away with envelopes that could be easily tossed, and almost exclusively used oversized postcards for our mailings. These postcards cut labor time as well (they only need a mailing address label, no folding, no stuffing of envelopes).

Mailing fliers through the U.S. Postal Service is important. Some groups rely on e-mail as their exclusive way of sharing information. We use e-mail too, but only as a supplemental tool. We send, via USPS, an easily noticed attractive oversized flyer on card stock that stands out from the rest of the postal mail delivery, and can be hung on the refrigerator door. Because many people don't open much of their e-mail, we find that focusing on e-mail as a primary turnout method results in low turnout to events.

Winter Educational Workshops

Central to our farmer-to-farmer education efforts have been winter educational workshops. We have held more than 30 of these events these past five years, typically four-to-five hours long. They are held during the day and include a hearty noon meal (with local food when possible).

Attendance has generally ranged from 50 to 170 people. Almost all of these events were held in very small farming towns (population less than 3,000 people). We found that farmers would rather drive an hour to an event with no traffic or parking challenges, than drive half that time to an event in a larger, more central regional hub (such as Rochester, Minn.). Plus, we think it is important to honor and recognize the importance of small-town life by holding our meetings in these locations.

The workshops featured high profile soil health farmers and researchers including Kristine Nichols, Elaine Ingham, Ray Archuleta, Jay Fuhrer, Rick Bieber, Dawn and Grant Breutkreutz, Tom Cotter, Myron Sylling, Barry Fisher, Justin Morris, Jonathan Lundgren, Kristin Brennan, and Joshua and Tara Dukart. Each workshop also included a panel of local farmers that have been experimenting with soil building farming methods.

The farm panel is crucial to the success of these events in order to provide local context and grounding for what the big-name speakers (often from outside of the area) are saying. The farm panelists' experience keeps a lid on "can't do that around here" statements about cover cropping, no-till, and managed rotational grazing. Typically, farm panels feature three-to-four farmers, each talking for 5-10 minutes about their farms, and often showing PowerPoint photos along with their presentations. The 30-minute panel is then usually followed by a 15-minute question-and-answer session with the audience. Event participants generally rate the farm panel as one of the high points of these workshops.



A farm panel at an LSP soil health workshop in Ridgeway, Iowa, January 2020. Participants included Ethan and Mark Imoehl, Parker Beard, John Lubke, and Jerome Fulsaas.

Additionally, workshops feature, along with high-profile speakers and farm panelists, one or more small group discussion activities to help participants get to know one another's farming operations better. We have also often held a farm policy discussion or a brief presentation on LSP's analysis of the farm economy, our position on healthcare reform, immigration reform, racial justice, and climate change.

Setting up workshops so there is at least one, if not two, small group discussions has been importing to building the soil health community. We make sure there are introductions happening among participants at their tables at the beginning of the workshop and we include an introductory activity like, "What did you come to learn today?" or "What do you see as the key barriers to building soil health on your farm?"



Small group discussion at a February 2019 workshop in Preston, Minn.

Charging a fee for events?

We charge for winter workshops, typically \$10-\$20 per person, to help us cover food and room rental costs, and also to ensure that the people that show up are deeply intent on learning. When we first began charging for events, we were concerned that it would negatively impact attendance. We found out many years ago that is not the case. If anything, we find that putting a fee on an event makes people take it more seriously, and they know, in advance, that we won't be trying to sell them any product or service.



Soil health activities during a July 2018 grazing field day at the Mike and Jennifer Rupprecht farm, near Lewiston, Minn.

Field Days/Farm Tours/Pasture Walks

During the past five years, we held at least six field days/farm tours each year, where farmers committed to soil health showcased what they were trying on their operations. This included farming methods like no-till, cover crops, managed rotational grazing, and composting. At these events, the host farmers do 80% to 90% of the presentation (it's not staff or an outside speaker delivering the message). We learned that having host farmers doing the talking at these kinds of events was not necessarily commonplace for other organizations or agencies. As one soil and water professional from a neighboring state said, as a compliment to us, "I can't believe you let the farmers speak!"



Veteran graziers Art and Jean Thicke, along with Chad and Melissa Crowley, hosted a Bridge to Soil Health workshop on using livestock to build long-term soil health and profitability, May 2019.



A pasture walk at the Rupprecht farm, July 2018, Lewiston, Minn.

At some events, we'll also include some interactive activities (slake test, water infiltration test, cave tour, or facilitated small group discussions). Attendance at these field days ranged from 30 to 100 people. We served simple meals at some of these events, like "Build Your Own Sandwich," and we would set out a bucket asking for free-will donations. Generally, those donations covered the costs of the meal.



No-till/cover crop farmer and conservationist, Martin Larsen, discusses farming, karst geology and water quality at a workshop at Mystery Cave near Harmony, Minn., July 2019.

Soil Health Hubs

Soil hubs, which have been used quite effectively in states like Indiana, are clusters of farmers that we know are interested in soil health. They are geographically located within a 20-30-minute driving radius of one another to facilitate local learning, farm visits, and networking on innovative practices, as well as to share equipment. Each hub met three-times-per-year, for five hours each session.



Farmer and soil hub member Patrick Kalmes shares the vision for his and his wife Kelly's farm at a 2020 soil hub meeting.

The goal of the hub concept was to build a local circle of farmers committed to making soil health changes on their farms. Farmers shared what they were already doing. And they shared what future changes they'd like to make. Getting support, ideas and "accountability" from the rest of the group has been important for the participants. We were interested in farmers making those on-the-ground changes on their farms, and eventually, emerging as spokespeople for building soil health and being resources for other farmers.

It's important to note that the hubs were invitation-only, closed groups. We specifically recruited farmers that we knew were interested in soil health. Soil hub events, unlike our workshops and field days, were not publicly advertised meetings. We asked people to make the commitment to be part of the hub for a couple of years, sharing their values, ideas, stories, hopes, dreams, and plans, and spending a concentrated amount of time together to get to know one another. The expectation was set for hub members to be at each meeting and that the meetings were not open to the public, or interested parties wanting to pop in and see what they were about.



Soil hub members Luke Bergler, Robb Miller, and Everett Rolfing "talk shop," January 2020, Lewiston, Minn.

The soil health hub process built a community of sharing and trust via a peer support system. We used tools and "icebreakers" like paired conversations, groups of threes and fours, full hub discussion, farmers telling the stories of their farms to the whole group, farmers' drawings of their long-term vision for their farm, sharing of plans for the year and reporting on those plans.

Soil Hub Activities. Discussion

Tools & Prompts Included:

- 1) "Find the Farmer" introductory activity.
- 2) Discussing ground rules for working together.
- 3) Farmers going around the room and talking about why they were interested in being part of the soil health hub.
- 4) Building the list of cover crop, no-till, grazing and soil health practices in use within group.
- 5) Brainstorming a list of the soil health practices participants want to learn more about.
- 6) What do you want to do differently to build soil health on your farm this year? Is there any input that you need (breaking into very small groups to provide that input)?
- 7) Farmers sharing their hopes for changes they want to make on their farms in the next 1, 3, 5 years, first in pairs or smaller groups, then in full group.
- 8) Discussion of Gabe Brown's soil health building blocks.
- 9) Farmers making 15-20--minute presentations on their farms, often with photos.
- 10) Structured time for shop talk: "I've got a question and I need some input."
- 11) Asking what hub members have learned about building soil health since the last meeting.
- 12) Group evaluation of the meetings: "What went well? What could have gone better?"
- 13) "Your opinion please" attitude survey and discussion on soil health and climate change
- 14) Vision activity "If you had it your way in the future, what would farming and the rural countryside look like?"

I DEALIZED VISION

- A Farm Family working together and engaging with the local community.
- They have adiversified form which includes many animal and plant Species all grown and raised in ways that don't degrade the natural environmen and maybe even enhance it.
- They buy all their inputs in the local community, perhaps emply some local seasonal help. and sell most of their produce directly to local consumers.
- The family is active in Form, civic, and church groups. They work together in harmany but structure between the members and generations, and the community. (Integration, Connection
 - The parents by example model strong workethics and personal integrity to the children.

the conferen greating up to this nurturing environment all enthusiastically either join this successful form to lead it into the future, or if this isn't an option for all, go ento success in other professional careers, building on their strong base.

MY REALITY

- I'm 60 years old. I'll probably form another Dycars, may be personed depending on my booth and what my wifes thoughts are. My wife marks off the form and plans to critica in 2 years.
- I have 2 single chi Wien in their 205. Norther really have the interest or inclination
- In any case from profitability has been inc to necessaries our sever Changes would have to be under to support another form appropriates.

My VISION

- Continue down the bern on for some years now integrating soil brothe practices into my largely cosh grain operation
- At some point find a farmland tenant who will continue these practices
- Htt out closed to Finding a Form Successor. Possibly if our of my Kids would have a life partner with an interest in Forming. Finding someone outside of family can be done

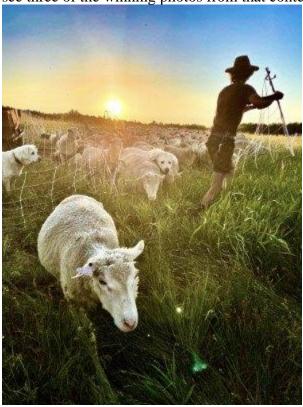
but it's really tough

Soil hub member Mike Krause's vision for his farm, January 2020, Lewiston, Minn.

Grazing Circles

LSP's grazing circles fully got off the ground in southeastern Minnesota in 2019. More than 100 farmers participated in two separate localized grazing networks. Again, the idea is to help build the grazing community, and farmers' ability to talk with one another about their grazing plans and ideas, and to see firsthand how they lay out their grazing and watering systems and raise their livestock.

Eight pasture walks and two grazing field days were held in 2019, giving new graziers the opportunity to learn from established graziers about the benefits of grass farming for profitability, water quality, and soil health. In 2020, due to the COVID-19 virus preventing inperson gatherings, we held online pasture talks and a Summer Pasture Photo Contest. You can see three of the winning photos from that contest in this report.



"Evening Paddock Shift" — 1st place Summer Pasture Photo Contest award, by Hannah Bernhardt

Producing New Soil Health Resources

Along with face-to-face events, the program has also produced numerous educational materials showcasing the soil building efforts of area farmers. We aimed to lift up the stories of as broad a number of farmers as possible (again, avoiding "the pedestal effect" of over-featuring one or two prominent farmers). We have featured more than 40 farmers from the region in video shorts, podcasts, blogs, fact sheets and the bi-monthly electronic newsletters of LSP's Soil Builders' Network. Additionally, a Cropping Systems Calculator has been designed by LSP's Chippewa 10% Project to help farmers plug in various planting and grazing scenarios and weigh the financial pros and cons of each option.

- To view all of the resources produced during the last five years, go to LSP's Soil Builders' homepage on our website: https://landstewardshipproject.org/lspsoilbuilders.
- Specifically, soil builder videos are here: https://landstewardshipproject.org/lspsoilbuilders/soilbuildervideos.
- Podcasts are here: https://landstewardshipproject.org/lspsoilbuilders/talkingsmartsoil.
- The Cropping Systems Calcuator is here: https://landstewardshipproject.org/croppingsystemscalculatordownload.

LSP's Soil Health "Hotlist" & Soil Builders' Network

Central to good rural community organizing is having a useful and extensive database where staff can track the participation of every person that attends any of our events. The soil health "hotlist" has the name, address, telephone number, and e-mail of every past participant, along with a code for each event that they attend. This information is scrupulously recorded at a staffed sign-in table at each event, where participants pick up a nametag, an agenda for the program that day, and pay the fee, if there's a fee that day. The event coding is important in that if we are having a grazing event, for example, we can specifically target mailings, e-mails, and reminder telephone calls to those that have already shown an interest in grazing. Five years in, we have more than 2,000 individuals on our soil health hotlist.

For the past 15 years, LSP has used the Databank https://www.thedatabank.com/, a service specifically designed for nonprofits to track participation, financial contributions, and more.



Farmers talk about the cover crop interseeder built by Mike Steinfeldt and Luke Bergler, Ridgeway, Minn., August 2019.

We also created an opt-in LSP Soil Builders' Network, issuing an invitation at every single event for farmers to join, for free. They could also fill out a card that told us what their experience was with soil building farming methods, what they wanted to learn more about, and whether they were interested in being involved in public policy engagement with us. Those that joined received a bi-monthly e-newsletter featuring soil health stories, videos, and podcasts about other farmers in the region. Also, these cards gave us information on innovative farmers that we didn't already know, and opened the door for us to do a one-to-one visit with them. Farmers can also join the network by completing the very same card online:

 $\underline{https://landstewardshipproject.org/forms/signupsoilbuildersnetwork 2017}$

Farmer-to-Farmer Consulting Service

While direct mentoring and guidance might not be necessary for the most advanced innovative soil health farmers we encountered, it seemed that others needed more help than they could get by just attending a workshop. We heard that one-to-one, step-by-step assistance would be helpful for some in making significant changes on their farms.

Therefore, we created a fee-based **Farmer-to-Farmer Consulting Service** where we recruited 11 skilled farmers deeply experienced in soil health methods to mentor other farmers. We paid the farmer-consultants \$40 per hour for their consulting time and their travel, and also charged

\$40 per hour to those receiving the service (the first 30-minute telephone call is free of charge). More details on how this service works, and a description of each of the consultants is here: https://landstewardshipproject.org/repository/1/3100/2019 farmer to farmer consulting brochu re.pdf

Farmer Citizen-Science

While we did not do much scientific research during the initial five years of the program, we did work with farmers to explore innovative soil health monitoring tools that would help them assess their farm's soil health progress. That included water infiltration tests utilizing an 8-inch steel ring driven into the ground with a hammer to measure how quickly a 2-inch rainfall would be absorbed by the soil. It also included the use of a microscope to examine soil microbiology, and specifically bacteria-fungi ratios in the soil.





Left Photo: North Dakota conservationist and soil health pioneer, Jay Fuhrer, "talks soil" at a field day. **Right Photo:** Farmers and soil health experts came together during a recent field day at the Tom and Alma Cotter farm near Austin, Minn.

The soil microbiology work was based on the research of soil scientist Elaine Ingham. Ingham believes that a highly microbiologically active soil needs no further fertilization, an idea that appeals to many of the farmers we're working with. This microbiologically active soil is achieved through the creation of highly aerobic compost and the preparation of compost teas and extracts that are applied to the soil. The soil microbiology work has initially been of most interest to a smaller group of "leading edge" soil building farmers, but interest in it is growing. In the autumn of 2019, 80 farmers showed up to an LSP soil microbiology and compost field day at the Pangrac-Olson farm outside of Lewiston, Minn.



Soil scientist Elaine Ingham talking about the "soil food web" to farmers after an LSP workshop she led in Rochester, Minn., in 2018.

Farmer Advisory & Steering Committees

Central to solid community organizing efforts is to ground the work in the needs and opinions of the community that is directly affected. For almost 40 years, LSP's work has been informed and guided by steering committees of farmers and rural community members with a stake in the work of the organization.

The *Bridge to Soil Health* program has been no exception. Initially an advisory soil health team of 10 farmers, all on the cutting edge of soil health practices on their farm — half of whom were organic, half of whom were conventional farmers — met each winter to share soil health ideas with one another and to advise LSP staff coordinating the work. Once this effort got more established, this group became the steering committee for the program. They served as critical resource people for the program, and at times, served as our spokespersons. Most of the group members did not initially know each other, and we used a series of discussion questions to build group rapport, trust, and learning that was important in the committee's development.

Farmer Advocacy for Policy Reform

As noted earlier, we work closely with farmers in making changes to improve soil health on their farms AND get many of those same farmers involved in community organizing efforts to change public agricultural policy. This kind of effort has its roots in both rural community organizing and in "popular education" — give people the opportunity to impact the larger political and economic and social pressures that affect their lives. As we work with these farmers to speak and write publicly about their own story, we also ask their insights and recommendations for improving public policy and get them involved in pressing for public policy change.

Two examples of *Bridge to Soil Health* program farmers positively shifting public policy have been to: 1) successfully press the USDA's Natural Resources Conservation Service (NRCS) to revise its recommendations for cover crop seeding rates that previously negatively impacted farmers; and 2) placing caps on cover crop cost-sharing grants so that funds would be widely distributed to a large number of farms, rather than having a few large farms soak up all the money.



LSP board member and farmer Jon Jovaag from Austin, Minn. Jovaag regularly works with LSP to advocate for farm policy reform.

"Renting It Out Right" — Working with Landowners, Not Just Farmers

An important part of this program was LSP's work to reach landowners that were not actively farming. With more than 50% of Midwestern farmland owned by people that don't actually farm, this audience is key for affecting major landscape change in the region. We lifted up the importance of the landowner's role in improving the care of the land and water through public workshops targeted specifically at this audience.

Through the "Renting It Out Right" initiative, we've done field days and one-to-one visits, as well as publicized the stories of landowners who are making important conservation changes on their farms. Additionally, we created a significant amount of resources for landowners, including an extensive Conservation Leases Toolkit (sample leases, setting rental rates, conversation tips, etc.): https://landstewardshipproject.org/conservationleasestoolkit.

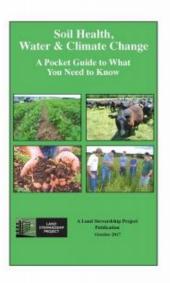
Talking with Farmers About Climate Change

Along with increasing soil organic matter, cutting soil erosion, decreasing input costs (fertilizer, pesticides, etc.), improving farm profitability, and improving water conservation and infiltration as key objectives of this work, so too was improving farmers' ability to withstand both drought and flood, and to also sequester carbon from the atmosphere and put that carbon back into the soil.

We knew that among the Land Stewardship Project's farming members and constituents in the Upper Midwest, many did believe in the science of climate change. We also knew, however, that many we were working with were skeptical about the term "climate change."

Armed with the knowledge that the fossil fuel and agricultural industries had waged a successful climate change denial campaign that served to delay political solutions that could address this very significant problem, the Land Stewardship Project decided that we were going to publicly talk about climate change. We were especially intent on having this conversation with our farmer audience. We focused our efforts on emphasizing the opportunities farmers had to build soil and utilize carbon-sinking farming methods that could both improve their farms and provide agriculture's share of the solution to climate change. Most importantly, we decided that our message about climate change needed to be grounded in the voices of the farmers we were working with, and that the actual messenger was at least as powerful, if not more powerful, than the message itself. We produced several important resources on the soil health-climate change connection:

- Soil Health, Water & Climate Change: A Pocket Guide to What You Need to Know: https://landstewardshipproject.org/lspsoilbuilders/smartsoil



- Farming to Capture Carbon: https://landstewardshipproject.org/repository/1/3143/grazing white paper 1 23 20.pdf
- Look to the Soil: Talking with Midwestern Farmers About Climate Change https://landstewardshipproject.org/repository/1/3201/lsp_climate_change_paper_1_30_20.pdf



"Early Morning Graze" — 2nd place photo award in Summer Pasture Photo Contest, by Beth Voss

Promoting Soil Health Through Print & Electronic Media

Another key to creating public support for farmers interested in improving soil health was to engage local news outlets in covering the stories of soil health farmers practicing no-till, cover cropping, and managed rotational grazing. Dozens of newspaper, radio and television news stories covered the farmers we've been working with. That didn't happen by chance, but through a concerted media outreach campaign that included news releases, follow-up telephone calls, and invitations to reporters to cover specific events. It also included a small amount of paid newspaper and radio advertising.

It is important to build a relationship with reporters, and we work at that. Telephone calls and personal face-to-face visits with reporters gave them background on the soil health movement, and offered them farmer-based resources to learn from and report on, and leads on soil building farmers they could interview. We have a regional media list that we're constantly needing to update, as reporters tend to switch jobs frequently, particularly in rural areas. And when we send out news releases, they are not sent out as a mass e-mail to numerous reporters, but rather, each is sent individually, and whenever possible, followed up with a telephone call to invite the reporter to attend the event.

We have found 30-second radio ads to be relatively inexpensive (\$150 can buy you 15 ads on a local farm radio station), and armed with the news release, the radio station will typically write up the ad for you. We also spent money on ads in small-town newspapers. The ad itself does not garner much attention, but we found that spending \$100 to \$150 on a newspaper ad dramatically increases the likelihood that a newspaper will carry your news release, do a promotional article on the event, and send a reporter to cover the event. This may seem to some like an unsavory transaction — "paying for coverage" — however, these small-town papers tend to be financially strapped and are often well-read. We value their existence and felt compelled to help support them.

Two examples of news releases for our soil health program are here:

- https://landstewardshipproject.org/posts/news/1155
- https://landstewardshipproject.org/posts/news/1263

Readers can also find all of the Land Stewardship Project's news releases on our website:

• https://landstewardshipproject.org/posts/news

Singing the Praises of Soil Through Music

The *Bridge to Soil Health* program has taken initial steps to integrate music into the work. This is an organizing and social change effort. Much of rural America is hurting, and has been for a long time. Music has historically been a part of numerous organizing efforts, as it can help affirm us, inspire us, challenge us. It can reach us on a much deeper level than the facts, figures, and talking points most commonly used in educational programs. Music can make us laugh, cry, and bond with others, as well as make clear what the vision is, and what structural barriers stand in the way. We've begun to commission songs about soil health from artists. "Got Cover Crops," written by Austin, Minn., native and singer-songwriter, Bret Hesla, is our first music video: https://www.youtube.com/watch?v=qh-VKekQi4.



A scene from the "Got Cover Crops" video.

Additionally, we've featured guest artists in many of our LSP Soil Builders' newsletters. For example, we recently featured Iowan Susan Werner singing "Plant the Stars": https://binged.it/2FsEPFx.

C) Our Approach, Values & Principles

Staffing Numbers

A tremendous amount of staff time has gone into this program the past five years. It is important to note, however, that the *Bridge to Soil Health* program began as a small pilot initiative, staffed by two part-time people, and it grew slowly. The initial staff were given the chance to see: a) if there was significant interest among small to mid-size farmers in LSP deeply involving itself in soil health, and b) whether money could be raised from foundations and private contributions from members and supporters to sustain a multi-year effort.

Once those questions were both resolved in the affirmative, we began to add staff to match the growing workload. At the end of year two, we had two staff working exclusively on the effort, adding another staff member at the end of year three, and a fourth at the end of year four. These were the core staff for the Bridge to Soil Health program, devoted heavily to the soil health work. It is also important to point out, however, that the Land Stewardship Project has a significant organizational infrastructure, with about 30 staff, two rural offices, and one metro office, covering all of its programs. (See https://landstewardshipproject.org/ for more on LSP's various programs.)

The *Bridge to Soil Health* program benefitted tremendously from the expertise and experience of numerous other staff, such as our managing editor, executive director, finance director, senior science adviser, membership program members, and social media team.

Rural Community Organizing

Since the early years of the Land Stewardship Project, we have employed and trained rural community organizers on our staff. Their experience has been shared throughout the organization, and has not only allowed us to take on (and win on) many pressing public policy concerns, but also effectively helped our members challenge excessive corporate agribusiness power. While most of the work of the *Bridge to Soil Health* program was not "political" in nature, we used many of the tools rooted in solid community organizing.

This includes: 1) the previously described one-to-one farm visits; 2) meticulously using sign-in sheets at every event and diligently keeping track of participants in a database that we could return to over and over again; 3) the "mandatory" use of nametags at every event so participants could get to know each other better; 4) recruiting the farmers we got to know best to become dues-paying members of our organization, and thereby making them part of a larger agricultural reform movement; 5) a very strong focus on turnout that included reminder telephone calls that invited past participants to new events; 6) the use of advisory and steering committees; 7) recruiting farmer-participants to get more deeply involved with us in agricultural policy reform; 8) strategically recruiting press coverage to boost the regional profile and consciousness of soil health activities being carried out by innovative farmers, and 9) incorporating music into the work.



"Evening Graze"— 1st place youth division Summer Pasture Photo Contest award, by Jessica Crowley

"Popular Education"

Another key thread woven throughout *Bridge to Soil Health* was the use of countless "popular education" facilitation tools in our workshops, field days, soil hub gatherings, and committee meetings. For the past 35 years, LSP has used an "education to action" approach, much of which can be categorized under the "popular education" strategy.

Wikipedia describes popular education as "a concept grounded in notions of class, political struggle, and social transformation. The 'popular education' term is a translation from the Spanish educación popular or the Portuguese educação popular, and rather than the English usage as when describing a 'popular television program,' popular here means 'of the people.' More specifically 'popular' refers to the 'popular classes,' which include peasants, the unemployed, the working class and sometimes the lower middle class." At LSP, we've adapted popular education to our work with farmers.

Popular education is not a defined curriculum, but rather a cycle of sharing of stories and values with others in a given group, noting the commonalities among participants, defining the primary concerns that they have, investigating possible solutions, developing a plan for acting on those concerns, taking action as individuals and as a group, coming back together to share the results of those actions, evaluating how these actions turned out, making adjustments, and taking action again. Throughout the popular education cycle, which is repeated over and over with sustained groups, participants get to know each other better, and a stronger community is created.

Participatory education is central to the popular education process, where the participants' knowledge and experience is highly valued and readily shared. A common tenet in popular education is to "draw the wisdom out of the group before bringing in new outside expertise." Certainly, at times, outside expertise is helpful and necessary, but ideally not before participants have been able to share some of what they know with one another and identified the outside expertise they are looking for.

A common tenet in popular education:

"Draw the wisdom out of the group before bringing in new outside expertise."

Unique to many LSP soil health workshops that featured a guest outside speaker is that the very first activity, often in a room of 100 to 150 people (all seated at tables and facing one another), consists of each individual sharing a bit of their farm's story with their table-mates and coming up with a list of the questions they would like to see the invited expert address. This is classic popular education — making sure the expert is hearing directly from their audience, even before they start speaking.



Farmers learning from farmers at a Bridge to Soil Health event in Preston, MN.

Popular education was first introduced to LSP staff early in our history by LSP co-founder Victor Ray. Then the principles of farmer-to-farmer sharing and learning, and education to action were built upon by numerous LSP staff throughout our history. We experimented with and refined the facilitation tools that have made our meetings and relationships with farmers dynamic and rewarding. Interestingly, Ray created the approach he used because he found the top-down educational approaches he'd been using while with the National Farmers Union deeply lacking in his work. Little did he know that approaches similar to what he'd developed had also had been created in other parts of the world, in Scandinavian Folk Schools, in Brazil by the likes of Paulo Freire and Augusto Boal, in affinity groups by the Women's Movement in the U.S., and at the Highlander Center's trainings on civil rights with groups in the American South.

Those of us that practice popular education push ourselves to ask: How are meeting rooms set up? Which meeting format is likely to produce a new friendship, contact, or relationship between participants? How do we get people to share their ideas and opinions? What should the discussion prompts be for small groups? How do we make it so that people know that their ideas will be valued and how do we facilitate them speaking up?

How many have been to a workshop where no one had a question for the expert? Too often, meetings go like this: "Any questions? Ok, next speaker." Unfortunately, that is all too common with expert presenters and the top-down educational approach. And that is exactly what we've successfully worked to avoid. The result has been very different, positive, and gratifying group dynamics and lots of energy among participants.

The facilitated discussion activities that we used with our soil hubs and in our winter workshops are all examples of popular education tools. You can read more about the early roots of LSP's popular education work in three 1990s articles from the *Land Stewardship Letter*:

- "Coffee, Stretching & Big Paper": https://landstewardshipproject.org/repository/1/3321/lsl_big_paper_nov_dec_1994.pdf
- "Making Every Voice Heard": https://landstewardshipproject.org/repository/1/3322/lsl_voice_march_april_1995_1.pdf
- "The Roots of Positive Change": https://landstewardshipproject.org/repository/1/3323/lsl_roots_july_aug_1995.pdf

For further information on Popular Education, two good resources (of many) are the book *Educating for a Change* (https://amzn.to/37bgQWT), and the Highlander Research and Education Center in New Market, Tennessee: https://highlandercenter.org.

What are the Keys to Successfully Getting People Involved in a Sustained Way?

Our process for getting farmers involved in a sustained way goes like this: Make them feel listened to in a one-to-one visit. Invite them to participate in a small group of farmers with like-minded interests and values, and make them feel listened to there as well. Invite them to be part of a larger group workshop where they are hearing similar values, interest, concerns. Invite them to be on a farm panel or to host a tour. Ask them to share their story with a reporter, write an oped or blog, or be featured in a video. Invite them to talk to a public official or testify at a hearing where they share their story and perspective.

In many of our group meetings with farmers, we also ask them their opinion: "Is this workshop working for you?" What was good, and what was not so good. We want farmers to feel like their opinion and ideas are important.

We also introduce, as discussion topics, key questions about the structure of agriculture and agricultural policy. Certainly not everyone in the room will agree with one another, but it provides for a stimulating form of civic engagement on these issues that is often lacking in rural communities.



Food

Considering that we're in the business of reforming our food and agriculture system, whenever possible we used locally grown food in our noon catered meals. It took some extra work to procure it, but it was well worth it, in taste and quality, and also in supporting stewardship farmers on the land.

D) Additional Big Picture Issues

Certainly, the primary focus of the *Bridge to Soil Health* program was facilitating the ability of small and mid-size crop and livestock farmers to make changes to improve soil health on their farms. At each of our soil health events, however, we also touched on larger social, economic, and political issues that LSP believes directly affect the health of individual farm families and rural communities.

This included discussions about excessive corporate power in agriculture, the current Midwestern farm crisis, farm policy and family farm economics, immigration, racial justice, and gender equity.

Challenging Excessive Corporate Agribusiness Power

Small and mid-size farms are under extraordinary financial pressure, and they have been for a long time. Public agricultural policy favoring the largest farms depletes the soil, water, rural

communities and the national treasury. When we see, year-after-year, large agribusiness corporations racking up huge corporate profits, we get tired of realizing everyone is making big money off of agriculture — except for farmers. We must work to reform this unjust and unwise system.

Race & Immigration

LSP works to create a food and farming system of fair wages, dignified work, access to affordable and nutritious food, profitability for small and mid-sized farms, and health for the land, water, and rural communities. This will be built through on-the-ground changes made by individual farmers, and through broad scale public policy change. Those changes include cementing pathways for future soil stewards. That includes people who have been historically and systemically denied access to opportunities to make a living from the land.

It's important to recognize that industrial agriculture has throughout U.S. history relied on the exploitation of people, whether it be in the form of free labor (slavery), the forced removal of Indigenous people from their lands, or the failure to compensate and treat immigrant workers fairly. Over the past half-century, small to mid-sized white farmers have also been pushed to the brink of extinction, again by public policy favoring agricultural corporations and industry.

We believe that white people need to understand the dynamics of race, and how bridging the racial divide can help reform our agricultural system for the benefit of many. This includes small to mid-sized white farmers, young farmers, and certainly farmers of color and native people. Ultimately, a broad cross-racial constituency is central to securing a farming system that is fair to all and good for the land. For more information on LSP's work on racial justice, see https://landstewardshipproject.org/about/racialjustice.

Gender Equity

From its beginnings in the 1980s, women have been integral to the sustainable agriculture movement. Their concern for the health of the land and the health of their families, along with their frequent role as the farm's "chief financial officer," have put them in a position to push for sustainable changes on the farm. Unfortunately, rural farming communities are rife with second-class treatment of women, and not seeing women as equal partners on the farm, or in the community. These attitudes keep progress towards a more sustainable and regenerative agriculture from moving forward as quickly as it could.

We have observed in our work the harassment of women staff by program participants. When this occurs, this sets the work back and diminishes everyone's ability to work for positive change. Women on our staff (and of course, throughout the community) need to be treated as the intelligent, creative, committed, and hardworking professionals they are, and not be subjected to unwanted suggestive comments and behaviors that are distracting at least, and at worst demoralizing and emotionally harmful.



During a February 2017 LSP workshop in Caledonia, Minn., soil microbiologist Kristine Nichols discusses with farmers the critical role soil biology plays in building resilience and productivity.

Promoting respect and equity for women is an area that LSP will keep working on. To date, in the *Bridge to Soil Health* program, we've worked at it in a number of ways:

- Creating staff leadership roles for women in our program and making sure that women have front-line leadership roles in public meetings.
- Featuring women soil health experts as keynote speakers since the beginning of the program. For example, Sarah Carlson, Kristine Nichols, Elaine Ingham, Kristin Brennan, and Erin Silva have been featured for the soil health knowledge and expertise they bring, and also to make women feel more comfortable in attending events as participants.
- We've worked to increase the number of women farm panelists, farm tour hosts and farmer consultants, and have increased our recruitment of women on our steering committee. These changes have made the program richer, provided greater insight and energy, and been a boon for all involved (men and women).
- In order to increase the ability of women to attend our events, we also have offered childcare, and continue to figure out how best to do this.
- In what may seem a trivial matter (it's not), we also work to record *both* names of the farm couples that attend our events and enter them into our database, making sure that both are invited to future events. Too often, in rural farming communities, women have been "nameless," and that needs to continue to change. Making sure they receive our invitations to events is one small way to build their participation.

• In the soil health movement these past five years, it's often been "the men" that have received most of the publicity. To help counter that, we published an article in the *Land Stewardship Letter* on soil health's "Hidden Figures," the women that are leading the movement: https://bit.ly/33YS6PG (pages 12-14). We borrowed that title from *Hidden Figures*, a film that depicts the unheralded African-American women scientists that played such key roles in the development of the NASA space program.

Promoting respect and equity for women is an area that LSP will continue to work on. That includes, internally within the organization, male staff heightening our awareness of sexist attitudes and behaviors we've absorbed and incorporated into our daily lives. While those tendencies may very well not be intentional and are the by-products of how we were raised and larger detrimental societal attitudes towards women and girls, that does not excuse us from making needed changes that will help create a more just and equitable community and workplace.

E) Appendix

One-to-One Visits: Goals

- Identify stewardship-oriented values that the individual expressed.
- Identify what soil building and/or cover crop methods each farmer is already using or has tried in the past, and how that has worked for them.
- Identify what new soil building and/or cover crop methods each farmer is interested in trying or learning more about in the next couple years.
- Identify what the barriers are to putting those methods in place (lack of information? lack of equipment? Perceived financial risk? farm policy barriers? Etc.)
- Identify what would be most helpful to them in making soil health/cover crops changes on their farm (Workshops? Tours? One-on-one consultation? Financial analysis? Etc.).
- Identify what federal farm policies get in the way of building soil health or planting cover crops.
- Find out if they know of others, particularly young farmers, that are interested in these methods as well, and get contact information from them.
- Identify how they've learned about new soil-building methods they want to try (educational events, publications, etc.). Assess their concern about climate change.

One-to-One Visits: Key Questions

- Describe your farm, who's involved, what you raise, how much land in crops, etc.
- From what I understand, this farm is quite devoted to conservation and stewardship. Not everyone farms that way. What drives you to farm the way that you farm?
- What soil building and/or cover crop methods are you using, or have you tried in the past, and how has that worked for you?
- What new soil building and/or cover crop methods are you interested in trying or learning more about in the next couple years?
- What are the barriers for you to putting those methods in place (Lack of information? Lack of equipment? Perceived financial risk? Farm policy barriers? Etc.)
- What would be most helpful to you in making soil health/cover crops changes on your farm (Workshops? Tours? One-on-one consultation? Financial analysis? Etc.)
- Do you have any thoughts on farm policy and its effects on agriculture? What federal farm policies get in the way of building soil health or planting cover crops?
- Which educational events, workshops, tours, webinars, etc. have you participated in? Anything in particular stick out as something new that you took home?
- Do you know of others, particularly young farmers, that are interested in these methods as well, and do you have contact information for them?
- Have you been experiencing extreme weather on your farm? How do soil health practices help with extreme weather?
- Do you think the extreme weather is connected to climate change?