

The Land Stewardship

33 Years of Keeping the Land & People Together

Letter



LAND
STEWARDSHIP
PROJECT

Volume 33

www.landstewardshipproject.org

Number 4, 2015



How one state became the king of the cover crops (page 24).

-
- ◆ ◆ ◆
- A Land Ethic for Our Common Home*—
 - Wildlife Habitat & Food Safety*—
 - Dollars & Cents Healthcare*—
 - Talking About Taters & Toxins*—
 - LSP Trip to Mexico in March*—
 - Building a Farm's Capacity to Transition*—
 - Crunching the Numbers on Women & the Land*—
 - Going Driftless, The End of Plenty*—



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.

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

BOARD OF DIRECTORS

Deborah Allan, Kim Bartmann, Lisa Coons, Dean Harrington, Alan Hoffman, Loretta Jaus, Charlie Kersey, Sr. Kathleen Mary Kiemen, Chad Kingstrom, Jody Lenz, Vince Ready, Juliet Tomkins, Sue Wika

STAFF

Southeastern Minnesota

180 E. Main St., P.O. Box 130, Lewiston, MN 55952; phone: 507-523-3366; fax: 2729; e-mail: lspse@landstewardshipproject.org
Karen Benson, Cree Bradley,
Dori Eder, Doug Nopar, Johanna Rupprecht,
Karen Stettler, Caroline van Schaik

Western Minnesota

301 State Rd., Suite 2, Montevideo, MN 56265; phone: 320-269-2105; fax: 2190; e-mail: lspwest@landstewardshipproject.org
Amy Bacigalupo, Andrew Marcum,
Robin Moore, Nick Olson,
Rebecca White, Terry VanDerPol

Twin Cities/Policy

821 East 35th St., Suite 200
Minneapolis, MN 55407;
phone: 612-722-6377; fax: 6474;
e-mail: info@landstewardshipproject.org
George Boody—Executive Director
Mark Schultz—Associate Director/
Director of Programs
Megan Buckingham, Brian DeVore,
Steve Ewest, Dylan Bradford Kesti, Timothy
Kenney, Bobby King, Abigail Liesch,
Mike McMahon, Heidi Morlock,
Rick Morris, Tom Nuessmeier, Kaitlyn
O'Connor, Rebecca Wasserman-Olin,
Stephanie Porter, Amelia Shoptaugh,
Megan Smith, Paul Sobociński



This LSL printed by Johnson Printers, Rochester, Minn.

Contents

Commentary...3

- A Land Ethic for Our Common Home
- Winona County & a Frac Sand Ban

Myth Buster...5

- Less Wildlife Habitat = Safer Food



LSP News...6

- LSP Staff Changes
- New Board Members



Women Caring for the Land...18

- Gender & Farmland Demographics

Farm Beginnings...19

- Farm Beginnings Accepting 2016-2017 Applications
- Is Farming in Your Future?
- LSP Local Listserv Shares Information
- Kiva Zip Loans
- MDA Funding Available for Farmers
- Fresh Faces-Fresh Farming:
Not Horsing Around



Continuous Living Cover...23

- Cover Crops in the Chippewa
- Soil Health on Women's Land
- King of the Cover Crops

Membership Update...30

- The Joy of Making Positive Change
- In Memory & in Honor
- LSP Gift Memberships
- Get Current with *LIVE-WIRE*
- Support LSP in Your Workplace

Policy & Organizing...7

- Financing a Healthy Minnesota
- MNsure Looks Better Than Ever
- Chart: Which Plan is Best for You?
- Mosel Appointed to Ag Funding Panel
- LSP Board Member "Champion of Change"
- LSP Meets with National Allies in D.C.
- Farming, French Fries & Fast Food
- LSP Trip to Mexico in March

Farm Transitions...14

- Value-Added Capacity Building
- *Farm Transitions Toolkit*
- *Seeking Farmers-Seeking Land Clearinghouse*



Opportunities/ Resources...22

- Township Manual
- Riparian Grazing
- Volunteers Fuel LSP's Work
- Want to Support LSP With Land Gifts?
- Soil Health Podcasts
- LSP Caps

Reviews...28

- *Going Driftless*
- *The End of Plenty*

Admin Corner...30

- LSP Staffers Assess Long Range Plan

Stewardship Calendar...32

Commentary?!?

A Land Ethic for Our Common Home

An Action Plan for Stewarding the Gift that is the Earth

By Sister Mary Tacheny

Aldo Leopold, author of the *Sand County Almanac*, coined the phrase “land ethic” to state our relationship to the larger ecological community of which air, soil, water, plants, animals and humans are interdependent parts.

These words of Leopold inspired our efforts as School Sisters of Notre Dame (SSND) to express our reverence for and care of Earth, our “common home.” We wanted to do more than merely react to abuses of land-related events around us. It was our hope to formalize a statement of belief about our gift of land. In particular it needed to call us to an attitude change, a solid reason for responding to needs. The development of a land ethic became this statement of belief, and supports our actions now and into the future.

Developing the Statement

For us, developing this land ethic came alive gradually through processes involving education, building relationships and collaborating among individuals within the geographic communities known as the Mankato Campus, which is in Mankato, Minn. It is in this area where local sisters live and minister in a variety of places, along with others, and includes the “Hill,” the geographic space where we have been located since 1912.

The SSND Earth Committee initiated the idea and grappled with the task of what we could say to influence attitudes and behaviors at the local level. After much study and discussion, basic principles and concepts were written for ourselves and our own land use on the Hill.

From there, a small writing committee took over, developed a simple statement of our principles and beliefs and asked for other ideas for living mindfully with all of creation where we live and minister. A remarkable number of suggestions emerged which were then incorporated into a final statement. Brochures were created and sent to each participant. The Green Team on the Hill and the Earth Committee were then charged with coordinating follow-up actions among sisters, associates and colleagues.

At about the same time, an international group of sisters, the SSND Integrity of Creation Committee, urged action on a worldwide basis. We were reminded that our Constitution as a religious community, called “You Are Sent” (revised in 1986), already called us to “accept responsibility for the Earth” and “educate with a world vision.” Papers developed on the international level urged us “to live more simply, responsibly and sustainably with one another and with all of creation.”

It was not a difficult jump, then, to go beyond our locally developed land ethic to a broader geographic level. So the Earth Committee called on the rest of the campus centers of our province to develop an all-province land ethic. These additional campus centers are located in Elm Grove, Wis.; St. Louis, Mo.; Dallas, Tex.; Chattawa, Miss.; Guam and Japan. This process became a greater challenge because it demanded an understanding of a variety of cultures, wider development of relationships, varied educational opportunities and broader collaboration efforts. Land use practices and social groupings varied greatly.

The Land Ethic Principles

Over a period of three years, and with a lot of effort, consensus was finally reached on many levels. All of us were called to care for Earth, our “common home,” as we pledged support for the Central Pacific Province Land Ethic. The five principles we agreed upon were:

→ **Principle 1:** Earth is a sacred community.

→ **Principle 2:** Reverent and responsible preservation of Earth is a necessity for survival of water, soil, air, plants and animals. Our buildings and our landscapes of each campus, as well as the homes in which each resides, are sacred to us. We have a strong reliance on these gifts of Earth.

→ **Principle 3:** God’s creation is diverse and interdependent. What happens to one part affects all other parts, calling us to live an ecologically sound life.

→ **Principle 4:** Dialogue and collaboration with other communities of life is more effective for systemic change than working by ourselves. Collaboration is most effective at the local level.

→ **Principle 5:** We value our charism of education. Because of our love of creation we practice good care of the land. The choices we make can and will educate ourselves and others as we heed the signs of the times.

These principles then became the basis for suggested practices for living mindfully, simply and sustainably with all creation. A few examples of these suggested practices are:

◆ **Eco Living Practices.** Develop eco-consciousness in use of water, electricity and care of buildings. Distinguish between needs and wants. Utilize car-pooling, public transportation, walking, biking; use technology for “long-distance meetings.”

◆ **Food and Health Choices.** Choose real food: organic, homegrown, grass-fed, free-range, less processed food. Purchase locally grown foods via Community Supported Agriculture (CSA), farmers’ markets and food co-ops. Garden and learn how to preserve food.

◆ **Land Use.** Develop natural aesthetic areas: prairie, woods, meadows and nature centers/walks. Provide gardening space education for the poor and landless people.

◆ **Eco-Literacy.** Devote some SSND community meetings to reflection and discussion of ecological spirituality and sustainable living. Educate by modeling and teaching sustainable land and lifestyle practices.

Land Ethic, see page 4...

What's on Your Mind?

The *Land Stewardship Letter* welcomes letters and commentaries related to the issues we cover. Submissions can be sent to: Brian DeVore, 821 E. 35th St., Suite 200, Minneapolis, MN 55407; e-mail: bdevore@landstewardshipproject.org.

We cannot print all submissions and reserve the right to edit published pieces for length and clarity. Commentaries and letters published in the *Land Stewardship Letter* do not necessarily represent the views of the Land Stewardship Project.

◆ **Action and Advocacy.** Collaborate with/support and/or initiate local sustainable endeavors—Transition Movement, zero waste management, food labeling and antibiotics effectiveness. Contact local, state, and national lawmakers to work for environmental priority legislation for all our natural resources.

The principles listed here have stimulated

local projects by the Center for Earth Spirituality and Rural Ministry (CESRM) and the Earth Committee, based at out Mankato campus. These include our annual Earth Conference; a community garden for 125 immigrants, refugees and other folks with no land of their own; a solar farm on our land that serves the broader community; educational workshops on chemical-free gardening, food processing, composting and water preservation; and collaborating with local groups on a variety of other programs.

We realize the work is not finished. We

need to continue to keep the message alive for ourselves and for others so that Earth, our “common home,” is respected, cared for, and loved. □

Sister Mary Tacheny is part of the SSND community and an emeritus board member of the Land Stewardship Project. Copies of the Land Ethic Statement of the School Sisters of Notre Dame can be obtained from: SSND Central Pacific Province, 320 East Ripa Avenue, St. Louis, MO 63125-2897.

Why Winona County Should Ban Frac Sand Mining

NOTE: The Land Stewardship Project is leading a campaign in southeastern Minnesota’s Winona County to pass a ban on any new frac sand mining, processing or transportation operations. Wiscoy Township resident Cherie Hales, Homer Township resident Lynnea Pfohl and Saratoga Township resident Vince Ready are all members of LSP’s Winona County Organizing Committee. They compiled this list of reasons why the ban is the right policy to protect Winona County. See LSP’s **Frac Sand Organizing** page at www.landstewardship-project.org for a pdf version of the “Why Winona County Should Ban Frac Sand Mining and Operations” flier, as well as links to the studies and reports referenced in this list. For more information on this campaign, contact LSP’s Johanna Rupprecht at jrupprecht@landstewardshipproject.org or 507-523-3366.

→ Frac Sand Operations Threaten Human Health & Safety

Frac sand mining and processing operations generate silica dust, a known health hazard — enough exposure can cause lung diseases, including silicosis, emphysema, COPD, tuberculosis and lung cancer, as well as immune system diseases. Neighbors of these operations already experience dust polluting their homes and businesses with harmful respiratory effects, and there has been very little study of the extent of these risks, especially to vulnerable populations. The heavy truck traffic created by the frac sand industry causes air pollution from diesel fumes and creates a safety risk on rural roads.



→ Monitoring & Regulations Have Failed in Wisconsin

Public records and media reports show that frac sand companies have routinely violated regulations and polluted streams, rivers and wetlands. Chemical-laden wastewater has been handled in an unsafe manner on numerous occasions, threatening groundwater and neighboring properties.

→ The Frac Sand Industry Puts the Burden on Taxpayers

Unless frac sand operations are prohibited, the permitting process, monitoring and enforcement will require additional time and personnel, resulting in higher taxes. Truck traffic generated by the industry will wear roads out at 10 times the rate of normal traffic, according to a 2012 Winona County Highway Department study.

→ Frac Sand Mining Will Harm Our Economy

Historically, mining does not provide sustained prosperity because of the volatility of the market. Mining also tends to discourage and displace other economic activity and diversity. Frac sand mining would put agriculture, tourism and recreation, which are important parts of Winona County’s economic base, at risk. In 2013 the leisure and hospitality industry in Winona County generated gross sales of \$96,000,000 and

sales tax revenues of \$6,500,000. In 2012 the market value of agricultural products in the county was \$282,000,000. The leisure and hospitality industry employed 2,300 people in the county in 2013, and 1,500 were employed in agriculture. The relatively small number of jobs generated by frac sand mining are highly vulnerable to fluctuations in the industry, as seen in recent layoffs at multiple frac sand operations in Wisconsin.

→ Frac Sand Mining Puts Property Rights & Quality of Life at Risk

Studies have repeatedly shown that property values decrease near mines and haul routes. The noise and light pollution and increased traffic created by the frac sand industry threaten the health and quality of life of Winona County residents. Allowing frac sand operations takes away neighbors’ rights to enjoy the use of their property.

→ It is Legal & Necessary to Ban Frac Sand Mining

Winona County’s Comprehensive Plan includes a value statement supporting “the stewardship of the land and its resources” and goals of “preservation and promotion of agriculture” and “protection and enhancement of the air, water and land resources in the County as a vital ingredient of the living environment.” Frac sand mining is incompatible with these goals and values. The long-established purpose of zoning is to protect the community’s health, safety and welfare. There is ample legal precedent for banning activities that threaten these fundamental rights.

It is the responsibility of our elected officials to amend the zoning ordinance to ban any new frac sand operations in the county in order to protect people and the environment. □

Myth Buster Box

An Ongoing Series on Ag Myths & Ways of Deflating Them

→ **Myth:** Less Wildlife Habitat Makes for Safer Food

→ **Fact:**

Almost a decade ago, a deadly multistate outbreak of E. coli sickened 205 people and killed three. This highlighted a major problem for the food industry: fresh produce is now the leading cause of foodborne illnesses in the U.S. During the 1970s, less than 1 percent of illnesses were traced to fresh produce; today it's 46 percent.

This has sent food companies and government agencies scrambling for solutions to a growing human health crisis. In the case of the 2006 E. coli outbreak in bagged spinach, the source was traced to a farm in California's Central Coast region, where more than 70 percent of the salad vegetables sold in the U.S. are produced.

One source of the contamination was thought to be feral pig feces. As a result, farmers were pressured by the industry to keep wildlife as far away from their fields as possible. Tall fences and rodent traps, among other measures, were put in place. Farmers also removed wildlife habitat—lots of it. One estimate is that between 2005 and 2009, 13 percent of the remaining riparian vegetation along California's Salinas River and its tributaries was removed. Many farmers replaced grasslands, marshes, wooded areas and other natural habitats with bare ground buffers. The message: food safety and wildlife conservation don't mix.

But a study published in September found that not only does having wildlife habitat near produce fields not increase the presence of E. coli and salmonella (another nasty food-borne pathogen), it actually may decrease health risks to humans. The paper, which was published in the *Proceedings of the National Academy of Sciences (PNAS)*, featured data on E. coli and salmonella gathered between 2007 and 2013 in the Central Coast region.

What researchers found was that E. coli increased by an order of magnitude in produce fields during the study period, *despite* the removal of wildlife habitat. An increase in salmonella was also associated with riparian habitat removal. The researchers did find more feces-borne pathogens where livestock

such as cattle were present near produce fields, a problem in areas such as California where large-scale dairy operations have exploded, putting large numbers of cattle (and their manure) into densely-packed areas.

There's no disputing that wildlife feces can spread pathogens in produce, so why did habitat removal actually have the opposite effect? One theory proposed by the scientists is that bare soil buffers simply don't deter animals with wide ranges from wandering into farm fields. In addition, studies show that when there is enough habitat available to accommodate a wide variety of rodents, for example, it "dilutes" the population, making the species that carry pathogens not so prevalent. There is also the fact that when there's less perennial vegetation present in a watershed, it's easier for contaminants such as feces to wash off adjacent slopes into fields or waterways that can eventually flood those fields. It is also interesting to note that herbicides and fungicides can reduce the presence of the kind of soil bacteria that compete with and even feed on pathogens such as E. coli. Natural habitats are more likely to contain that beneficial bacteria.

The authors of the *PNAS* study say habitat removal may not only be expensive and counter-productive to food safety, but it also eliminates many of the other ecosystem services such habitat provides, including cleaner water and pollinator habitat. That latter benefit is becoming particularly key as honeybee and wild bee populations continue to crash, increasingly denying agriculture an ecological service that makes every third bite of food possible.

None of this is breaking news to farmers who are certified organic or otherwise don't rely heavily on agrichemicals to raise food. As the Wild Farm Alliance points out, there are numerous examples of farmers utilizing "beneficial" species to keep insect pests under control, for example. Numerous studies show that when predator-prey populations get out of whack, food produced by humans often becomes vulnerable.

Another *PNAS* study published in September reported that bats boosted corn yields on Illinois farms by 1.4 percent, which equates to a \$1 billion ecological service worldwide to corn producers. It turns out the bats are voracious eaters of corn earworm moths, whose larvae can do major damage to corn. The presence of earworm larvae was almost 60 percent higher when bats were excluded.

Taking advantage of the agroecological services something as complex as nature can provide is no easy matter—it doesn't lend itself to being sold as an input or computer program. That's why for years the Land Stewardship Project has been promoting farming systems reliant on the close monitoring of the landscape and all its workings. Such monitoring requires more "eyes to the acre" than ever.

In the 2002 book, *The Farm as Natural Habitat: Reconnecting Food Systems with Ecosystems*, North Dakota farmer David Podoll described how he controlled Canada thistles by providing ecological "edge" areas near his fields. It seems these areas harbored painted lady butterflies, which lay eggs in the thistle's flowering head. When the larvae hatch, they munch their way out, pretty much shredding the flower. In addition, the natural habitat adjacent to Podoll's fields allowed a rust disease that attacks Canada thistle roots to overwinter.

How did Podoll figure all this out? "You just watch," quipped the farmer.

→ **More Information**

- The *Proceedings of the National Academy of Sciences* (www.pnas.org) study on food safety in California is called, "Comanaging fresh produce for nature conservation and food safety."

- The *PNAS* study on bats and corn pests is called, "Bats initiate vital agroecological interactions in corn."

- More on how wildlife and farming can go together is available from the Wild Farm Alliance at www.wildfarmalliance.org/resources/food_safety.htm.

→ **More Myth Busters**

To download previous installments in LSP's *Myth Busters* series, see www.landstewardshipproject.org. For paper copies, contact Brian DeVore at 612-722-6377, bdevore@landstewardshipproject.org.



LAND
STEWARDSHIP
PROJECT

LSP News

LSP Staff: Ness Leaves, Olson Returns

Richard Ness is leaving the Land Stewardship Project after serving the organization over many years in various capacities.

Ness first joined LSP's staff in 1989 and soon after helped launch the Stewardship Farming Program. This was a pioneering effort to conduct on-farm participatory research related to sustainable techniques such as managed rotational grazing, cover cropping and nitrogen management. The Stewardship Farming Program helped spawn, among other things, the Sustainable Farming Association of Minnesota, Farm Beginnings (*see page 19*) and the Monitoring Project.

Through grazing groups and classes, Ness was instrumental in popularizing the use of managed rotational grazing and Holistic Management in Minnesota and the Upper Midwest. During the past few years, he led Farm Beginnings class sessions and developed curriculum for the program. He also coordinated the program's Livestock Loan Program and its successor, the Matched Savings Account, as well as helped direct the Journeyperson Course (*see page 21*).

Most recently Ness, along with former LSP staff member Julia Ahlers Ness, spearheaded efforts to promote farming systems that are based on building soil health (*see pages 23-27*).

Nick Olson has returned to LSP's staff to work as an organizer for the Farm Beginnings Program. Olson previously worked for LSP's Farm Beginnings Program from 2008



Richard Ness

(*see page 19*).

Olson is now leading a new Farm Beginnings initiative focused on identifying, engaging, training and supporting emerging beginning farmer-leaders. He will also help coordinate LSP's Journeyperson Course. Olson is at nicko@landstewardshipproject.org or 320-269-1057.

Heidi Morlock has joined LSP's Policy and Organizing Program team. Morlock is a Farm Beginnings graduate and former member of LSP's board of directors. She is a member of the organization's Health-care Organizing Committee (*see page 7*). Morlock, along with her husband Hans Peterson, farms in Minnesota's Scott County.

In her new role at LSP, Morlock is organizing for the Affordable Health-care for All initiative (*see pages 7-9*). She can be reached at heidim@landstewardshipproject.org or 952-492-5314.

Rebecca Wasserman-Olin has been assisting LSP's work on the Chippewa 10% Project (*see page 23*). Wasserman-Olin has a bachelor's degree in environmental studies and agricultural and applied economics from the University of Wisconsin-Madison.

Among other things, she has worked as a farm apprentice for the Michael Fields Agricultural Institute and a Youth Corps Leader at Growing Power in Milwaukee, Wis.

At LSP, Wasserman-Olin is developing economic decision-making tools for farmers in the Chippewa River watershed and beyond.

Madison Tomony is interning with LSP's Community Based Food Systems Program this fall. Tomony is a sophomore at the University of Minnesota-Twin Cities, where she is involved with the Higher Education Consortium for Urban Affairs' Environmental Sustainability program, which is an off-campus experiential learning initiative on environmental sustainability,



Rebecca Wasserman-Olin

policy and community action. Besides working for United Cerebral Palsy and People Serving People, Tomony has served as a volunteer for Big Brothers Big Sisters of America.

During her LSP internship, Tomony is assisting the organization's urban agriculture initiative by conducting storm water research and supporting the food and garden programming at Hope Community. □



Madison Tomony

Allan & Kersey Join LSP Board

Deborah Allan and **Charlie Kersey** have joined the Land Stewardship Project's board of directors.

Allan is an emeritus professor with the University of Minnesota's Department of Soil, Water and Climate. Over the years, she has focused her research on examining alternative and traditional cropping systems and their effects on soil health related to chemical, biological and physical properties.

During the 1990s, Allan was the research team leader of the Monitoring Team, which LSP led. The Monitoring Team is considered a groundbreaking initiative that brought together farmers, researchers and natural agency staff to develop techniques for monitoring the environmental, economic and quality of life impacts of farming systems.

Kersey, along with his wife Tzeitel, owns and operates La Finca, a Community Supported Agriculture (CSA) operation near Bruno, Minn. They also operate La Finca Market and Deli in Sandstone, Minn.

Kersey is a graduate of LSP's Farm Beginnings Program and has traveled to Washington, D.C., to testify on farm policy.

Kersey served in the U.S. Peace Corps in Panama and travels frequently to Latin America. He is leading the Land Stewardship Project-Witness for Peace delegation to Mexico in March (*see page 12*). □



Charlie Kersey



Nick Olson

Financing a Healthy Rural MN

LSP Members Testify in Favor of Affordable Healthcare for All

By Paul Sobociński

During the spring of 2015, the Minnesota Legislature created the Minnesota Health Care Financing Task Force. The task force will advise the Legislature and the Governor on strategies to increase access to and improve the quality of healthcare for Minnesotans.

The Land Stewardship Project's Healthcare Organizing Committee is following the work of this task force closely, since affordability of healthcare for rural Minnesotans is a priority of our organization. The first outstate meeting of the Health Care Financing Task Force was held in Rochester, Minn., on Oct. 23. Members of LSP's Healthcare Organizing Committee were there in force to provide input about the critical need for affordable, quality healthcare for rural Minnesotans.

I testified about healthcare insurance becoming too unaffordable for farmers and many other rural Minnesotans. Lack of affordable healthcare is a serious barrier for beginning farmers. This is especially true if they are trying to launch a management-intensive enterprise such as livestock production that requires them to be on the farm fulltime, which means they can't be working a town job to qualify for insurance. I made it clear in my presentation to the task force that farmers in the 55- to 65-year-old age group find insurance policies, with their high deductibles, so expensive that it's almost as if they have no insurance at all.

People with limited budgets and high deductibles often don't seek care until their health situation has gotten so bad that the treatment needed becomes very expensive, whereas if they had gotten help sooner, the cost would be much less.

Southeastern Minnesota farmer Leslea Hodgson testified what it was like for her and her husband to have low value insurance, poor coverage, or at times no insur-

ance at all. She also testified how they now (finally) have good insurance with MinnesotaCare.

"It was like a weight being lifted off our shoulders," Hodgson said.

She added that MinnesotaCare should be expanded to reach more Minnesotans, which is a proposal the task force is considering.

Alan Hoffman shared that when he first became a member of LSP's Healthcare Organizing Committee, he noticed that, as a doctor at the Mayo Clinic, he was the only



LSP's Healthcare Organizing Committee turned out in force for the first outstate Minnesota Health Care Financing Task Force Meeting in Rochester. Pictured, from left to right, are: LSP organizer Paul Sobociński, Leslea Hodgson, Curt Tvedt, Craig Brooks and Alan Hoffman. Not pictured is committee member Joe Kriegl. (LSP Photo)

one on the committee who really had good health insurance. Many of his fellow committee members are farmers, and Hoffman noticed that the people who grow the food we eat are having a very difficult time with the outrageously high cost of health insurance premiums, deductibles and co-pays.

Farmer Curt Tvedt told the task force about the importance of making primary care more affordable, and thus more available. He shared how a friend of his — a farmer — may have prevented a major heart attack if he would have had affordable access to a primary doctor. Under consideration by the task force is a provision that would incentivize utilization of primary care and generic prescription drugs by exempting certain healthcare services from high deductibles.

Craig Brooks shared his experience of working for 44 years in Minnesota's human service system, including 33 years as the human services director in Winona County. He is now residing in Wisconsin. Unfortunately, in his adopted state, thousands of people who could be eligible for medical assistance are not because Wisconsin didn't make use of expanded Medicaid offered by the federal government.

Under BadgerCare, Wisconsin's version of MinnesotaCare, thousands are being denied medical care because of reductions in eligibility. Also, unlike Minnesota, Wisconsin does not have navigators that will help individuals and families access the Affordable Care Act Health Care Exchange. Brooks urged the task force not to turn Minnesota's healthcare system over to profit-driven insurance companies, or the HMOs who are, in his opinion, nonprofit in name only.

When we talk about healthcare, the needs of people, not corporations, should come first. That became even clearer to me on Nov. 6 when I attended a work group meeting on healthcare access barriers, where research was shared showing a growing ethnic diversity in rural Minnesota. For example, in Nobles County, 43.2 percent of students are speaking non-English at home, which means that even if they learn English, their parents have not necessarily done so. We are now much more racially and culturally diverse in rural Minnesota. The clear takeaway is that if we don't address disparities that include language, culture and health literacy, we will see a continuing decline in overall health in rural Minnesota.

Recent revelations that premium rates will increase 14 percent to 49 percent in Minnesota should be a wake-up call to how broken our healthcare system is. Here in Minnesota we need to decide that healthcare should be a human right, that all are entitled to a system in which all are in one big pool, much like Medicare. □

*Paul Sobociński, an LSP healthcare organizer, can be reached at sobopaul@landstewardshipproject.org. For more on LSP's healthcare work, see the **Affordable Healthcare for All** page at www.landstewardshipproject.org. To learn more about the Health Care Financing Task Force and its workgroups, go to <http://mn.gov/dhs/hcftf>.*

As Rates Get Worse, MNsure Looks Better

Open Enrollment Insurance Deadlines in December & January

By Paul Sobocinski

Health insurance, already unaffordable for most people, is about to get a whole lot more expensive.

It was recently revealed that premiums offered by insurance companies in Minnesota are expected to increase in a range of 14 percent to 49 percent for a significant number of individual payers in 2016. Even the cost of MinnesotaCare, the state's subsidized healthcare program available to Minnesotans whose incomes range from 138 percent to 200 percent of the poverty level, is going up. In 2016, the premium for an adult enrolled in MinnesotaCare will rise from \$15 per month to as high as \$80 per month, depending on income. Also in 2016, MinnesotaCare recipients will face higher co-pays. MinnesotaCare is used by a number of farmers and other rural residents.

These rising costs mean it's more important than ever that Land Stewardship Project members take a close look at MNsure, an exchange that offers a way for people to shop for insurance policies that are affordable. Because of these incredible cost increases that are on the horizon, tax credits offered through the MNsure exchange will be much higher in 2016, helping individuals and families significantly bring down the cost of their healthcare insurance.

It is important to note that if you got an insurance policy through the MNsure exchange this past year, and your insurance company you are with has pulled that policy from MNsure for the current sign-up, that you shouldn't automatically renew with that insurance company. The main reason not to

renew with pulled plans automatically is that any premium subsidies you were receiving will no longer be available. There were 5,000 such policies pulled from the exchange in 2014. For the coming year, 6,500 such policies are being pulled from the exchange. Two major insurance companies in Minnesota that have pulled plans are Health Partners and Blue Cross and Blue Shield.

For farmers, the self-employed, and people who aren't offered insurance through their jobs, MNsure could provide more affordable coverage than is currently available on the private market. Individual Minnesotans' eligibility for public programs like Medicaid or MinnesotaCare, or subsidizes available on the exchange to make coverage more affordable, will depend upon their income (*see chart on page 9*).

Open Enrollment Period is Now

We are now in the midst of the 2016 enrollment period for MNsure. Here are some important dates to remember:

- The 2016 annual open enrollment period for MNsure expires **Jan. 31**.
- To have coverage by **Jan. 1**, you need to enroll by **Dec. 15**.
- To have coverage by **Feb. 1**, you need to enroll between **Dec. 16** and **Jan. 15**.
- To have coverage by **March 1**, you need to enroll between **Jan. 16** and **Jan. 31**.
- After **Jan. 31**, enrollment for the cur-

rent period is not available unless you qualify for special enrollment due to a major life-changing event.

It is important to remember that if you have no health insurance you are subject to a fine of 2.5 percent of your income, with a limit of \$695 per adult in 2016.

If computers and enrolling via MNsure's website (www.mnensure.org) make you nervous, consider enrolling through the help of a navigator. Navigator support was created as part of the federal Affordable Care Act as a way for people to get free assistance in understanding options that are available when getting healthcare insurance. You can find a navigator in your area by going to www.mnensure.org/help/find-assister, or you can call 1-855-366-7873. Call center hours are Monday through Friday, 8 a.m. to 6 p.m.; Saturdays, 8 a.m. to 4:30 p.m.; and Sundays 10 a.m. to 3 p.m. You can also choose to work with an insurance broker in your area to enroll within MNsure.

I can also help you with MNsure enrollment questions or hook you up with a navigator if you call me at 507-342-2323.

To get started, check out the chart on page 9 for a quick sense of what health insurance is available for you through MNsure.

Help Us Reform Healthcare

If you want to be part of the Land Stewardship Project's effort to create a real fix for our broken healthcare system in Minnesota, then join with us in working for a system in which everyone is in and no one is out. You can get signed up for LSP's "Healthcare Hot List" and we will connect with you at key times to take action at the local and state level. To join our Healthcare Hot List, e-mail me at sobopaul@landstewardshipproject.org or call 507-342-2323. □

Paul Sobocinski is a healthcare organizer for the Land Stewardship Project.

LSP's Mosel on State Ag Funding Panel

LDarrel Mosel has been appointed to the Minnesota Department of Agriculture's Agriculture Research, Education, Extension and Technology Transfer (AGREETT) Advisory Panel.

AGREETT was created by the 2015 Minnesota Legislature to oversee the spending of public money for agricultural research and outreach. As originally drafted, the legislation set up a governing board that did not represent sustainable agriculture organiza-

tions, minority farmers, fruit and vegetable growers or organizations focused on water quality. However, the board would have included representatives from each of the commodity groups as well as the AgriGrowth Council, which represents the largest agribusiness interests in the state.

LSP and its allies were successful in highlighting the importance of an advisory panel that has fair representation from such areas as



Darrel Mosel

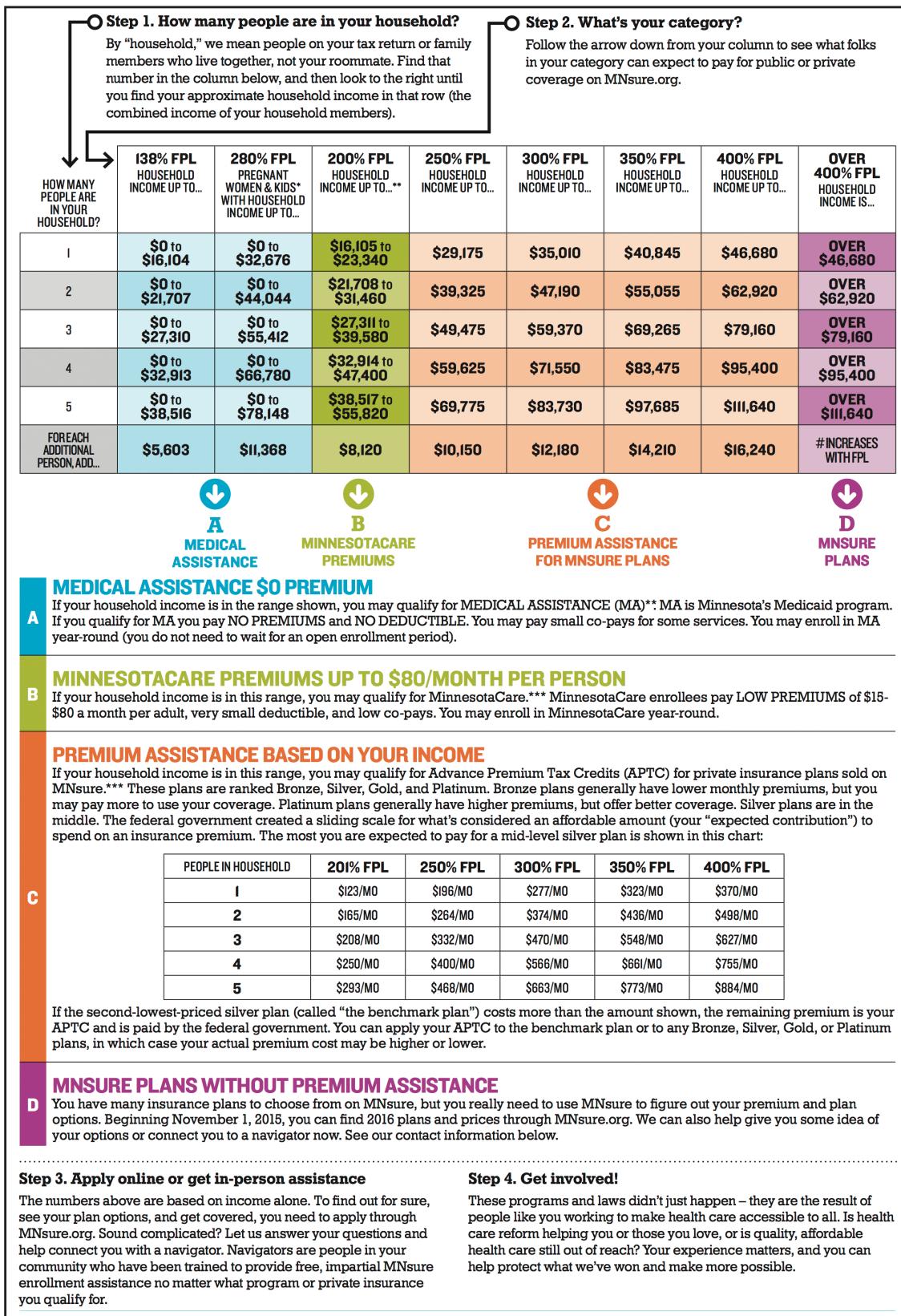
sustainable agriculture and natural resource conservation.

Mosel, who raises crops and livestock in Sibley County, is on LSP's Federal Farm Policy Committee and has long been active in promoting support for conservation farming at the state and federal level.

For more on AGREETT, contact LSP's Bobby King at 507-523-3366 or bking@landstewardshipproject.org. □

What Kind of Health Coverage Can You Get from MNsure?

Use this chart developed by TakeAction Minnesota to get a quick sense of what kind of health coverage is available through MNsure (see page 8), and what your expected monthly cost (premium) might be (NOTE: “FPL” is short for “Federal Poverty Level”). If you have questions about your situation or need help connecting with an insurance exchange navigator for your area, contact Land Stewardship Project healthcare organizer Paul Sobocinski at 507-342-2323 or sobopaul@landstewardshipproject.org. For information on enrolling in MNsure, see www.mnstate.org.



LSP Board Member Named a White House ‘Champion of Change’

Loretta Jaus, a Land Stewardship Project board member, Sibley County farmer and long-time leader in sustainable agriculture and farm policy reform, was recognized this fall by the White House as one of 12 “Champions of Change for Sustainable and Climate-Smart Agriculture.” Jaus and the other farmers, educators and scientists recognized were selected for their work to “promote soil health and energy efficiency, improve water quality and reduce greenhouse gas emissions,” according to the White House.

Jaus, along with her husband Martin, owns and operates a 410-acre 60-cow organic dairy near Gibbon. Over the years, the Jauses have developed a production system that integrates rotational grazing, diverse crop rotations, soil health improvement and wildlife habitat restoration. They regularly host natural resource professionals and members of their local community during field days and special events that connect

sustainable production systems, local food and environmental quality.

Jaus has also worked in the area of policy reform, both within Minnesota and nationally. She recently collaborated with LSP’s Policy and Organizing Program to publicize “How a Safety Net Became a Farm Policy Disaster,” a series of white papers that documents the need for major reforms in federally subsidized crop insurance. This spring, Jaus met with Minnesota Gov. Mark Dayton and presented him with petitions calling for the preservation of the Minnesota Pollution Control Agency Citizens’ Board.

“This recognition by the White House is well-deserved,” says George Boody, LSP’s executive director. “The Jaus family makes stewardship a priority in all that they do on



Loretta Jaus

their farm, and as an LSP member-leader, Loretta knows firsthand what is possible to achieve. She brings that practical understanding to reforming public policies so more farmers and landowners will be able to make transformational changes on the land and in our communities.”

In October, Jaus traveled to Washington, D.C., to participate in a White House-sponsored ceremony featuring U.S. Secretary of Agriculture Tom Vilsack. The Secretary talked about the importance of developing farming systems that are resilient in the face of dramatic changes in climate conditions. Jaus said there are many challenges and opportunities involved with building a resilient operation literally from the ground up.

“We’ve been able to create a farm that supports our family while producing clean water and contributing to a larger food system that addresses social justice issues,” she said. “But individuals on their own land can only do so much, and that’s why we need to work together with groups like the Land Stewardship Project to do everything from launch the next generation of farmers to reform agricultural policy.” □

LSP Meets with National Allies to Build ‘Capacity for Change’

By Kaitlyn O’Connor

In October, the Land Stewardship Project joined allies from across the U.S. to share skills and resources at a special training event in Washington, D.C.

LSP and the other participants in the training are members of the Animal Agriculture Reform Collaborative. Groups in the collaborative range from those national in scope, like Food and Water Watch, to state-based membership organizations like Iowa Citizens for Community Improvement.

At the training, the main focus was to gather information on how organizations working for positive changes to animal agriculture and the rural environment can build their membership and power as we move forward on reforming our food and farm system on a national basis. These kinds of efforts fall under the category of “capacity building,” as in, “We’re building the capacity for change.”

At the October meeting, attendees learned more about communicating our message, technological tools and tactics for advocacy and engagement that will help build the grassroots power needed to bring about

change at the local, state and national level. This training is one small part of a larger collaborative effort involving organizations spearheading reform to our nation’s food and farming system.

At a time when our food and farm system is at a crossroads, such capacity building is critical. In order to achieve the transformational changes we seek, an increasing number of people need to become engaged in the movement. In each corner of the country, we can look around us and see the consequences of a Farm Bill that is negotiated in an inherently undemocratic manner and heavily influenced by corporate power. All the while, land ownership is consolidating, factory farm expansion continues, and related environmental problems increase — soil erosion, water contamination, habitat loss, air pollution and climate change. And perhaps worst of all, there is often a broad and silent acceptance by a populace that doesn’t believe major change is possible, or in some cases, even desirable.

As with any social movement, change does not come easily. It takes hard work, dedication, communication, organization, infrastructure, action, and

most importantly, it takes power.

LSP is dedicated to continuing to work with our allies to build the power we need to take on corporate agribusiness’ stronghold on our food and farming system. □

LSP Policy organizer Kaitlyn O’Connor can be reached at koconnor@landstewardshipproject.org or 612-722-6377.



LSP joined other members of the Animal Agriculture Reform Collaborative to share tactics and resources for building more power.

Farming, French Fries & Fast Food

LSP Joins Toxic Taters in Holding McDonald's & RDO Accountable

By Stephanie Porter

On a bright day in October, I gathered with Land Stewardship Project members and supporters in front of a McDonald's in Brainerd, Minn. "No more Toxic Taters!" read the sign I held; "Hold the Pesticides" read another.

We were there for the National Day of Action Against McDonald's as part of a new partnership LSP is forming with the Toxic Taters Coalition, a group of White Earth Tribal members, farmers, and rural residents organizing to hold industrial potato producer R.D. Offutt (RDO) accountable to the harm its farming practices are doing to rural communities in northern Minnesota.

RDO is the largest potato grower in the world and one of America's biggest agribusinesses, with 40,000 acres in Minnesota alone. Northwestern and north-central Minnesota's sandy soils — in combination with heavy irrigation, fertilizer and pesticide application — have built RDO a profitable business as the main supplier of potatoes for McDonald's French fries. But those profits come at a cost to the health of people and the land, and are part of the increasing corporatization of our food system.

Health Risks

RDO's fields are sprayed with toxic pesticides and fungicides as often as every five to seven days throughout the growing season. These chemicals, classified as known carcinogens, neurotoxins and endocrine disrupters, volatilize and drift over to neighboring homes and schools. Such chemicals have been linked to a host of health problems, including vision loss, heart ailments, birth defects, cancer and developmental disorders. Bob Shimek, Interim Director of the White Earth Land Recovery Project and one of the leaders of the Toxic Taters campaign, suspects the heavy use of these chemicals is a major reason that an increasing number of people in his community are dying of cancer, and why up to one in five children in Minnesota's potato producing region are enrolled in special education classes.

Livestock are also exposed to pesticide drift in the region. Don and Norma Smith farm 100 acres of land next to one of Offutt's fields. One year after the giant

potato grower moved into the area, half of their ewes failed to conceive; the following year, one lamb was born deformed, and the remaining lambs that were born died. They ultimately lost their entire 29-head herd.

The Land & Water

R.D. Offutt's farms rely on high levels of irrigation and fertilizer applications to make the poor, sandy soils productive for potatoes. With permits to withdraw over 12 billion gallons of water per year to supply its extensive irrigation system, depletion of the aquifer is a major concern. Water quality is also at risk: in sandy soils, pesticides and fertilizers filter straight to the groundwater, contaminating drinking water supplies.

Park Rapids, Minn., which is surrounded by 9,000 acres of Offutt farms, has already had to spend \$2.5 million on a new water treatment facility, raising water fees by 25



During the growing season, large scale potato growers like R.D. Offutt spray their fields as often as every five to seven days with fungicides. (Photo by Noel Allard, Toxic Taters)

percent for local residents. Perham, Minn., also in prime potato country, spent \$856,000 on a wellhead protection plan.

RDO's water consumption only appears to be increasing as it seeks new permits for expansion into the vulnerable Pineland Sands aquifer, where the company has been steadily buying up formerly forested land and clear-cutting it for potato production, resulting in soil erosion and habitat destruction. Dubbed the "pine to potato" conversion, the total area at risk for deforestation covers 42 square miles.

In November, members of Toxic Taters and LSP filed a petition with the Minnesota Department of Natural Resources calling for a thorough environmental review of RDO's proposed expansion into the Pineland Sands Aquifer region in the north-central part of the state.

Land Access

R.D. Offutt can afford to pay astronomical prices for land, shutting out smaller and beginning farmers. Brittany Springer, a beginning farmer who has been raising bees, beef cattle and pigs outside of Henning, Minn., since 2011, has experienced this issue firsthand. She grew up spending summers on her grandparents' dairy farm, and said it was those days helping out on the farm that first sparked her love for the land. She and her husband would like to buy that farm to keep it in the family, as well as to expand their grass-fed beef business. But when they approached the current owner, he was unwilling to sell it to them because he could get a higher price from Offutt.

"I told him the price he was asking for was kind of steep," she said. "He said, '[Offutt] gave the neighbor three grand an acre, and I'd like to have something close to that.' There's no way we'd be able to afford that."

The Cost to the Public

Perhaps most troubling about the harm that industrial potato farming causes Minnesota's rural communities is that much of it is funded by public dollars. R.D. Offutt has been ranked as the second biggest recipient of crop insurance in Minnesota, raking in \$1,116,124 in premium subsidies in 2011 alone, according to the white papers on crop insurance LSP published in 2014. On average, the federal government subsidizes 60 percent of the cost of insurance premiums. Subsidies garnered by corporations like RDO are one more way the public is shouldering the cost of industrial agriculture.

Moving Forward

As the number one purchaser of potatoes in the nation, McDonald's is in a prime position to influence Offutt's production methods. Momentum for change is building. During the October National Day of Action, people rallied at over 40 McDonald's locations across the country to demand that the corporation pressure its potato suppliers to utilize production methods that don't harm rural communities. Now, Toxic Taters is looking beyond McDonald's as it continues to advance the campaign and build momentum for the year ahead. LSP looks forward to deepening this collaboration and moving toward a new food system that puts the health of people and the land first.

LSP organizer Stephanie Porter can be contacted at 612-722-6377 or stephanie@landstewardshipproject.org. Information on the Toxic Taters Coalition is at www.toxic-taters.org.

First-Ever LSP Member Trip to Mexico with Witness for Peace

March 2016 Delegation to Examine Agriculture, Land Rights & Immigration

By Doug Nopar

A number of years ago, long before billionaire provocateur Donald Trump demonized undocumented Mexican workers and called for the erection of a new wall along the southern U.S. border, the Land Stewardship Project began work as an ally for immigrant farmworker rights and immigration reform.

Our latest endeavor along these lines is a trip south of the border called, “Agriculture, Land Rights & Immigration: The Mexico-Midwest Connection.” This LSP-Witness for Peace event in March will provide an opportunity for our members to connect with rural residents in Mexico and discuss the common challenges they face in a world increasingly dominated by unfair trade policies, corporate agriculture and threats to basic human rights. More on this later. First, here’s a little background on why LSP is involved in the

issue of immigrant rights in the first place.

A Truly Sustainable Ag

Over the past 10 years, an increasing number of our members have become interested in immigrant rights and immigration reform. In rural southern Minnesota, for example, we’ve seen a significant growth in the immigrant population, many of whom have been displaced from their homes and farms in Latin America by the very same U.S. trade and farm policies that damage family farms here in this country.

Some LSP farmers have wanted to hire immigrant workers but have been stymied by the complexity of U.S. immigration laws. Others see the opportunity to provide start-up farming options for these workers, many of whom come from farming backgrounds. And LSP’s mission of building healthier rural communities pushes us as well to work to tear down racial disparities in education, healthcare, employment and criminal justice.



Building cross-border solidarity between rural people in the Upper Midwest and rural people in Mexico will be another helpful strategy in creating an agriculture that favors people and the land over the profits of corporate agricultural interests. (Photo courtesy of Witness for Peace)

LSP is convinced that we can’t build a truly healthy, sustainable food and agriculture system in the U.S. unless:

- 1) Immigrant workers are respectfully treated and paid fairly on factory farms.
- 2) A comprehensive and just reform of U.S. immigration laws is enacted.
- 3) Immigrant farmers and farmers of color have access to land and the opportunity to begin farming on their own right here in the Midwest.

Accomplishing these objectives won’t be easy. It will take a strong coalition of immigrant rights advocates and white allies, rural and urban people, working together to overcome years of exploitation of people of color and Native Americans during our nation’s agricultural history.

And it will take us understanding how U.S. farm and trade policy has not only detrimentally affected family farms and the land in the U.S., but also how destructive these policies have been for farmers and rural communities in other countries, and in particular, Mexico.

Mexico has been the target of major foreign investment and transnational corporations since the North American Free Trade Agreement (NAFTA) went into effect in 1994, and more recently since constitutional reforms were passed in 2014. This has had a devastating effect on the countryside: small farmers’ holdings are targeted for purchase for industrial agriculture use or tourist development, support for small farms is almost non-existent, communal lands are up for sale, and mega-projects have proliferated, polluting the land and off-shoring the profits.

Many people have no option but to migrate to the U.S. In addition, many of the human rights violations in Mexico are committed against community members fighting to protect their land and their way of life. U.S. foreign policy plays a big role in this story through free trade policies, support for transnational businesses, the drug war and militarization, and the lack of insistence

Mexico Trip, see page 13...

on human rights improvements. As long as Mexico is “open for business,” it seems, the U.S. and the Mexican governments seem content with the status quo.

Details of the Trip

This is a key time for people in our region to learn more about what we have in common with rural Mexicans. Building cross-border solidarity between rural people in the Upper Midwest and rural people in Mexico will be another helpful strategy in creating an agriculture that favors people and the land over the profits of corporate agricultural interests. Out of this deeper understanding and analysis of Mexico-Midwest connections, participants in the LSP-Witness for Peace delegation can help LSP take further action on issues of immigration, trade and agriculture while learning how to fully engage their fellow rural community members on these issues.

The trip runs from March 11-20 and participants will get to learn about rural communities in the states of Oaxaca and Morelos. Here are a few examples of site visits that will take place during the trip:

• Cedicam—Effects of NAFTA on the Oaxacan Countryside.

Cedicam works in one of the most eroded areas in the world. Primary projects include reforestation efforts, native seed use, and promotion of local markets and local food consumption. They work to prevent out-migration, which skyrocketed after NAFTA went into effect 21 years ago.

• Puente — Amaranth Production for Health and Livelihood in Oaxacan Families and Youth.

Puente works to provide economic opportunities and greater nutrition for Oaxacan families through the cultivation and consumption of the traditional amaranth plant. Because traditional crops like corn and beans are no longer profitable, the organization provides economic opportunities for farmers and also ways for people to use amaranth in their home cuisine.

• Asamblea — Defense of Territory and Threats of Mega-Projects on Culture and Communities.

The Asamblea is an organization made up of indigenous communities of farmers and fishermen in the Isthmus region of Oaxaca. They work to protect the land from mega-projects, specifically “green” wind farms. These projects threaten their land, their livelihood and their way of life, and generate en-



Participants in the LSP-Witness for Peace trip will have opportunities to visit and stay in rural Mexican villages. (Photo courtesy of Witness for Peace)

ergy and/or carbon credits for corporations like Coca-Cola, Walmart and Heineken.

• Capulálpam — Resistance & Alternatives to Migration.

Calpulálpam de Méndez is a town of about 1,300 inhabitants, mostly of Zapotec origin, located in the Sierra Juarez region of Oaxaca. As opposed to other nearby towns, Calpulalpam has almost no out migration. One of the principal reasons for this is that they have developed community projects, such as a sawmill and ecotourism, which support the entire community. Additionally, they have successfully resisted a mining project that would have threatened their environment, health and way of life.

• Vida Nueva — Weaving Co-op.

Vida Nueva is a women’s weaving

cooperative from the Zapotec community of Teotitlán del Valle, a town with a long history of migration to the U.S. This traditional indigenous community is known worldwide for its long line of weavers. Vida Nueva provides a sustainable alternative for single mothers, unmarried women taking care of their parents and widows. The mission of their cooperative is to create economic opportunities for women, serve their community and preserve their Zapotec heritage.

Sound interesting? Check out the sidebar below for details on how to sign-up for this trip. □

Doug Nopar is an LSP organizer based in Lewiston in southeastern Minnesota.

Agriculture, Land Rights & Immigration: The Mexico-Midwest Connection

The “Agriculture, Land Rights & Immigration: The Mexico-Midwest Connection” trip will be specifically arranged for 10 to 20 Land Stewardship Project members. The cost is \$1,100, plus round-trip airfare. The fee covers all meals, lodging, interpreters and transportation within Mexico. We’re expecting the total to be under \$2,000 and fundraising support and partial scholarships may be available. The one-page trip application form, which is available at www.landstewardshipproject.org, must be sent in by Jan. 1 with a \$150 deposit. Applications from LSP’s farm and rural members will receive high priority.

For information on participating in the trip or to obtain an application form, contact LSP board member Charlie Kersey at 320-216-5296 or lafinca@earthlink.net. You can also contact LSP organizer Doug Nopar at 507-523-3366, dnpnopar@landstewardshipproject.org.

Witness for Peace

This trip wouldn’t be possible without the help of Witness for Peace (WFP), a national, grassroots organization of people committed to nonviolence and led by faith and conscience.

The WFP mission is to support peace, justice and sustainable economies in the Americas by changing U.S. policies and corporate practices that contribute to poverty and oppression in Latin America and the Caribbean. The Upper Midwest chapter of WFP alone organizes 10 trips to Latin America every year, with upcoming trips planned for Mexico, Colombia, Honduras and Cuba. For more information, see www.witnessforpeace.org or call 920-421-2269.

Value-Added Capacity Building

What if a farm has more potential than its owners can handle?

The way Jackie and Harry Hoch see it, their diverse fruit and vegetable operation has plenty of room for adding new enterprises.

Indeed, during the past two decades Hoch Orchard and Gardens has become a major supplier of dozens of kinds of certified organic apples and apple products in Minnesota and western Wisconsin. The Hochs are also utilizing the steep slopes and marketing infrastructure of their 40-acre operation in southeastern Minnesota's Driftless Region to produce and sell strawberries, raspberries, blueberries, cherries, apricots and even wine grapes. They also rent three other orchards in the area near La Crescent, adding 20 acres to their production capacity.

The Hochs are no strangers to adding value to the fruits of their labor before they leave the property, either. They've made various drinks and jellies over the years, and their products are sold at farmers' markets as well as food co-ops from La Crosse, Wis., to Minnesota's Twin Cities.

And the land, hoop houses and processing buildings have room for yet more enterprises. The owners? That's a different story.

"The farm has a lot of capacity, but Harry and I only have a certain capacity," says Jackie, 49, on a recent summer morning. As she says this, standing next to her is Harry, 50, as well as 36-year-old Rob Fisk, who represents a new strategy for adding enterprises to this busy beehive of a farm. He and the Hochs are looking up at three tall, 465-gallon stainless steel fermenting tanks, which are in the process of adding yet more value to Hoch Orchard's production in the form of cider.

The Hochs and Fisk are entering their second year of a unique partnership that has blended the couple's production, distribution and marketing capacity with the beginning farmer's passion for making a local product for local markets.

In farming, using processing and packag-

ing to add value to what the farm produces is considered a savvy way to keep more profits at home. But such value-added strategies can also produce pay-offs in terms of community, particularly when that enterprise has as a key component a beginning farmer. It's a form of helping the next generation transition into farming that the Hochs believe has a lot of potential as business owners like themselves confront the realities of not having enough hours in the day to take on all the great enterprise opportunities available.

A Hard Demand for Cider

There's a lot of serendipity involved with how Wyndfall Cyder (www.wyndfallcyder.com)



Harry and Jackie Hoch (left) have added another enterprise to their farming operation with the help of cider maker Rob Fisk. (LSP Photo)

(www.hochorchard.com) came to be in the back of a packing shed on the grounds of Hoch Orchard and Gardens (www.hochorchard.com). It turns out when Fisk first began talking to Harry and Jackie over a year ago about his desire to produce alcohol-based cider, also known as "hard" cider, from local apples, the couple had already delved deep into starting such an enterprise themselves.

They had done some market analysis, even going so far as to work with students at the University of Minnesota's Carlson School of Business to develop economic

models. What they discovered was there was a growing market in the region for hard cider, a drink that has a long history in this country. As the story goes, the reason John Chapman, otherwise known as "Johnny Appleseed," was so welcomed in communities when he offered to establish apple nurseries was that pioneers knew the trees would eventually be a perennial source of alcohol. Much like micro-brewed, craft beer, hard cider is experiencing an impressive renaissance of late. National cider sales rose from 4.5 million cases in 2010 to 23.2 million cases in 2014. Areas like the Twin Cities are seeing an explosion in bars, restaurants and liquor stores that offer hard cider, much of it sourced locally.

The Hochs had experience making fresh, non-alcoholic cider and selling it as a way to add value to apples produced in bumper crop years. But hard cider is more shelf stable, providing a significant extension to the marketing season.

A few years ago the couple began wading through the byzantine state and federal permitting processes required to begin producing and distributing an alcoholic beverage from their own fruit. They even began propagating the types of apples that would lend themselves to producing hard cider.

Two Ships Meeting

Fisk was friends with a former Hoch intern and had visited the farm a few times. He has degrees in environmental science and horticulture and had worked as a biologist for the USDA and the Minnesota Department of Agriculture. But his real passion was home brewing and land preservation—two interests that aren't as divergent as one might think. Fisk believes in "terroir"—the concept that certain foods and beverages get their distinct aromas and flavors from the soils, microclimates and topography present in a region.

Terroir has long been associated with wine-making, and Fisk argues that if a product like cider could be identified with, say, the Driftless Region, then people might find a reason to protect such natural habitat from destructive development.

"By buying the product you're literally helping the watershed," he says.

In February 2014, Fisk ran into the Hochs at the MOSES Organic Conference

Capacity Building, see page 15...

in La Crosse. It turned out that the couple's planning and the wannabe farmer's dreams were on a collision course—in a good way. Things moved quickly after that. By June 2014, Fisk had put his house in the Twin Cities on the market and by September he had moved onto the Hoch operation. In October of that year, the three custom-made fermenting tanks were delivered, purchased with proceeds from the sale of Fisk's house.

"I probably wasn't as ready to go as I thought I was or hoped to be, but the opportunity was too great to pass up," says Fisk, recalling a hectic 2014. "I felt it was the right time to get into the business."

But a lot of thought went into the partnership as well. Between February and September the two parties had several on-farm meetings to hash out the details of the partnership. The Hochs have long hosted interns on their operation, but taking on a partner and a whole new enterprise was a different world altogether. They discussed not only the structure of the partnership but what it meant to be present on a farm 24-7.

"Obviously to run a business like this you can't be doing it on the weekends part-time," says Harry. "So we talked about what we envisioned for this business and how this could work, and he talked about what he wanted to do in life, and what his goals were, and it seemed like a good fit. We didn't jump into it blindly."

An added benefit to the partnership is Fisk's horticulture background. That means he can work in the orchard during the growing season on contract and spend the rest of his time producing and marketing cider. The three formed a limited liability corporation that gives Fisk three-fourths of Wyndfall Cider's profits. The rest of the year he draws an income from his work in the orchard.

"I can be getting paid to press the apple juice that the cidery will end up buying," says Fisk. "It's a good arrangement."

A little over a year into the budding business, Wyndfall Cyder is off to a strong start. Fisk started fermenting the first batch in fall 2014 and had product to sell by the beginning of 2015. It's looking like this year Wyndfall will be able to double its 2014 production of just under 3,000 gallons. Even 6,000 gallons would be a modest amount of production. In comparison, that's a fraction of what a midsize craft beer brewery would produce in a year's time. The demand is strong, and reviews of Wyndfall's brand of cider—it's a dry, less sweet, European style drink—have been good. So far, Fisk has released four varieties, which, besides apples, feature ingredients like raspberries and apricots, also raised by Hoch Orchard.

"Everything is estate grown, even the fruit that we put in to flavor the cider," says Harry. "We're not buying barrels of concentrated juice."

Hoch Orchard and Wyndfall Cyder have also been able to integrate shipment of the cider. The Hochs do their own fruit distribution to co-ops and other businesses in the region and can piggyback on top of that with cider deliveries to liquor stores and bars. They sell the cider in "bomber" style bottles (one pint, six ounces), as well as kegs.

"We've learned a ton in the first year," Fisk says as he inspects the fermenting tanks. One challenge is juggling work on an orchard that is also home to a cidery. That means figuring out how to transition from harvest to fermentation and then to harvest again. The next few years will be full of trial and error as Fisk tests the market to figure out what flavors sell well.

A big advantage the new enterprise enjoys is that Fisk is starting out with no debt, since he was able to finance the equipment through the sale of his house. He says another major perk of partnering with the established farm is gaining the business and marketing infrastructure it offers. Fisk describes himself as "the opposite of entrepreneurial," given his background as a government employee. Could he have gotten started without the Hochs' help?

"Probably not," Fisk says. "I would have held onto the dream for probably five to 10 years and then realized it wasn't going to work."

Jackie and Harry disagree, saying the young, energetic multi-tasker would have eventually found *some* way to reach his goals. But they concede Fisk received a significant boost by being able to utilize right away apples grown literally within a few yards of the fermenting operation.

"It takes decades to establish an orchard and the odds are long of finding a small orchard for sale that would have a good mix

of apples," says Harry. "I'm sure Rob could have done it, but it's the timing."

First of Many?

The Hochs are excited about this new value-added venture, and not just because it is providing another market for their production. They think a lot about the future of their business, as well as the future of farming in the wider region.

Already the couple has been considering their next value-added enterprise: meat production. They've set up a system for grazing hogs around their orchards as well as among trees that have dropped their apples to the ground due to bad weather, and have already sold some pork, as well as chicken and duck, to local customers. The couple estimates they could increase 10-fold the number of animals they produce on the land utilizing rotational grazing. They wonder aloud: what if they could find a beginning farmer who was interested in meat production, or maybe wanted to start up a Community Supported Agriculture operation that offered vegetable and fruit shares?

"Jackie and I have been looking at versions of this scenario for years. Rob, hopefully, is just the first one who does something like this here," says Harry.

Whether it be apples, cider, meat or vegetables, the Hochs see such capacity building as a way to not only continue their own success as business owners, but to fortify the farm's foundation for the long-term—no matter who is involved.

"Harry and I have built up an infrastructure over quite a few years," Jackie says. "I think using that infrastructure and having other people be part of it, just figuring out how to share, is sometimes the hard part. But ultimately, that would be one way we could see this farm continuing. It doesn't have to be just Harry and Jackie, it could be a farm that has many aspects to it." □

Looking to Transition Your Farm to the Next Generation? Check out the *Farm Transitions Toolkit*

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

The *Toolkit* contains resources, links to services and practical calculation tables to help landowners establish a commonsense transition plan. It also features user-friendly resources on the economic, legal, governmental, agronomic, ecological and even social issues that must be considered in order to ensure a successful farm transition. It is rounded out with profiles of farmers who are in various stages of transitioning their enterprises to the next generation. An online version of the *Toolkit* is at www.landstewardshipproject.org/farmtransitionstoolkit; paper versions can be purchased by calling 1-800-909-6472.

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 LSP's *Seeking Farmers-Seeking Land Clearinghouse*. To fill out an online form and for more information, see www.landstewardshipproject.org and look under the **More Farmers on the Land** section. 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 www.landstewardshipproject.org.

Farmland Available

◆ Linda Hutchinson has for sale 19.5 acres of farmland in **southeastern Minnesota's Dodge County (near Hayfield)**. There is 12 acres tillable and it has been used for pasture and hay production for the past several years; it has not been sprayed for several years. There is fencing, as well as a house and a small shed that could be torn down. The asking price is \$220,000. Contact: Linda Hutchinson, 651-214-1853, Linda@haha-team.com.

◆ Ron and Waunita Brunscheon have for sale a 35-acre orchard and produce farm in **northeastern Iowa's Chickasaw County**. East View Orchard is a well-established 17-acre business and the Brunscheons are retiring after 25 years. They would be willing to work with someone and transition them into the business. Contact: Ron or Waunita Brunscheon, 563-238-3871, eastvieworchard@iowatelecom.net, www.eastvieworchard.com.

◆ The Yggdrasil Land Foundation has available for long-term lease a turn-key certified organic dairy in **southeastern Wisconsin**. The land is owned and protected by the foundation (www.yggdrasillandfoundation.org). It consists of 450 acres, 240 fenced, with improved lanes and a pasture watering system. Facilities include a 16-unit swing over parlor and a four-bedroom house with separate one-bedroom apartment. An organic buyer is ready to pick up milk. There is a full line of equipment and 25 spring calving heifers available for purchase. The current tenant is retiring after 25 years on the farm. This farm has been a Master Site for the Dairy Grazing Apprenticeship Program (www.dga-national.org). It is part of a larger agricultural land association in southeastern Wisconsin that offers possibilities for synergies and like-minded businesses. Send letter of interest, resume and at least three references and letters of recommendation to: Yggdrasil Land Foundation, c/o Dorothy Hinkle-Uhlig, dghu@charter.net.

◆ Jerod Bergman has for rent 200-400 acres of farmland in **northern Wisconsin's Oneida County (near Rhinelander)**. The land has never been sprayed but it is not certified organic. There is pasture, some fencing, two large metal buildings, a barn and

water. The price is negotiable. Contact: Jerod Bergman, dr.jerod@educatingwellness.com.

◆ Herbert Stone has for sale 184 acres of farmland in **northwestern Wisconsin's Rusk County**. There is pasture, a dairy building that holds 40 heifers, fencing and a house. The land has not been sprayed for 25 years. Contact: Herbert Stone, 715-415-1215.

◆ Peter Kastler has for sale 10-20 tillable acres of farmland in **Minnesota's Washington County (near Lake Elmo)**, in the Twin Cities region. Available are two separate 10-acre parcels side-by-side and next to active farms. Outbuildings would not be included in the sale, but could be rented separately. The asking price is \$219,000. Contact: Peter Kastler, 612-382-9385, peter.kastler@gmail.com.

◆ Glen Thompson has for sale a 240-acre farm in **northeastern South Dakota's Codington County (near Henry)**. The land has not been sprayed for several years and includes pasture with new four-strand barbwire fencing and a cross fence with alley system for rotational grazing. There are three built-in Ritchie waterers, two hydrants, two dug outs, a medium-size lake and a deep slough. There is a milk barn that was last used three years ago; all equipment remains except the bulk tank. There are two additional medium outbuildings, a garage/carriage house type building, a small grainary, and an old hoop barn that needs some repairs but has a usable lean-to on the good side. There are also apple trees, cherry trees, raspberries, wild choke cherries, wild plums, wild asparagus and grape vines. There are two houses—one older and one newer. The asking price is \$6,250 per acre. Contact: Glen Thompson, lobo@itctel.com.

◆ Andrew Tatham has for rent approximately 3 acres of farmland in **east-central Minnesota's Wright County**. The land has not been sprayed for several years and includes a 120 x 40 hoop barn and a 40 x 40 pole barn (will rent with either, neither or both). There is tillable acreage that would be suitable for a small market garden. There is also a four-bedroom house with a double garage and a lean-to. The rental price is \$1,000 to \$1,200 per month. Contact: Andrew Tatham, 651-552-1625, aptatham@yahoo.com.

◆ Gary Raatz has for sale a 38-acre farm near **Amery in western Wisconsin**. All the land (tillable and pasture) is eligible for organic cer-

tification. There are outbuildings for housing beef, pigs, poultry and goats, in addition to a machine/hay shed. The land is surrounded by organic hay fields to the north and south. No conventionally farmed land touches the property. There is a four-bedroom home and carriage house with apartment. The asking price \$259,000. Contact: Gary Raatz, 651-226-2613.

◆ Steven Abel and Mary Maier-Abel have for sale 30.83 acres of certified organic farmland in **western Wisconsin (Pierce/Pepin County line)**. There is a 20 x 20 greenhouse shed with walk-in cooler, a 30 x 40 pole building, a 28 x 88 old barn in need of attention and a home built in 2006. The farm is listed as two separate properties. The first listing is for the buildings and approximately 6.5 acres. The second listing is for 24 acres of cropland/woodland. The asking price is \$199,000 for the first listing and \$129,000 for the second. It is possible to buy the farm as a whole if interested. The Abels are willing to negotiate the price and other details based on interest of someone wanting to farm it organically. Contact: Steven Abel and Mary Maier-Abel, 715-647-3119, 715-448-0876, bloominghill1593@yahoo.com.

◆ Peggy Troller has for sale approximately 10 acres of farmland in **western Wisconsin**. The land has not been sprayed for 20 years; there is a house but no outbuildings. The asking price is \$136,250. Contact: Peggy Troller, 651-341-9869.

◆ Brian McGinness has for rent 38.6 acres of farmland in **North Dakota**. The land has not been sprayed for several years and has pasture, two high tunnels, a heated greenhouse, a walk-in cooler, four grain bins, a 40 gallons-per-minute irrigation system and a house. The asking price is \$1,200 per month. Contact: Brian McGinness, 701-202-9834.

◆ Sylvester Wetle has for rent 40 acres of farmland in **south-central Wisconsin's Adams County**. The land has been fallow for more than 40 years and could be used for organic production or native hay production. A new well can be operating in a short time. There is pasture but no house or

Clearinghouse, see page 17...

...Clearinghouse, from page 16

outbuildings. The asking price is \$300 to \$500 per month. Contact: Sylvester Wetle, showperg@aol.com.

◆ Michael Dripps has for sale 20 acres of farmland in **western Wisconsin's Pierce County**, 90-minutes from the Twin Cities and near Lake Pepin. The land includes pasture and it has not been sprayed for several years. There is an off-grid Amish-built log cabin with wood-burning stove and a 550-gallon water collection system. The asking price is \$120,000. Contact: Michael Dripps, mdripps@earthlink.net.

◆ Dan and Allysse Sorensen have for rent 2 acres of tillable farmland in **northwestern Wisconsin's Polk County**. The land has never been sprayed and it was previously operated as a CSA. There is existing structural equipment and a storage cellar. Two acres of gardens have 10-foot tall fencing and water is available on-site. There are no other farms within a two-mile radius. For additional rent, there is a cabin available. Rent for the land would consist of a typical CSA share (paid in produce). Contact: Allysse Sorensen, essylla@gmail.com.

Seeking Farmland

◆ Seng Lor is seeking to rent 5 acres of farmland in **Minnesota**. Land with pasture and water is preferred; no house is required. Contact: Seng Lor, 651-219-0710, senglor1991@hotmail.com.

◆ Austin Hoefs is seeking to rent or buy 80+ acres of farmland in **southeastern Wisconsin (eastern Rock, Walworth, Racine, Kenosha, Jefferson or Waukesha County)**. Land with pasture and that has not been sprayed for several years is preferred. A barn/shed, perimeter fencing and water supply to pasture is also preferred; no house is required. Hoefs is planning on practicing Holistic planned grazing and will be using the Holistic Management framework to make decisions. He would also consider hay ground that the owner would like to have grazed and hayed. Contact: Austin Hoefs, 262-210-9804, hoefsaustin@gmail.com.

◆ Chris and Tamara Johnson are seeking to buy 40 acres of farmland in **western, northwestern or northern Wisconsin**. Land with fenced pasture, outbuildings (for storage, workspace and sheltering livestock), hydrants and a house is preferred. Contact: Chris and Tamara Johnson, tmb808@gmail.com.

◆ Mai Pa Kou Yang is seeking to rent 10-20 acres of tillable farmland in **Minnesota**. Access to water is preferred; no house is required. Contact: Mai Yang, myang@

flaginc.org, 651-223-5400.

◆ Lydia and Jared Strand are seeking to rent 20+ acres of farmland in **southern Minnesota, the Twin Cities region or New England**. They would like to use the land for a small-scale, sustainable sheep operation, and would prefer pastures with fencing, water and potential for haying. Land that has not been sprayed for several years, a barn, other outbuildings and a house are also preferred. Contact: Lydia Strand, lydiastrand@gmail.com.

◆ Blake Rutz is seeking to rent 80 acres of tillable farmland in **southwestern Iowa's Dallas or Madison County**. No house is required. Contact: Blake Rutz, 515-681-0948, blakerutz01@gmail.com.

◆ Bairet Eiter is seeking to buy 200+ acres of farmland in **Minnesota**. Land that has not been sprayed for several years is preferred. Eiter would like land with fenced pastures for rotational grazing, a barn for dairy cattle, the potential for putting up a milking facility and a house. Land that is relatively close to a city with a market for organic foods is also preferred. Contact: Bairet Eiter, 952-818-4583, bairet26@gmail.com.

◆ Jon Albrecht is seeking to rent 20+ acres of tillable farmland in **northern Illinois or southern Wisconsin**. No house is required. Contact: Jon Albrecht, 815-871-7654, Jpalbrecht92@gmail.com.

◆ Megan T. Pierce is seeking to buy 20+ acres of farmland in **western Wisconsin or southeastern Minnesota**. Land that has not been sprayed for several years and that has pasture, outbuildings and a house is preferred. Contact: Megan T. Pierce, 612-708-9904.

◆ Robert Barbeau is seeking to buy 24-640 acres of farmland in **Minnesota**. Land that has not been sprayed for several years and that does not have too much visible corn residue is preferred; no house is required. He would be interested in a rent-to-own situation (possibly renting 10-30 tillable acres during the fall of 2016). Access to renting a tractor and equipment would also be good. Contact: Robert Barbeau, 612-219-1404, rbarbeau94@gmail.com.

◆ David Schroeder is seeking to rent 5-20 acres of farmland in **Will County in northeastern Illinois**. Land with pasture is preferred; no house is required. Contact: David Schroeder, 630-240-6971, dschroeder312@gmail.com.

◆ Wally Rankin is seeking to rent 25+ acres of farmland in **Wisconsin or northern Michigan**. Land that has not been sprayed for several years and that has pasture, fencing, water, outbuildings and a house is preferred. Rankin is seeking a possible rental arrangement with opportunity to purchase in the future. Contact: Wally Rankin, wallyrank@gmail.com.

◆ Amy Holmgren is seeking to buy 20-40

acres of farmland in **southeastern Minnesota or northeastern Iowa (within 25 miles of Decorah—Fillmore, Houston, Winneshiek or Allamakee County)**. Land that has not been sprayed for several years and that has pasture, outbuildings and a house is preferred. Contact: Amy Holmgren, 507-402-9507, amy.holmgren@gmail.com.

◆ Nang is seeking to rent 5-10 acres of farmland **within 30-60 miles of Minnesota's Twin Cities**. No house is required. Contact: Nang, 651-706-9691.

◆ Brittany and Michael Casarez are seeking to rent farmland in **Minnesota**. Land with fencing, electricity, water and a house is preferred. Contact: Brittany or Michael Casarez, Mikesinz@gmail.com, 612-406-3013.

◆ Thomas Semper is seeking to buy 50 acres of farmland in **Kane County in northeastern Illinois**. Land that is certified organic and has pasture, a barn, utilities and a house is preferred. Contact: Thomas Semper, 630-870-2583, tsemper95@gmail.com.

◆ Emily Gerde is seeking to rent 2 or more acres of farmland **within 30 minutes of Saint Paul, Minn.** Land that has not been sprayed for several years is preferred; no house or outbuildings are required. Contact: Emily Gerde, koec0016@gmail.com.

Seeking Farmer

◆ Mitchell Vetsch is seeking a farmer for his 69-cow dairy in **Minnesota**. The tie-stall dairy barn is for rent and the cows are for sale; feed is on-hand until fall of 2016 and the farm will be for sale in the near future. Housing is available on the farm. Contact: Mitchell Vetsch, 320-360-4202.

◆ Andy Hoffmann is seeking a farmer to join his operation in **east-central Wisconsin's Brown County**. He has a 44.3-acre property that he would like to lease for \$2,000 per month to someone interested in starting an organic farm and selling to the Green Bay and Appleton markets (both cities are within 20 minutes of this location). The property includes a 4+ acre tillable upper section and a road throughout a wooded river bottom, as well as an upper hardwoods area. Opportunities for firewood and wood chip production exist. A furnished cabin is included in the lease. Contact: Andy Hoffmann, 920-737-6595 (text).

◆ Robert Barbeau is seeking renters for **Minnesota** land he is buying for a land cooperative during the next five years. The rental rate is \$150-\$200 per acre and the land will be available in 2020. Contact: Robert Barbeau, 612-219-1404, rbarbeau94@gmail.com.

Women Caring for the Land

Farming's Demographic Future

Women Landowners Play a Key Role in the Future of Land Stewardship

By Caroline van Schaik

The future of land stewardship over the next 15 years may rest in the hands of women farmers and landowners, if current trends stand the test of time. Research suggests that some 70 percent of all private ranchland and farmland will change hands in the next 20 years, and three-quarters of it will be owned by women who are age 60 or older.

This has major implications for how the land will be managed. Will it be protected with a continuous living cover—perennial grasses or annual small grains in rotation with cover crops, for example? Or will annual row crops like corn and soybeans leave the ground bare for most of the year, producing the kind of soil and water quality problems that come with monocultures?

Many women landowners want to steward their land in a sustainable manner, either through their own farming practices or by

renting to good conservation farmers. But they are disinclined to avail themselves of the current system of public and private conservation programs and resources, fearing and feeling a lack of regard and support.

That's why during the past few years the Land Stewardship Project has been working to reach out to women landowners in places like southeastern Minnesota's Root River watershed, an area struggling with erosion, water quality issues and, not coincidentally, disappearing small- and mid-sized farms. Recent statistics have made it even clearer that targeting women landowners will become only more critical in coming years.

Women as Farmers

- The USDA's National Census of Agriculture began collecting gender data in 1978, but statistics still rely heavily on those farmers who constitute what is called the principle farm operator — the one who makes the day-to-day decisions. The latest Census (2012) shows women represent



A recent LSP field day in the Root River watershed focused on how women landowners can monitor and build soil health on their property. Research indicates that when it comes to farmland, women are willing to strike a balance between financial needs and their commitment to family, community and conservation. (Photo by Johanna Rupprecht)

14 percent of all principle farm operators and 30 percent of all farm operators when primary, secondary and tertiary decision makers are included.

- When compared to the 2007 Census, the number of women farmers is falling slower than those of male farmers—1.6 percent fewer women farmers versus 3.7 percent fewer men farmers.

Growing Role of Aging Landlords

- Perhaps of greater import when considering the future stewardship of the land is the shift in tenure. A just-released report by USDA (www.agcensus.usda.gov/Publications/TOTAL) suggests that approximately 40 percent of U.S. farmland is rented out by both farming and non-farming landlords. More of those landlords than ever are at least 65-years-old.

- Rented out farm acreage represents a significant opportunity for change on the landscape: Minnesota reports 11.6 million acres, Iowa 16.3 million, Wisconsin 4.7 million and North Dakota 19.6 million, according to the USDA. When landlords were asked by the USDA about their plans for transferring ownership in the next five years, those farming plan to keep or place 70 percent of their acres in trusts. Non-farming landlords plan to use trusts, as well as outright sales and gifts, to transfer their acres.

- Data as it relates to the gender of farm/ranch landlords is not readily available. However, a survey conducted by researchers with the Leopold Center for Sustainable Agriculture and the University of California-Davis indicates that when it comes to farmland, women are willing to strike a balance between financial needs and their commitment to family, community and conservation. These values are borne out by their openness to rent land to farmers who practice good conservation, to share the costs of those stewardship practices, and even to change tenants who aren't taking care of those acres, despite social and economic pressures to stay the course.

LSP's work with this population supports the hopeful premise that as ownership shifts to women, land use will provide more benefits to society—if we continue to reach them with education, empowerment and support. □

LSP's Caroline van Schaik can be contacted at 507-523-3366 or caroline@landstewardshipproject.org. She recently presented her work with women farmers and landowners via a webinar: http://greenlandsbluewaters.net/Perennial_Forage/grz_ed_webnr.html.

Farm Beginnings

LSP's Farm Beginnings Accepting 2016-2017 Applications

Course Marks 19th Year of Training & Support

The Land Stewardship Project's Farm Beginnings course is accepting applications for its 2016-2017 class session. The early bird discount application deadline is Aug. 1; the final application deadline is Sept. 1. Classes will be held somewhere in the Minnesota-western Wisconsin region, but exact locations have not yet been determined.

LSP's Farm Beginnings program is marking its 19th year of providing firsthand training in low-cost, sustainable methods of farming. The course is designed 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 planning, enterprise planning, marketing and innovative production techniques.

This 12-month training 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 area. The classes, which meet approximately twice-a-month beginning in the fall, run until March 2017, followed by an on-farm education component that includes farm tours and skills sessions.

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

Besides Minnesota and Wisconsin, Farm Beginnings classes have been held over the years in Illinois, Nebraska and North Dakota. Farm Beginnings courses have recently been launched in South Dakota, Missouri, Kentucky, Indiana, New York and Maine.

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 infor-

mation, see www.farmbeginnings.org or call 507-523-3366. □

Is Farming in Your Future?

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 article on the left*).

LSP holds Farm Dreams workshops at various locations throughout the Minnesota-Wisconsin region during the year. 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. □

'LSP Local' Listserv Shares Farming Information

The Land Stewardship Project has launched "LSP Local," a series of regional e-mail listservs to help farmer-members share information and communicate around production and management issues.

Information on signing up is at www.landstewardshipproject.org/lsplocalnetwork. For more information, contact LSP's Dori Eder at 612-578-4497 or dori@landstewardshipproject.org. □

Kiva Zip Loans

KIVA-Zip is a web-based micro-lending organization that utilizes crowd-funding to finance small businesses and small farmers. Details and application information can be found at <https://zip.kiva.org/about>.

For more information about these micro-loan opportunities, contact the Land Stewardship Project's Amy Bacigalupo at 320-269-2105 or amyb@landstewardshipproject.org. □

MDA Funding Available for Farmers

The Minnesota Department of Agriculture has grants available through the Agricultural Growth, Research and Innovation (AGRI) Program. These grants, as well as scholarships and cost share funds, are available for livestock development, value added business and market development, farm-to-school, research, and renewable energy.

Grants are awarded to farmers, agricultural businesses, schools, researchers and county fairs. Grant eligibility is specific to each program.

Here are the latest grant deadlines:

- **Sustainable Agriculture Demonstration Grants:** Dec. 15
- **Livestock Investment Grants:** Dec. 18
- **Minnesota Transition to Organic Cost Share:** Feb. 14
- **Value Added Grants:** March 8
- **Good Agricultural Practices (GAP) Certification Cost Share:** May 15
- **Beginning Farmer Farm Business Management Scholarships:** June 30

For more information, see www.mda.state.mn.us, or contact David Weinand at david.weinand@state.mn.us, 651-201-6646 or 651-201-6500. □

FB Collaborative Website Launched

The Farm Beginnings Collaborative (FBC) has launched a new website: www.farmbeginningscollaborative.org. The FBC is the national alliance of regional groups who are offering the Farm Beginnings course, which was originally developed by the Land Stewardship Project.

Through the Collaborative, LSP is sharing the Farm Beginnings curriculum with other farmer training peers, and Farm Beginnings is now a licensed program in which all partners trained to offer the course become members of the FBC. The Collaborative includes 10 organizations with programs serving beginning farmers in 13 states.

For more information on the Farm Beginnings Collaborative, contact LSP's Amy Bacigalupo at 320-269-2105 or amyb@landstewardshipproject.org. □

Farm Beginnings

Sara Morrison

No More Horsing Around

In 2005, Sara Morrison was driving home to Minnesota after spending a few long days at a Saint Louis horse show. Traveling, often with a horse trailer in tow, was nothing new to her. Since getting a degree in equine science eight years before, Morrison had spent much of her life on the road, preparing and showing other people's horses.

"I'm the girl that's up at 5 a.m., preparing the horses," she says.

"It's not a bad way to live for awhile and I thought I was going to spend the rest of my life on the back of a horse."

But that fateful trip gave Morrison plenty of opportunity to re-consider. A blizzard was raging and her vision was partially obscured by a black eye that had resulted from a wayward bungee chord. A drive that should have taken 11 hours clocked in at double that.

"After that trip I just thought, 'Sara, you're smarter than this.'"

She describes that epiphany on a day in late July while giving a tour of the small vegetable enterprise she owns and operates near River Falls in western Wisconsin. The operation is another step in a journey that Morrison began during that harrowing winter drive. She realized while taking care of other people's horses that ultimately she wanted to own and operate her own business. Morrison maintained that goal in subsequent years while working as a co-op produce manager, gardening consultant and customer service representative for a software company.

In recent years, the 40-year-old has taken several serious steps toward, as she puts it, "playing in my own dirt"—in other words, finally becoming a self-employed entrepreneur. She's garnered plenty of experience raising and marketing vegetables, and gotten some solid grounding in business planning and goal-setting through the Land Steward-

ship Project's Farm Beginnings and Journeyperson courses. She has also attended field days around the region, observing firsthand everything from wholesale vegetable production to grass-based livestock farming.

"I love learning," says Morrison. "I love sitting in a room and trying to figure out what I want to do with my life."

But these days she's doing most of that learning on the land itself, as her business, The Backyard Grocery (www.thebackyardgrocery.com)



Sara Morrison: "The whole idea of having CSA production ready each week on time was crazy talk." (LSP Photo)

grocery.com), wraps up its fourth season as a Community Supported Agriculture (CSA) farm and Morrison considers how best to make use of the 15 acres she bought in 2013.

Piano Lessons

After leaving the horse business, Morrison bought a house in Bayport, Minn., near the Twin Cities on the Saint Croix River.

Give it a Listen

In episode 172 of LSP's *Ear to the Ground* podcast (www.landstewardshipproject.org/posts/podcast), Sara Morrison talks about Farm Beginnings, Journeyperson, vegetables and, of course, horses.

Fresh Faces-Fresh Farming



She began working at the River Market Community Co-op in nearby Stillwater as a produce manager, mostly "learning on the job," as she puts it. At about that time, Morrison started a garden in her backyard and her mother, Lois, bought a former dairy farm in Grantsburg, Wis., 50 miles away.

The combination of gardening, being involved with the River Market and raising vegetables on a larger scale at her mother's farm got Morrison excited about producing food for a living. It also made her aware that plenty of other people had that interest, if not the skills and knowledge. Through her

connections in the local food community, it became clear to Morrison there was a niche opportunity: people were willing to pay to have someone mentor them in gardening. Thus was born the first, "mobile" iteration of The Backyard Grocery.

The business consisted of meeting with clients in the spring, establishing their gardens, and then visiting regularly throughout the growing season to provide guidance.

"I would come every week like piano lessons and say, 'This is a weed and this is a vegetable,'" recalls Morrison.

She enjoyed the experience and ran the business for four years, having 30 clients at her peak—it was a mix of single people, retirees and families. But Morrison eventually decided she wanted to be rooted on her own plot of land.

"If I was going to go fulltime from weedy patch to weedy patch all season long, I thought it might as well be my own weedy patch instead of everybody else's weedy patch," she says.

Crazy Talk

The original idea was to go into wholesale vegetable production on the land owned by Lois, who is a certified Master Gardener. But it eventually became clear that commuter farming on that scale wasn't going

Fresh Faces, see page 21...

to work for Sara—she wanted something closer to the markets she was familiar with in the Saint Croix River Valley. But she also needed some help in networking with other farmers and figuring out how to do the kind of holistic planning needed to get serious about food production.

So during the winter of 2009-2010, Morrison and her mother took LSP's Farm Beginnings course (*see page 19*). During the class they learned about business planning, decision making and goal setting, and networked with established farmers in the area.

"Our position to this day is every high school student should take Farm Beginnings because it helps you figure out what you want to do in life," says Morrison. "There's no class in school called decision making."

During this period, Morrison also worked in customer support for a software company. It was a job she didn't particularly enjoy, but it offered up a bit of serendipity that led her further down the road toward achieving her farming dream. Both during Farm Beginnings and later when she took the follow-up Journeyperson Course (*see sidebar below*), Morrison's mentors were Chris and Paul Burkhouse, who run Foxtail Farm, a winter CSA in nearby Osceola, Wis.

She was impressed by Foxtail's success, but intimidated by the idea of having a core of farm members reliant on her for regular deliveries.

"I never wanted to be a CSA farmer," says Morrison. "The whole idea of having CSA production ready each week on time was crazy talk."

But eventually that crazy talk drowned out the "saner" discussions going on in Morrison's head. While flying back from a computer software trade show in 2012, she met a man who had 110 acres of land near her home in Bayport and was willing to let her raise vegetables on one corner of it. That first year she raised enough for 10 CSA shares on a quarter of an acre. In 2013, she farmed three-quarters of an acre on another friend's property.

Also in 2013, Morrison bought 15 acres

near River Falls, providing a permanent home for The Backyard Grocery. Morrison says in a lot of ways the farm fits her skills and needs well. She's a self-professed "non-builder" and needed a place with facilities that could serve as a packing shed and tool storage. The farm she landed on not only has a small barn, but a Quonset building. In addition, if Morrison eventually decides to transition to certified organic, the property is safe from spray drift: it sits on a designated "Wisconsin Rustic Road" that's protected from major development, and 150 acres of land north of her farm is in a conservation easement. Two other sides of the property are bordered by pine trees.

The 2014 CSA farming season for the newly transplanted Backyard Grocery was a real struggle, with frequent floods undermining production. This is where the connections Morrison has made through Farm Beginnings and Journeyperson paid off. She recalls one particular stressful period when she contacted LSP Farm Beginnings organizer Dori Eder and said she wanted to sell the land and give up her farming dream.

Eder texted back: "Put on a pair of pantyhose and spend a day under fluorescent lights, and you'll think differently."

"That was the year where I wondered if it was the time to get out," admits Morrison. "This year it's the reverse: I can barely get the boxes closed."

During the 2015 growing season, The Backyard Grocery consisted of a small CSA (14 shares), vegetables produced for canning that are sold at a local farmers' market, and sales to restaurants in Bayport and Stillwater, as well as food co-ops in River Falls and Stillwater.

It also has a few acres of pasture, and Morrison has recently added four Galloway cow-calf pairs to the farm. She's rotationally grazing them and considering just how deep to go into the grass-based beef business. It may be one way to make a farm that is a very part-time endeavor into more of a self-supporting business.

Cattle are different from horses, and pursuing the beef business will mean attending more field days and seeking out further advice about such things as animal husband-

LSP's 2016-2017 Farm Beginnings Course

LSP is now accepting applications for its 2016-2017 Farm Beginnings course. The early bird discount deadline is Aug. 1; Sept. 1 is the final deadline. See page 19 for details.

Farm Beginnings Profiles

To read more Farm Beginnings graduate profiles, see www.landstewardshipproject.org/morefarmers/meetourgraduates.

ry and pasture management. That's fine, but Morrison concedes that even her own love of learning has its limits.

"I would like to feel like I'm not always just starting out," she says as a family stops by to pick up their CSA share for the week.

No Stockings & Bad Lighting

One goal is to figure out how to do farming in a less labor-intensive manner, something she dreams about while bent over picking beans on a summer day. One idea is to focus on more year-round production utilizing season extending hoop houses and root cellar storage.

"As I get older, I can pick beans for an hour, and then not pick beans for 20 minutes. So I'd like to smooth out my work load," says Morrison. "More herbs, greens, things like that, instead of watermelons, squash and potatoes."

As she wraps up the 2015 growing season and looks ahead to 2016, Morrison says she will rely on the network she's developed through Farm Beginnings and Journeyperson more than ever. The phone calls, e-mails, informal conversations and on-farm workshops made available through these initiatives has given her the confidence to keep saddling up, even when the riding gets rough.

"Without these programs, I don't know where I'd be," she says, pausing a moment before answering her own question. "Probably wearing pantyhose and sitting under fluorescent lights." □

LSP's Journeyperson Course Takes Farming to the Next Level

The Land Stewardship Project's two-year Journeyperson Course is designed to support people who have a few years of farm start-up and management under their belt and are working to take their operation to the next level. Participants get assistance moving their farming plans forward through advanced financial planning and one-on-one advising, production assistance via mentorship with an experienced farmer, and guidance on balancing farm, family and personal needs. Participants who develop and execute a comprehensive financial plan are eligible to have their savings of up to \$2,400

matched to invest in a wealth-generating asset for their farm.

The deadline for the next course session is Oct. 1. For details, see the **Journeyperson** page at www.landstewardshipproject.org/morefarmers. You can also contact LSP's Cree Bradley at 218-834-0846 or creeb@landstewardshipproject.org.

Opportunities/Resources

LSP Township Manual

Protecting Your Township from Unwanted Development, produced by the Land Stewardship Project's Policy and Organizing Program, provides guidance on using the Minnesota Interim Ordinance and other tools in the Municipal Planning law.

It's online at www.landstewardshipproject.org/about/libraryresources/ publications. Free paper copies are available by calling Bobby King at 612-722-6377, or e-mailing bking@landstewardshipproject.org. □

Riparian Grazing

The Land Stewardship Project has developed a fact sheet on riparian grazing and a "Trout-fishing with Livestock" summary of how a farm in southeastern Minnesota's Root River watershed is showing that managed grazing can improve fish habitat while providing the livestock producer economic benefits. The resources are available at www.landstewardship-project.org on the **Root River: Promise of Pasture** page. Paper copies are available from Caroline van Schaik at 507-523-3366 or caroline@landstewardshipproject.org. □

Volunteer for LSP

A big thanks goes out to the volunteers that helped the Land Stewardship Project out in all aspects of our work during 2015. LSP literally could not fulfill its mission without the hard work of our volunteers. Volunteers help us do everything from stuff envelopes and make telephone

calls to enter data and set up logistics for meetings. If you'd like to volunteer in one of our offices, contact:

- **Montevideo, Minn.** — Terry VanDerPol, 320-269-2105, tldvp@landstewardshipproject.org.
- **Lewiston, Minn.** — Karen Benson, 507-523-3366, karenb@landstewardshipproject.org.
- **Minneapolis, Minn.** — Megan Smith, 612-722-6377, megans@landstewardshipproject.org. □

Want to Support LSP with a Gift of Land?

The Land Stewardship Project's *Land and Stewardship Legacies* initiative provides a way for your family's legacy on the land to continue by using it to support LSP's work or to provide opportunities for a new generation of stewardship farmers. Through this initiative, LSP is able to accept gifts of farmland or other real estate from members or other friends of our organization.

For more information, call LSP executive director George Boody at 612-722-6377 or see www.landstewardshipproject.org/about/legacygiving.

In a new video, LSP members Dennis and Carol Johnson talk about how they used a gift of land to support what's important to them. The video is available on LSP's YouTube channel: www.youtube.com/user/LSPMN



Get Your LSP Cap Today

Show your support for the Land Stewardship Project with an official LSP cap. LSP's baseball-style cap is union made in the U.S. of high quality 100-percent cotton. It comes in black with LSP's green and white embroidered logo featured on the front. A fabric strap and brass clip on the back make this a one-size-fits-all cap. The price is \$15.

Caps are available in LSP's offices in Minneapolis (612-722-6377), Lewiston (507-523-3366) or Montevideo (320-269-2105). They can be ordered online at www.landstewardshipproject.org/store.

LSPNOW. A big thanks to LSP member Audrey Arner and the University of Minnesota-Morris for developing this video. □

Podcasts: Digging the Dirt on Soil Health

The Land Stewardship Project's *Ear to the Ground* podcast (www.landstewardshipproject.org/posts/podcast) frequently features conversations with farmers, scientists and others who are working to build a healthy soil biology utilizing innovating cropping and grazing systems. Here is a selection of podcasts related to soil health:

- **Episode 171** — Using conservation grazing to revitalize a prairie.

Episode 166 — A farmer works with a professor and her students at a local college to study the impacts of cropping on soil health.

- **Episode 154** — NRCS soil health evangelist Ray Archuleta shares his passion for "farming in nature's image."

Episode 153 — How the Forever Green Initiative could make Minnesota farming more efficient.

- **Episode 151** — Using conservation grazing to keep wildlife refuges, prairies and other natural areas healthy.

Episode 137 — Two Minnesota farmers experiment with multi-species cover cropping to improve soil health.

- **Episode 136** — How can we get more farms to integrate prairie into row-cropped fields?

Episode 128 — A government conservationist talks about treating soil as a complete ecosystem.

- **Episode 121** — How farmers, scientists and conservationists have teamed up to revolutionize the relationship between ag and soil health.

Episode 103 — Using native prairie strips to make row crop fields more sustainable.

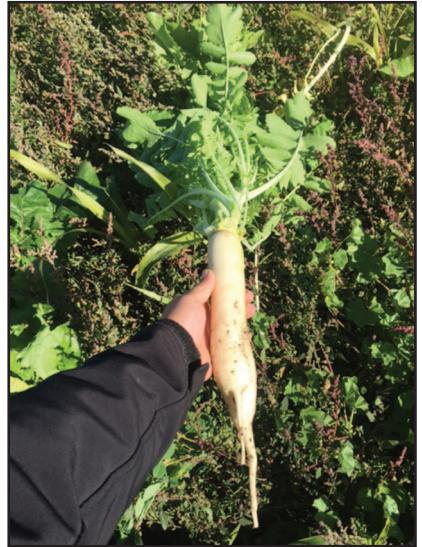
- **Episode 84** — What a perennial-based farming system may look like in the Chippewa.

Episode 83 — How the Chippewa 10% Project could produce perennial profits. □

Continuous Living Cover

Cover Crops in the Chippewa

West-central Minnesota farmer Curt Blair recently launched an effort to convert roughly 1,000 acres of former crop ground to a mix of perennial pasture and cover crops. Shown below is a cocktail mix of cover crops planted to 425 acres of Blair's land this summer. The mix includes turnip, tillage radish, annual ryegrass, sorghum sudan grass, BMR pearl millet, berseem clover, hairy vetch and cow peas. Plants like tillage radish (*right photo*) help break up compacted soil and access minerals and nutrients deep in the soil profile. Blair, who farms in the Chippewa River watershed in Pope County, plans on using the cover crops as late season grazing for his beef cattle herd. He has completed a managed rotational grazing plan with the USDA's Natural Resources Conservation Service. The Land Stewardship Project is working with Blair and other farmers in the region to develop profitable farming systems that protect water quality and build soil health by keeping more continuous living cover on the land. To read more about LSP's work in the Chippewa watershed, see page 27 in the No. 3, 2015, issue of the *Land Stewardship Letter*. For more information, contact LSP's Robin Moore at 320-269-2105 or rmoore@landstewardshipproject.org. (*Photos by Andy Marcum*) □



Soil Health on Women's Land

The Land Stewardship Project sponsored a field day in late October for women interested in learning more about how to monitor and build soil health on their land. The event, which was held at Sweetbend Farm in southeastern Minnesota, provided participants a chance to use a soil probe, test for soil compaction and discuss management practices that lead to better soil, cleaner water, improved wildlife habitat and more money from farming. Guest presenter Dan Nath, a soil scientist with the USDA's Natural Resources Conservation Service, demonstrated how soil, roots and residue interact, using a rain simulator to illustrate his points. For more information on LSP's work with women landowners and soil-friendly farming systems in southeastern Minnesota, contact Caroline van Schaik at 507-523-3366 or caroline@landstewardshipproject.org. (*Photo by Johanna Rupprecht*) □



Continuous Living Cover

King of the Cover Crops

An Indiana initiative has made the state a national leader in getting continuous living cover established on crop acres. Can it change the way farmers view soil?

By Brian DeVore

Michael Werling is, literally, a card-carrying *connoisseur* of soil health. “I call it, ‘My ticket to a farm tour,’” says the northeastern Indiana crop producer, showing off his business card. The words on the “ticket” leave little doubt what is in store for the lucky holder who chooses to redeem it. Headings at the top say, “My soil is not dirt” and, “My residue is not trash.” A third bold line of script across the middle reads, “For Healthier Soil and Cleaner Water Cover Crop Your Assets and ‘NEVER TILL.’” Buried at the bottom as a bit of an after-thought is Werling’s contact information. Given his excitement over the world beneath his feet and how to protect and improve it, maybe it makes sense the farmer’s card relegates his address and phone number to footnote status—soil is his identity.

Spend enough time on a soil health tour in Indiana these days and one is likely to run into a lot of farmers like Werling. Perhaps that’s no surprise, given that events like this tend to attract true believers in the power of healthy humus to do everything from create more resilient fields to clean up water.

But what sets Indiana apart is that it’s home to an initiative that has found a way to take the passion of farmers like Werling and use it as an engine for driving change on a whole lot of farms whose owners may not be card-carrying soil sophisticates—they’re just looking for ways to cut fertilizer costs and keep regulators off their backs, all the while remaining financially viable.

Werling is one of a dozen “Hub Farmers” located across Indiana who are at the core of one of the most successful soil health initiatives in the country. In just a few short years, a public-private partnership called the Conservation Cropping Systems Initiative (CCSI) has helped get around 8 percent of the Hoosier State’s crop fields blanketed in rye and other soil-friendly plants throughout the fall, winter and early spring—times

1st of 2 articles

when corn and soybean fields are normally bare. No other Corn Belt state is even close to having that high a percentage of its land protected with continuous living cover. Indiana’s success has farmers, soil scientists and environmentalists across the country excited about the potential CCSI holds as a national model. But first, one key question needs to be addressed: can a state parlay all of this interest in one conservation farming technique—in this case cover cropping—into a holistic embrace of a larger soil health system?

A Corn Belt Leader

As of this fall, just under one million acres of Indiana farmland is planted to cover crops, according to transect surveys done

acres of cover-cropped land, estimates Sarah Carlson, who works for Practical Farmers of Iowa and is a nationally recognized expert on cover cropping. That means around 2 percent of that state’s cropland is protected outside the regular growing season. Updated, accurate estimates of cover cropped acres in other states are hard to nail down, but the latest U.S. Agriculture Census shows Minnesota, Illinois and Ohio have, respectively, around 400,000, 300,000 and 360,000 acres in cover crops. None of these states have more than 4 percent of their cropland cover cropped, which is half Indiana’s 8 percent figure. In addition, the average Indiana farm growing cover crops has devoted 113 acres to the practice, while that figure is 72 acres in Minnesota and 53 acres in Iowa, according to the Agriculture Census.

The Ag Census figures are from three years ago, and a national cover crop survey coordinated by the USDA’s Sustainable Agriculture Research and Education program during the past few years shows cover cropping is generally trending upwards from those 2012 levels. But no Corn Belt state is trending higher, or faster, than Indiana.

A decade ago, around 20,000 acres of the Hoosier State’s farmland was cover-cropped, and as recently as 2013, that figure was around half-a-million acres. University of Maryland soil ecologist Ray Weil has visited



A recent CCSI field day included presentations by seed and implement dealers, as well as businesses that provide turn-key cover cropping services. “The farmers overwhelmingly get their information from the co-op and fertilizer dealers,” says cover cropping expert Sarah Carlson. “You have to bring them into the picture.” (LSP Photo)

by government agencies. There are approximately 12.5 million acres of cropland in Indiana and the state has a long ways to go before the majority of land is protected with continuous living cover, but it’s already light years ahead of its compatriots in other parts of the Corn Belt.

Iowa, by contrast, has just over 500,000

the state numerous times to give presentations, tour farms and scramble around in soil pits. He recalls a drive he took in the state during the winter of 2012. “We must have passed a couple thousand fields and I counted two cover cropped fields,” he says.

King Cover, see page 25...

On his most recent visit to the state this summer, Weil was impressed at how much progress had been made in the intervening years. "Indiana seems to be leading the change," says the scientist. "On paper it doesn't make any sense. It has nothing to do with climate and soils."

But it does make sense when one takes a closer look at Indiana's intensive team effort to get more of its land growing plants (and roots) for more than a few months out of the summer.

Roots in No-Till

The Conservation Cropping Systems Initiative consists of federal, state and local natural resources agencies working with farmers and an array of private businesses, from fertilizer and seed companies to implement dealers. Barry Fisher, a soil health specialist for the USDA's Natural Resources Conservation Service (NRCS), says CCSI is rooted in a statewide program that began in 2002 and focused on promoting and supporting no-till farming. What he and others discovered during that program's run was that successfully making a major change like no-till is more complex than buying a new planter or modifying field work schedules. The transition years are critical, especially since a major deterrent to no-till adoption is its reputation for causing a drop in crop yields. Going cold turkey on tillage may produce conservation benefits on the surface, but the soil underneath is likely to be so biologically unhealthy that it lacks the ability to carry out basic functions like provide nutrients and minerals to plants while making good use of water.

"You're going to struggle in any system if your soil fails to function," says Fisher.

That's when he and other soil conservation experts realized they were going to have to focus on soil health in general, and not just one tool or method, such as no-till.

So in 2009, CCSI was born. Under the leadership of Indiana NRCS state conservationist Jane Hardisty, the initiative used federal funding to develop a core group of specialists who were given advanced training in soil health development. They were even sent to Burleigh County, N. Dak., which has become the model for advancing soil health on farmland utilizing a teamwork approach (*see the Land Stewardship Letter, No. 3 and No. 4, 2012*).

Back in Indiana, these specialists then formed their own regional soil health teams, or Hubs, which consist of farmers, soil and water experts and Purdue University Extension educators, among others. At the heart

of CCSI's work are the workshops and field days it puts on, many of them at working farms. It organizes around 60 such events across the state a year, drawing around 6,500 farmers and certified crop advisers.

Talking about the importance of protecting our soil is nothing new in farming. But the explosion in interest in the biological aspects of soil health in recent years has added a new wrinkle that CCSI has been able to take advantage of. By supercharging that biological activity, farmers can go beyond just putting in a terrace or a grassed waterway to cut surface erosion. They can actually have a positive impact on their entire field's ecosystem using homegrown creativity—an affirming message that they are in the driver's seat.

"That's been a real game changer—the language we use to talk about this stuff," says Ryan Stockwell, senior agriculture program manager for the National Wildlife Federation. Stockwell has been involved in soil health trainings in Indiana, and utilizes cover crops on his own Wisconsin farm. "Now that you talk about soil structure, all these benefits from soil health, it creates a lot of excitement. Indiana was just primed to take advantage of that."

A major focus of CCSI, and its biggest source of success, has been one particular soil health tool: planting cover crops to protect fields during the "off-season" for corn and soybeans.

"In my 30 years in this job, very few practices have taken off so exponentially," Fisher says of cover cropping.

Getting farmers excited about such things as soil bacteria, root interactions and organic matter is one way to avoid the trap of farmers seeing planting some rye after corn harvest as the end-all solution. Whenever CCSI team members get a chance, they emphasize it's just one tool—albeit an important one.

"We almost never just talk about cover crops. You better be willing to adjust your pest management practices, your nutrient management practices," says Fisher.

In other words, CCSI isn't just laying out a menu of innovative practices producers can pick and choose from—it's trying to change the very nature of how farmers view soil. "If you can't trigger the 'want-to' in a farmer, all the data won't do any good," says

Fisher. "It's almost an emotional response."

But farmers have to start somewhere on the road to building their soil's biology, and invariably that means experimenting with planting a few acres of small grains or some tillage radish. Like soil health initiatives in other states, CCSI has made extensive use of providing government cost share monies so farmers can establish cover crops. But Fisher says their experience with promoting no-till taught them an important lesson about the need for going beyond just subsidizing some seed or equipment.

"If we threw out cost-share money for 40 acres and didn't help them in that transition to a new system, they would fail and say, 'I'll never do that again,'" he says, adding that even if the farmer was initially successful, the experimental practice has to be sustainable long after the government money is gone. "It can be a train wreck if you don't provide technical support."

Customer Support

That's why from day one, CCSI's strategy was to create the same kind of support network farmers enjoy when they pursue more conventional farming practices. That meant not just having government technicians available in each region to help with the basics of bringing the soil back to life.



Barry Fisher (right) shown with farmer Clint Arnholt, who has integrated cover crops into his no-till system. Fisher says he and other soil conservation experts realized that focusing narrowly on one practice such as no-till resulted in a soil ecosystem that wasn't functioning properly. (LSP Photo)

It also requires teaming up with the players that farmers are comfortable working with on a daily basis: fertilizer suppliers, seed dealers, co-ops, crop advisers and implement companies.

"The farmers overwhelmingly get their information from the co-op and fertilizer dealers," says Iowa's Carlson. "You have to

King Cover, see page 26...

Continuous Living Cover

...King Cover, from page 25

bring them into the picture."

Fisher and the other CCSI coordinators have done just that. At first it was a bit of a hard sell to get input suppliers on board with promoting cover cropping, since it's a technique that can eventually result in reducing demand for the fertilizer, chemicals and other products they are in the business of supplying. But in the early years of the initiative, Fisher visited businesses throughout the state and talked about how helping farmers build healthy soils can open up new markets — they need to purchase cover crop seed from someone, for example, and chemical applicators can be modified to spread seed.

Betsy Bower agrees. She's an agronomist for CERES Solutions, which provides everything from grain handling and agronomic services to fuel and crop insurance to farmers via 22 locations, mostly along the western edge of Indiana. She says her company started getting into the cover cropping business five or six years ago as a result of customer demand.

"They were coming to us as their trusted adviser," she recalls. "What do you think we ought to do? What are the various rates? How do we control weeds? As cover crops become more popular, it's going to be in our best interest to learn along with them."

Bower says the company now offers an array of cover cropping services, from soil tests and species selection advice to planting and termination. She estimates cover cropping now make up between 5 percent and 10 percent of the company's business, depending on the branch location. One thing cover cropping does is allow firms like CERES to keep their applicator drivers busy at a time when they would normally be idle or under-utilized. They can apply chemicals and fertilizer in the spring, and cover crop seed in the late summer and fall.

Another key player in CCSI's success is implement companies, which not only sell the planters to put on cover crop seed, but can offer custom field work or modify equipment for seeding. Adam Fennig with Fennig Equipment in Clearwater, Ohio, says

that the interest in modifying tillage equipment so that it could plant cover crops "exploded" around 2010. His family's company specializes in mounting seed boxes, drop tubes and deflectors on vertical tillage tools. He does some 60 modifications per year, mostly in Indiana, Ohio and Illinois, and the custom enterprise makes up about 30 percent to 40 percent of the firm's business.

"But that's about to change in a big way,"



Soil pits are showcased at many CCSI field days. They not only provide a visual clue as to how key root systems are in building soil health, but can reveal what impacts above-ground farming practices are having deep down. (LSP Photo)

Fennig says excitedly, estimating that perhaps as much as half of their business will be related to modifying equipment for cover crop seeding by the end of 2016. That's because more farmers are starting to report back major benefits from planting cover crops: everything from reduced soil compaction to yield increases. Many of those reports are emerging firsthand at CCSI field days and workshops.

Fennig says another factor is that there's a lot of buzz these days around modifying "high-boys" into cover crop seeders. These are the gangly, skinny-wheeled chemical applicators that can drive through standing corn late in the season without damaging the stalks. In a "swords into ploughshares" kind of trick, mechanics are tweaking high-boys so they can seed cover crops into corn in August, providing a jumpstart on fall growth.

"That's going to push things hard," Fennig says of the expanded high-boy sprayer modification business. "I think 2016 will be our biggest year yet."

Fennig and Bower credit CCSI for not

only providing them the information they need for providing the proper cover cropping support, but for creating the interest in this technique on the part of farmers.

"We keep in close contact with Barry Fisher and he lets us know of events in the area," says Fennig. "We try to participate when we can, because Barry can always draw a crowd."

Indeed, the agribusiness support arm of farming was on display at several well-attended CCSI field days held this past August across the state. At Moody Farms, a large cropping operation in northeastern Indiana near the Ohio and Michigan borders,

seed company representatives showed off an impressive array of miniature cover crop plots: crimson clover, Austrian winter peas, hairy vetch, radish, rape, turnips, kale, Ethiopian cabbage, sunflowers, annual ryegrass, cereal rye, oats, pearl millet, triticale and winter barley. As participants walked past each planting, their advantages and disadvantages were described in detail.

Nearby, Adam Fennig stood next to a tillage implement that had been modified into a cover crop seeder and described how the process works. A shiny red high-boy sat a few yards away and another implement expert described being able to use it to plant cover crop seed in corn that's "14 feet high."

Digging into the Science

An argument could be made that another form of support—an input supplier so to speak—farmers rely on is agricultural science. And helping farmers unearth some of the wonders beneath their feet can take them beyond just focusing on one tool like cover cropping. During a recent series of summer CCSI field days, soil ecologist Ray Weil repeatedly drove home the point that soil is more than a growth medium for corn, soybeans and a few small grains or brassicas.

"You can't just throw out cover crop seed and keep doing what you're doing," he says at one point while standing in a four-foot pit that's been back-hoed out of a southern Indiana cornfield. As farmers and crop advisers gather around the trench, Weil uses a hunting knife to point out where fat corn roots are tracing their way through the profile. Roots are a key part of Weil's lesson today. It's Aug. 20, and just a few days before, the owners of the field, Clint and Dan

King Cover, see page 27...

Arnholt, had used a high-boy to seed radish and rye into this stand of corn, which is well above everyone's head. Weil estimates there can be a couple hundred pounds of unused nitrogen at the four-foot level, and corn is inefficient at making use of it. Within three or four weeks of planting the rye and radish, their roots will be soaking up the excess nitrogen while bringing other nutrients and minerals closer to the surface.

Fisher and the CCSI team had brought Weil to the state for a week of field days and presentations like this because of his reputation as one of the nation's leading soil ecologists, someone who can put cover cropping in perspective as just one tool for attaining soil health.

Soil pits play a major role in such field days. Seeing radish roots "bio-drill" through what was thought to be an impenetrable soil hardpan caused by years of plowing, wheel traffic and lack of biological activity can be a real eye-opener.

Michael Werling, the northeastern Indiana farmer, recalls when a soil pit dug in one of his more marginal fields revealed that his use of cover cropping, no-till and crop rotations had built up the organic matter to the point where a soil expert determined he had slightly modified his soil type.

"He said he would have to reclassify the soil," says Werling proudly while checking out a soil pit at another farm during a CCSI field day. "That's pretty encouraging."

During what was affectionately termed "Ray Days," Weil spent a lot of time in soil pits from one end of the state to the other, talking about the latest innovations in soil science. He should know: besides doing cutting-edge work on the impacts various farming techniques have on soil, Weil is the co-author of the seminal textbook, *The Nature and Properties of Soils*.

Whether standing in a hole or giving a PowerPoint presentation in a farm's cavernous machine shed, Weil has a consistent message: the science of soil is in flux, and farmers can be on the cutting edge of this exciting revolution. He describes how cover crop roots not only go vertical in search of moisture and nutrients, but send branches in a horizontal pattern. Weil has utilized the same cameras that are used in colonoscopies to trace root channels—it doesn't get any more cutting-edge than that. Of particular interest to soil scientists these days is the role mycorrhizae fungi can play in building soil health. By interacting with a plant's roots in

a symbiotic fashion, such fungi can create a diverse biological universe that's resilient and able to cook up its own fertility.

"We're finding out plants send out all sorts of signals underground," says Weil at one field day, citing a recent study that



Soil scientist Ray Weil: "You can't just throw out cover crop seed and keep doing what you're doing. You need to change your system, you need to think flexibly." (LSP Photo)

showed older corn hybrids were sending out a signal when besieged by corn rootworm to recruit nematodes to attack the pest. "That's pretty cool. That's the way nature works. We didn't really appreciate the role of roots in building soil until relatively recently."

His point, which is reiterated by the soil pits: it's not enough to look at the surface of the soil—take a peak underground as much as possible. In fact, more than once Weil admits to farmers with embarrassment that while revising the latest edition of his textbook he had to re-write the section on organic matter. It turns out farmers can have a bigger influence on their soil's organic matter than scientists once thought.

But Weil has another critical message: we don't need to understand the minutiae of how soil protozoa and bacteria interact in order to benefit from it. The key is diversity, which provides the habitat for these interactions to thrive.

"If we can encourage the diversity, we can encourage the workings of this system, even if we don't understand all of it," says Weil. "Nature will sort it out."

It's an effective message for a group that is a mix of veteran cover-croppers and newbies. At each field day and presentation, farmers nod their heads in agreement with Weil's point that we're all along for a ride on a train pulled by an exciting, if sometimes baffling, ecological engine. This conversation is going way beyond just providing tips on the best seeding rates for rye and turnips.

One of the farmers agreeing with Weil is Gordon Smiley, who farms 1,200 acres of

row crops with his brother Jeff in southern Indiana. For the past few years, the Smileys have been using cover crops, and despite a few hiccups along the way, now feel they are an important part of their farm. They have a farrow-to-finish hog operation and the cover crops offer a way to soak up excess nutrients and reduce runoff. Gordon says their soil has a crumbly, mellow texture and is full of earthworms.

"What convinced me was the shovel test—digging and seeing the soil underneath," he says while standing in the shade of a machine shed several yards from a soil pit where Weil has just finished one of his presentations.

So far the brothers have focused mostly on planting a single species like rye as a cover crop, but Smiley says he's excited to move to the next level of soil health and try cocktail mixes of as many as 10 species. He's been watching online soil health videos and attending CCSI field days.

"They're way out there," he says of the innovators in soil health he's been observing and interacting with. "We talk about mycorrhizae fungi, we talk about all the bacteria." Then he throws his hands in the air to symbolize lots of activity going on at once. "It's exciting." □

The next issue of the Land Stewardship Letter will describe how the Conservation Cropping Systems Initiative is using "rock star" farmers, the threat of environmental regulation and economic reality to create a culture of cover cropping, and hopefully, soil health improvement, in Indiana.

Give it a Listen

Three recent episodes of the Land Stewardship Project's *Ear to the Ground* podcast (www.landstewardshipproject.org/posts/podcast) feature the voices of people involved with Indiana's Conservation Cropping Systems Initiative (CCSI):

- **Episode 173:** Soil health specialist Barry Fisher talks about the team approach that anchors CCSI.

- **Episode 174:** Soil scientist Ray Weil discusses why Indiana's "bottom up" approach to soil health is preferable to the "top down" strategy being used in his home state of Maryland.

- **Episode 175:** Indiana farmer Gordon Smiley describes his experience with cover cropping and why he's so excited about the latest science related to soil health.

Going Driftless Life Lessons from the Heartland for Unraveling Times

By Stephen J. Lyons
2015; 219 pages
Globe Pequot Press
www.globepequot.com

Reviewed by Dale Hadler

Stephen J. Lyons's book, *Going Driftless: Life Lessons from the Heartland for Unraveling Times*, is a fascinating account of the history, people, agriculture, geology and ecology of the Driftless Region that extends from the southeastern suburbs of Minnesota's Twin Cities to the north end of the Iowa-Illinois Quad Cities metropolitan area.

Lyons describes a region of small farms, as well as diverse animal and plant life—a region completely untouched or only partially touched by the glaciers that formed much of the rest of the Midwestern landscape. He also describes the people of the region, including the Hoch family, who have long grown apples on the scenic Apple Blossom Trail utilizing innovative production and marketing systems (*see page 14*).

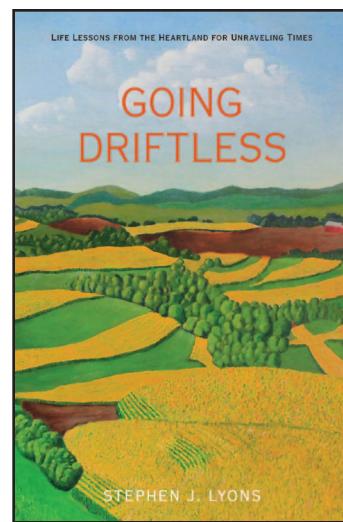
The author interviews members and founders of intentional agricultural communities such as the Wiscow and Zephyr

communes of southeastern Minnesota.

Lyons explores many other aspects of the region, including the immigration raids and related issues at Agriprocessors, a kosher meat processing company in Postville, Iowa. These raids brought to light the separation of families and the stresses put on the community of Postville as it faced the opportunities and challenges presented by its newfound ethnic diversity. Lyons explains that this diversity was created by the sudden influx of both Orthodox Jews from New York and Latin American immigrants who were involved with the Agriprocessors plant, a diversity that continues to shape and change Postville to this day.

In addition to the presence of Postville's Orthodox Jewish community, Lyons describes other religious groups that are present in the region, including the Ryumonji Zen Buddhist Monastery near Dorchester, Iowa, and its Abbot Shoken Winecoff, who studied Buddhism in Japan. The author elaborates on the storytelling skills of this Abbot, who is very familiar and comfortable with the natural and human world near this northeastern Iowa monastery and clearly loves the beauty of the surrounding landscape.

Besides the religious and ethnic diversity that some may not expect in such a predominately rural region, Lyons describes a thriving arts, cultural and small business environment that extends throughout the Drift-



less area. This is a culture created by tourist meccas like Galena, Ill., educational centers like La Crosse, Wis., and literary centers like Richland Center, Wis.—the latter community is the home of award-winning author David Rhodes. There is also Viroqua, Wis., home to Driftless Books, a well-stocked bookstore located in an old tobacco sale barn. (Yes, this region was a major tobacco-producer at one time.)

In addition to the literary contributions of the region, the author makes a point of describing the many wonderful local music venues, like Ed's No Name Bar and the Midwest Music Festival, both in Winona, Minn. Another fascinating part of Driftless life and culture that Lyons includes is the local food restaurants and independent coffee shops and roasters of the region, including Kickapoo Coffee roasters of Viroqua, and the popular Blue Heron in Winona, where the author conducted several of the interviews he included in this book.

Going Driftless: Life Lessons from the Heartland for Unraveling Times provides an excellent overview of the people, culture, natural environment and agriculture of this unique part of the Upper Midwest. □

Land Stewardship Project member Dale Hadler lives in the heart of the Driftless Region.

The End of Plenty The Race to Feed a Crowded World

By Joel K. Bourne Jr.
2015; 408 pages
W. W. Norton & Company
www.wwnorton.com

Reviewed by Brian DeVore

In the late 1790s and early 1800s, British economist Thomas Robert Malthus thus used mathematics, the agronomic reality of the day and basic biology to lay out a grim assessment about the future of the planet: we were doomed to an endless cycle of boom and bust. It was inevitable human populations would periodically grow to the point where demand for food would outstrip supply. At that point populations would crash as a result of famine.

At the time, his prediction made sense, given the limitations of peasant agriculture and the inability to move food from one place to another in an efficient way. But that changed. Malthus could not have foreseen the industrial revolution, hybrid seeds, fertilizers created from fossil fuels or GPS-guided tractors. His predictions also preceded giant leaps in medicine and sanitation, which have caused death rates to plummet. He certainly couldn't have imagined the "Green Revolution"—plant breeder Norman Borlaug's post-World War II miracle that brought us high-yielding (and chemical-intensive) grain varieties.

In a way, the world's agrarians have spent the past two centuries proving Malthus wrong. As Joel Bourne Jr. points out in his new book, *The End of Plenty: The Race to Feed a Crowded World*, between 1900 and 2000, the Earth's population quadrupled

from 1.6 to 6.1 billion. That's the largest population increase in history. Meanwhile, world grain production increased fivefold, from 400 million to 1.9 billion tons.

So far, so good. But that's just the first few pages of Bourne's well-researched and wonderfully written book. The author, a regular contributor to *National Geographic* magazine who has long written about agriculture and land use, has traveled the world and interviewed farmers, agronomists, economists and just about anyone else you can think of involved with food production. Bourne's conclusion—and he's not alone—is that the Malthus curse is finally catching up to us. Bin-busting harvests are losing the race as population growth rabbits ahead.

"In other words, the world is running out

Plenty, see page 29...

of food," he writes in a punch-to-the-gut sentence early in the book.

That became painfully clear around 2008 when food riots erupted in Egypt over people's inability to get access to that most basic of foods—bread. As Bourne points out, grain prices were soaring at a time when harvests of such crops as wheat were at an all-time high. Supply was simply not keeping up with demand.

Part I of *The End of Plenty* lays out how factors such as climate change, environmental degradation, making food into fuel, a growing middle class that wants to eat higher on the food chain and just plain old population growth are conspiring to create a very hungry future. The world population is expected to grow from its current 7 billion to 9 billion by the middle of this century, and much of that growth will occur in parts of the planet where people are already starving.

Bourne reports that in 1992, 824 million of the world's population was considered malnourished. In 1996, the United Nations held a World Food Summit where developed countries committed to halving hunger by 2015. By the beginning of this year, the number of hungry had fallen by less than 20 million. All those malnourished people equal the combined populations of the United States and European Union. Add 2 billion to the population in the next 35 years, and a truly apocalyptic scenario takes shape.

"We'll have to learn to produce as much food in the next four decades as we have since the beginning of civilization," says Gebisa Ejeta, a plant breeder who won the 2009 World Food Prize.

Now this is the part of the story where supporters of an industrialized, input-intensive agriculture would use these facts to defend the "U.S. must feed the world at any cost" philosophy. Such an argument has been used to justify a host of sins against the land and rural communities—from factory livestock operations to the plowing of every last acre of grass to plant more corn.

But Bourne takes an interesting turn here. He realizes the only viable way for the world to get fed is for it to feed itself—one country, one region, one village, at a time. Shipping food from the Midwest to Africa extracts way too much energy, soil and even wealth to be sustainable in the long run.

So Part II of the book presents a bit of a travelogue. The journalist spends some time in the U.S., but mostly provides firsthand reportage from places like Malawi, Panama, China, Ukraine and India. In these places the

author finds farmers, researchers, inventors and entrepreneurs who are figuring out ways to stay ahead of the Malthus curse on a local level. He describes aquaculture farms that are about as efficient at closing the nutrient cycle as possible, low-tech micro-irrigation systems made from the same material that goes into cheap plastic bags and organic operations that rely on intense building of soil health. It's exciting what can be accomplished when new technology, traditional farming, and natural processes are combined.

One of my favorite sections describes SRI: "system of rice intensification." It was developed in the 1980s by a missionary after he spent years observing traditional farmers in Madagascar utilizing methods that relied more on natural processes than the chemical- and energy-intensive inputs that characterize the Green Revolution. SRI has proven that it can produce more rice with fewer inputs, putting money in farmer's pockets while reducing environmental woes. SRI methods have been used to successfully produce sugarcane, yams, tomatoes, garlic and eggplant.

"This is post-modern agriculture," one international agriculture expert tells Bourne.

But all of these individual success stories are just that—isolated examples of local farmers and researchers overcoming the odds to develop sustainable production systems. After all, we live in a global society. If corporations continue to tighten their control of our food and farm system, we are doomed to a system where some people eat too much, and a lot of people eat too little.

Toward the end of the book, Bourne tries to bring the big picture into focus by laying out some global-scale solutions. For example, if we reversed course on food-based biofuels, 40 percent of the U.S. corn crop and 16 percent of Europe's arable land could be returned to food production. Another solution? Educate women in developing countries. This would have the dual benefit of getting innovative farming methods into the hands of the gender that produces almost half of the food in the world (and most of the food in Africa) while reducing our population explosion.

Bourne also describes Jonathan Foley's "silver buckshot" approach to balancing food production and environmental sustain-

ability. Foley, former head of the Institute on the Environment at the University of Minnesota, points out, for example, that a third of global agricultural production is lost to waste. He advocates considering how many more people could be fed if agriculture was to focus less on how many *bushels* were raised per acre, and more on how many *people* could be fed off that same acre.

Theoretically, a Midwestern farm could triple the number of calories per acre that go directly to people.

Unfortunately, Bourne also misses some key points when summarizing solutions. For example, although early on the book provides one of the most even-handed analyses I've ever read of the role GMOs play in agriculture, the author later overlooks a critical factor when it comes to the role genetic engineering, or any technology for that matter, will play in our future: who will control it?

"Despite the controversy over the current generation of GMOs, some have demonstrated large environmental benefits, with little documented harm. In the hands of public researchers... the potential to use our technology to create a truly sustainable agriculture now seems within our grasp," he writes.

The problem is that GMO technology, with few exceptions, is in the hands of private entities such as Monsanto. And they do not have the public's interest in mind when they develop and market such products.

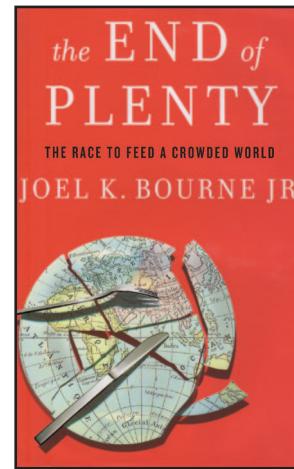
Bourne also describes how private investors are scrambling to lease as much land as possible in Africa so that they can raise commodities for world markets. It's "agro-imperialism" at its worse. Writes Bourne: "Yet veterans of agricultural development say the massive infusion of private cash, infrastructure, and technology that such deals may bring to poor rural areas could be a catalyst for desperately needed change—if big projects and small farmers can work together."

That last sentence contains one big, fat, problematic "if."

But in the end, *The End of Plenty* serves an important role by showing how innovative humans can be when faced with their very survival. It's not just about the technology or even the political will. It's also about seeing beyond the next 24 hours.

As Bourne points out, even Thomas Robert Malthus was an optimist in this department: "Unlike other species, as Malthus recognized...humans have foresight."

Brian DeVore is the editor of the Land Stewardship Letter.



LSP Staffers Assess Long Range Plan

By Amelia Shoptaugh

In mid-September, Land Stewardship Project staff gathered for a retreat near New London, Minn., to connect and check in on the organization's most

recent Long Range (2014-2019) Plan.

LSP's Long Range Plan (www.landstewardshipproject.org/about/history) was completed in early 2014, and as an organization we wanted to discuss what progress has been made in implementing it and ways of using it to guide future work. We

got to hear about the work of every program and give feedback on the strategic initiatives outlined in the Long Range Plan.

As administration staff I coordinated the logistics: meals, lodging and some of the transportation. That's just another hat administrative staff wear: "Event planner and coordinator." □

Amelia Shoptaugh, LSP's operations manager, can be reached at amelias@landstewardshipproject.org or 612-722-6377.



LSP staff at their fall 2015 retreat. Kneeling, left to right: Amy Bacigalupo, Mike McMahon, Kaitlyn O'Connor, Amelia Shoptaugh, Stephanie Porter, Karen Stettler and Brian DeVore. Standing, left to right: Dori Eder, Cree Bradley, Abby Liesch, Doug Nopar, Robin Moore, Timothy Keeney, Andy Marcum, Terry VanDerPol, Johanna Rupprecht, Rebecca White, Tom Nuessmeier, Megan Smith, Bobby King, Caroline van Schaik, Dylan Bradford Kesti, Megan Buckingham, Paul Sobocinski, Mark Schultz and George Boody. (LSP Photo)



LAND
STEWARDSHIP
PROJECT

Membership Update

The Joy of Making Positive Change

"Be joyful though you have considered all the facts."

— Wendell Berry

By Mike McMahon

The line above from Wendell Berry's poem, "Manifesto: The Mad Farmer Liberation Front," has stuck with me since I heard it many years

ago. For me, its staying power comes from Berry's ability to both reassure and challenge us in a single simple phrase.

It's a hopeful reminder that even in the face of all we know — about the abuse of people and land and the rise of unchecked corporate power — joy continues to survive in the hearts of people.

There are times when I need to be reminded of this. Like when I read about rainforests (rainforests!) burning and larger and

larger ice shelves crashing into the ocean. Or when I see the dangerous extent to which the rich and powerful will go to protect and grow their obscene amounts of hoarded wealth. In these moments, joy feels all but lost for a planet on the brink of destruction.

The facts about the state of our planet and its inhabitants are important and sobering. Berry tells us not to ignore them, but to know them and weigh them carefully.

But knowing the facts is not enough. Knowledge without action is inert, and by itself it lacks the power to create change. That's why Berry's use of the word "joyful" is so impactful.

Joy is more than being content or even

Membership, see page 31...

happy. Joy is exciting and kinetic. Joyful people are movement people who share their energy and radiate their hope.

When I look across LSP's membership, I see just these kinds of people: informed, undaunted and joyful.

People like organic dairy farmer Loretta Jaus, who, as we note on page 10, was recognized this fall by the White House as a "Champion of Change for Sustainable and Climate-Smart Agriculture."

And leaders like Omari Chatman, who has grown from an intern at the Hope Community in South Minneapolis to become the co-chair of the Homegrown Minneapolis Food Council, boldly moving forward to create public food landscapes in a city that favors private ownership and buildings over the needs of people and the land.

And young farmers who have graduated from LSP's Farm Beginnings Program (see page 19), like Lauren and Caleb Langworthy, who in the face of terrific challenges courageously choose to start farming.

And long-time farmers like Curt Tvedt, who continue to innovate and adapt farming systems to improve soil health and reduce erosion, even though they are surrounded by thousands of acres of monocrop agriculture owned and controlled by fewer and fewer people.

And the hundreds of people in Winona County who refuse to bow to corporate frac sand interests that would destroy the land for short-term profits and, as is noted on page 4, are organizing to enact a precedent-setting ban on frac sand mining activities.

These are the actions of joyful people. They inspire me to be joyful in my work, to take risks, try new things and be hopeful, even though I have considered the facts.

The people and the work I've described

In Memory & in Honor...

The Land Stewardship Project is grateful to have received the following gifts made to honor or remember loved ones, friends or special events:

In Memory of Stewart Shaw

- ◆ Harvey Benson & Bonita Underbakke
- ◆ Donna Buckbee
- ◆ Steve & Margaret Schild
- ◆ Richard & Yvonne Carpenter
- ◆ Steve & Linda Mueller
- ◆ Emilio & Monica DeGrazia

In Memory of George Boyum

- ◆ Arlene Renshaw

In Memory of Phyllis Pladsen

- ◆ Karen Bartig

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

here are just some of the examples of the work carried out by Land Stewardship Project members every day. All of it has been made possible by the contributions that every member of LSP makes to the organization.

As we approach the end of the year, I want to ask you to take this moment and make a contribution before Dec. 31. Make it a joyful contribution, one that will lift up the work of these innovators, risk-takers and organizers. I am asking you to make a contribution that you can feel, one that fills your heart and raises your spirits.

That could be starting a new monthly pledge or adding \$10, \$15 or \$35 a month to your current pledge. It could be doubling your annual membership renewal gift this year. It could be making a year-end gift of \$25, \$75, \$250 or \$1,000. It could mean making a gift of stock or adding LSP to your planned giving.

Whatever gift you choose to make, I want you to know it will have an impact and be put to work where it is needed most. I want to thank you for your continued support for

the Land Stewardship Project. Here is to a new year of joy, energy, hope and action! □

Mike McMahon is director of LSP's Individual Giving and Membership Program. He's at mcmahon@landstewardshipproject.org or 612-722-6377.

Give a Gift LSP Membership

Know someone who would enjoy becoming a member of the Land Stewardship Project? Give them a gift membership. We can send a special card describing the gift, along with a new member packet. For details, call 612-722-6377 or see www.landstewardshipproject.org/home/donate. □

Get Current With LSP's

LIVE WIRE

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

Support LSP in Your Workplace

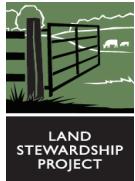
The Land Stewardship Project is a proud member of the Minnesota Environmental Fund, which is a coalition of 20 environmental organizations in Minnesota that offer workplace giving as an option in making our communities better places to live. Together member organizations of the Minnesota Environmental 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, ask the person in charge of workplace giving to include it. For details, contact LSP's Mike McMahon (mcmahon@landstewardshipproject.org) or Abby Liesch (abiesch@landstewardshipproject.org) at 612-722-6377.





LAND STEWARDSHIP PROJECT
821 E 35TH ST STE 200
MINNEAPOLIS, MN 55407-2102

NONPROFIT
 ORGANIZATION
 U.S. POSTAGE
 PAID
 ROCHESTER, MN
 PERMIT NO. 289

Address Service Requested

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

STEWARDSHIP CALENDAR

→ JAN. 8-9—**Minnesota Organic Conference**, St. Cloud, Minn. Contact: www.mda.state.mn.us/food/organic/conference.aspx, 651-201-6012

→ JAN. 9—**LSP Farm Beginnings Class Session**, Amery, Wis. (page 19)
 → JAN. 11—Deadline for CSA farmers to sign-up for the 2016 Edition of the Twin Cities, Minnesota & Western Wisconsin Region CSA Farm Directory (see sidebar on this page)

→ JAN. 14-16—**GrassWorks Grazing Conf.**, Wisconsin Dells, Wis. Contact: Heather Flashinski, grassheather@hotmail.com, 715-289-4896, www.grassworks.org

→ JAN. 21—**LSP Farm Beginnings Class Session**, Amery, Wis. (page 19)

→ JAN. 21-23—**2016 Northern Plains Sustainable Ag Society Conf.**, Aberdeen, S. Dak. Contact: www.npsas.org, 605-229-4040
 → JAN. 22-23—**2016 Practical Farmers of Iowa Conference**, Ames, Iowa. Contact: <http://practicalfarmers.org>, 515-232-5661

→ FEB. 4—**LSP Soil Health Meeting featuring North Dakota's Jay Fuhrer**, southeastern Minnesota. Contact: Doug Nopar, LSP, 507-523-3366, dnopar@landstewardshipproject.org
 → FEB. 6—**LSP Farm Beginnings Class Session**, Amery, Wis. (page 19)

→ FEB. 13—**Sustainable Farming Association of Minnesota Conf.**, St. Joseph, Minn. Contact: www.sfa-mn.org/conference, 1-844-922-5573, ext. 1
 → FEB. 14-15—**Minnesota Fruit &**

Farmers: Time to Sign-up for the 2016 CSA Directory

If you are a Community Supported Agriculture (CSA) farmer operating in Minnesota or western Wisconsin, the Land Stewardship Project invites you to be listed in the 2016 edition of LSP's *Twin Cities, Minnesota & Western Wisconsin Region CSA Farm Directory*.

The *Directory* will be published in February and distributed to eaters throughout the region, as well as posted at www.landstewardshipproject.org/stewardshipfood/findingjustfood/csa.

The deadline for submitting listings is Monday, Jan. 11. The listing fee is \$22 for LSP members and \$37 for non-members. There is a 250-word limit for listings.

For information on getting listed, contact LSP's Brian DeVore at bdevore@landstewardshipproject.org or 612-722-6377.

Vegetable Growers Conf., St. Cloud, Minn. Contact: www.mfvga.org, 763-434-0400

→ FEB. 17-18—**Midwest Soil Health Summit**, Alexandria, Minn. Contact: Sustainable Farming Association of Minnesota, 1-844-922-5573, Ext. 2, www.sfa-mn.org

→ FEB. 20—**LSP Farm Beginnings Class session**, Amery, Wis. (page 19)

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

→ MARCH 8—**2016 Session of the Minnesota Legislature convenes**, St. Paul, Minn. Contact: Bobby King, LSP, bking@landstewardshipproject.org, 612-722-6377

→ MARCH 11-20—**LSP Agricultural Travel Delegation to Mexico**. Contact: Charlie Kersey, LSP, 320-216-5296, lafinca@earthlink.net (page 12)

→ MARCH 12—**LSP Farm Beginnings Class Session**, Amery, Wis. (page 19)

→ MARCH 13—**LSP Fundraiser Art Sale, HeArt Market**, Casket Arts Bldg., 681 17th Ave. NE, Minneapolis, MN 55413. Contact: Megan Smith, LSP, megans@landstewardshipproject.org, 612-722-6377

→ MARCH or APRIL—**LSP Family Farm Breakfast & Day at the Capitol**, St. Paul, Minn. Contact: Bobby King, LSP, bking@landstewardshipproject.org, 612-722-6377

→ AUG. 1—**Early Bird Application Deadline for 2016-2017 LSP Farm Beginnings Course** (page 19)

→ SEPT. 1—**Final Application Deadline for 2016-2017 LSP Farm Beginnings Course** (page 19)

→ OCT. 1—**LSP Journeyperson Course deadline** (page 21)

Check Upcoming Events at www.landstewardshipproject.org for the latest workshops, classes, field days and deadlines.