



the Practical Farmer

SPRING 2018

COVER CROPS EDITION!

On the cover



Cow pies nestled at the base of lush cover crop growth on Matt Schuiteman's farm are apt visual evidence of some of the soil health and other benefits cover crops provide.

LIVESTOCK

On-Farm Research Helps Put a Value on Cover Crop Forage

4

COVER CROPS

Corn Following a Cover Crop

12

COOPERATORS' PROGRAM

Finding the Cash in Cover Crops

22

In this issue

OTHER FEATURES:

- Meet the newest SIP class
- Farm transfer wisdom from 20 PFI members
- 2018 conference photos
- And more!

In This Issue

features

- 4 LIVESTOCK :: PUTTING A VALUE ON COVER CROP FORAGE**
Cover crops that are grazed have value, but how much? A three-year PFI research project is helping put a price tag on this value.
- 6 HORTICULTURE :: DEMYSTIFYING FARM MACHINERY**
A series of farmer-led trainings over the past year have focused on helping farmers gain more confidence with machinery decisions and handling.
- 8 SAVINGS INCENTIVE PROGRAM :: MEET THE CLASS OF 2019**
The newest SIP class was inaugurated in January. Meet the farmers and learn about their hopes for the program.
- 9 BEGINNING FARMERS :: A PROGRAM FOR THE FARM CURIOUS**
The Labor4Learning program helped aspiring farmers Margaret and Brad Wolter find more direction for their farming aspirations.
- 10 FARM TRANSFER :: WISDOM FROM 20 PFI MEMBERS**
The words and deeds of several PFI farmers offer inspiration for those dealing with a farm succession situation.

- 12 COVER CROPS :: CORN FOLLOWING A COVER CROP**
On-farm research is yielding more insights on how to manage this tricky rotation.
- 14 PHOTOS :: 2018 ANNUAL CONFERENCE**
- 18 LIFETIME MEMBERS :: COMMITTED**
Several lifetime members share why they chose to make this long-term investment in PFI.
- 20 FOOD SYSTEMS :: ENVISIONING FARM DIVERSITY**
Josh Nelson reflects on the barriers and opportunities to diversifying Iowa's landscape.
- 22 COOPERATORS' PROGRAM :: THE CASH IN COVER CROPS**
Research by PFI members is verifying that cereal rye ahead of soybeans is a good fit for Iowa.
- 24 LAND STEWARDSHIP :: A USEFUL TOOL**
Conservation planning pairs farmers' knowledge with data to meet land stewardship and economic goals.
- 26 POLICY :: MAKE YOUR ASK**
Sarah Gilbert shares her experience traveling to Washington D.C.

departments

- 3 EXECUTIVE DIRECTOR NOTE**
- 27 SUSTAINABLE AG AWARD**
Profile of Earl Hafner, recipient of PFI's 2018 Sustainable Agriculture Achievement Award
- 28 PFI NEWS**
 - PFI has a new address
 - Meet Richard Lane
 - Spring cover crop field days about to start
 - Field day planning underway
- 29 WELCOME NEW MEMBERS**
- 30 CALENDAR MID-MARCH – MAY**
- 31 JOIN PFI**

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the Practical Farmer

the Practical Farmer is published quarterly as a benefit of membership to help keep farmers and friends of farmers in touch with one another through informative articles on relevant farming topics, current on-farm research, upcoming events and other news of interest.

Newsletter Editor: Tamsyn Jones

(Back issues are available upon request. Unless otherwise noted, articles may be reprinted or adapted if credit is given. Clippings and notice are appreciated.)



What's New at Practical Farmers of Iowa?

If you ask this question to a Practical Farmers board or staff member, reserve a few minutes for an answer. There are several new developments! More people are paying attention to farmer-led research and education, and their value in making informed decisions to positively affect the agriculture landscape. As a result, Practical Farmers is growing.

Dan Guenther, of Common Harvest Farm in Wisconsin, talks about how increasing the scale of your farm is a step, not a slide. You can't increase your number of production acres without also appropriately scaling your machinery, storage and transportation. Practical Farmers is in the midst of a similar step up.

Here are some of the new things going on and coming soon to Practical Farmers of Iowa:

- **New website:** Our website stores a wealth of exclusive information. This includes years of ground-truthed, farmer-centric research, profiles, photos, resources, blogs, videos, farminars and podcasts. The layout and search features of the current site aren't optimal to easily access this trove. We staffers even have trouble finding stuff on the website! We are excited to be working with Juicebox Interactive in Des Moines to create a new website that will be easy to search, responsive and will help you find the information you're seeking.
- **New strategic plan:** Our new strategic plan, which can be found on our website, is bursting with bold goals to equip farmers to build resilient farms and communities. The overarching goals are: 1) Build community in Iowa and beyond; 2) Farmers and landowners are stewards of our natural resources; 3) Farmers, farms and food systems are viable; 4) PFI supports beginning farmers and farm transfer; and 5) Increase PFI's organizational capacity.
- **New grants:** We are fortunate to add new grant-funded projects to our plate. Cedar Tree Foundations' Sustainable Grazing Initiative is providing three years of support for Practical Farmers to increase the visibility and adoption of regenerative grazing. Through PepsiCo and Unilever, we will have five years of support to offer technical assistance to farmers in their supply chain who agree to plant cover crops. We will work hard to engage these new-to-PFI farmers in our network. Our auditor is encouraged by our fiscal growth; he reports that our finances are growing at a pace he likes to see.
- **New employees:** We recently hired Richard Lane to support Sarah Carlson and Alisha Bower in our robust cover crop and small grains work. Read more about Richard on page 28. We are looking forward to adding additional communications and livestock support to our staff capacity as well.
- **New staffing structure, processes and procedures:** These may sound less exciting on paper, but they are important aspects of sustainable growth. We need to make sure our internal processes are on par with our growing staff and membership. This includes analyzing and upgrading our



Thanks for a Lifetime Commitment: Sally Worley hands a special crock to lifetime member Don Adams, of Full Circle Farm near Madrid, in February as a token of thanks for his commitment to PFI. Don and his wife, Nan Bonfils, have been members since 1996. The crocks are exclusive gifts for lifetime members and are part of a new package we have created to show our appreciation for their lifetime commitment.

current staffing structure, processes and policies to ensure our internal capacities match our expanded size.

- **New office space:** With all of the above, our office was getting quite crowded. We moved to a larger office – located at 1615 Golden Aspen Drive, Suite 101, Ames, IA, 50010. This office includes a large meeting space, which we are happy to loan out to friends and partners when it is available. Please come visit us at our new office!

Thank you to all of you for making this organization a success, and for helping bring it into its next phase. Awareness of Practical Farmers is growing because of all the innovative, participatory leaders we are fortunate to call PFI members.

Onward and upward to a more diverse Iowa,

Sally Worley

On-Farm Research Helps Put a Value on Cover Crop Forage

by Meghan Filbert

When cattle are out grazing cover crops, farmers don't have to supplement their cattle with as much feed as they normally would during the fall, winter and early spring. Cover crops that are grazed have value, but how much value? A three-year PFI research project, initiated in 2015, helped quantify this value by putting a price tag on the forage produced by cover crops. For three cow-calf producers in northwest Iowa, the practice of grazing cover crops, combined with cost-share funding, provides positive economic returns within the same year the cover crops were planted.

Determining Feed Value

To conduct this research, participating farmers Wesley Degner, of Lytton; Bill Frederick, of Jefferson; and Mark Schleisman, of Lake City, seeded cover crops of their choosing with the intention of grazing the forage produced. Each recorded the dates their animals were turned in and removed from fields, the number of cattle in the herd and the weight of each animal.

The feed required by cattle during each grazing period was estimated based on animal weight and a daily dry matter intake of either 2.5 or 2.7 percent of bodyweight, depending on whether cows were dry or lactating. Cattle grazed cover crops planted in cash crop fields; therefore they had access to the remaining crop residue in those fields. Water, minerals and some supplemental feed were all provided when necessary. "Cattle eat the cover crops to the ground when given a choice between that and normal crop residue," says Mark Schleisman. "In the early spring, cover crop growth cannot satisfy the herd's full needs, so we add some feed to their diet, but they only eat from the bunk if enough cover crop isn't available."

Cover crops and crop residue comprised the vast majority of each herd's ration. For the research project, the estimated feed required by the herd, minus any supplemental feed provided, was thus considered the amount of feed farmers were able to offset by grazing cover crops. A conservative value of \$80 per ton was assigned to the amount of feed saved. The price of grass hay varies, but can often cost \$90 to \$140 per ton.

Economic Impact

To determine the actual economic impact of grazing covers, the participants kept track of all their costs and revenue, entering data into a spreadsheet developed by William Edwards, professor emeritus at Iowa State University. The spreadsheet is a tool for farmers to estimate the forage value of cover crops on their farms. It can be accessed on the Iowa State Ag Decision Maker website at extension.iastate.edu/agdm.

Across the three farms, the value of cover crop forage ranged from \$28 to \$61 per acre, before costs were removed. Costs included cover crop establishment and termination, labor, fence and water. In some cases, costs exceeded forage value, which highlighted the importance of

planting cover crops early, allowing for plenty of growing days before turning cattle out to graze in the fall. More cover crop growth increases the number of days cattle can graze, thus offsetting more feed expenses and further reducing costs.

Cost-Share Contributes to Profitability

In the cases where costs exceeded value, cost-share payments helped keep farmers in the black. All three farmers involved in the research project received cost-share for their cover crop acres, either from their county Natural Resources Conservation Service (NRCS) or from the Iowa Department of Agriculture and Land Stewardship (IDALS). Cost-share payments ranged from \$11 to \$41 per acre, and were included in the economic analysis.

Total net economic gain ranged from \$2 to \$60 per acre, a variance that can be attributed to the farmers' different levels of experience with cover crops and their understanding of issues related to cover crop planting and grazing management. Without the help of the cost-share, Wesley Degner of Lytton would have experienced a net loss both years. Wesley had never planted or grazed cover crops before this project. "Now that I've had a bit more



Above: Cattle graze cover crops in northwestern Iowa. (Photo courtesy of Lynn Betts) **Opposite (Left):** A young calf walks in a lush carpet of green cover crops. **(Right):** Dennis Degner and his son, Wesley, started grazing 85 acres of cereal rye on their farm near Lytton in 2015. This year they added over 200 more cover crop acres for grazing. (Photo courtesy of Lynn Betts)



"We started planting cereal rye because it was easy to calve in. Now, our cover crops are grazed as a way to justify the costs." – MARK SCHLEISMAN



experience with cover crops, I planted an additional 208 acres in 2017," he says. "I grazed them from November to early January and plan on getting spring grazing out of these acres too. I'm still learning, but I think grazing both in the fall and spring will help me remain profitable."

Cost-share funding can be especially helpful for farmers, like Wesley, who are new to certain farming practices. The funds let farmers experiment with unfamiliar practices and hone their skills while providing a financial buffer against mistakes in hopes that the lessons learned will result in future economic success.

Mark Schleisman, by contrast, has over 10 years of cover crop grazing experience and has figured out ways to remain profitable regardless of cost-share dollars. "We started planting cereal rye because it was easy to calve in," Mark says. "Now, our cover crops are grazed as a way to justify the costs." His gross cover crop value averaged \$59 per acre, while his costs averaged \$32 per acre. He seeded multi-species cover crop mixes in mid-August with a modified high-clearance seeder and was able to produce an average of 1.5 tons of forage per acre. Cattle grazed through the winter and again in March and April of each year. Mark also combined cover crop termination with pre-plant burn-down, helping his bottom line.

Grazing Cover Crops Helps Control Costs

The results of this on-farm research revealed that cover crops can – and do –

offset winter feeding expenses, thus giving farmers more control over the costs of purchased feed. Wesley says that if cover crops had not been available for grazing, he would have been feeding four round bales of hay per week. "I buy hay, and four bales would cost me \$320 a week to feed my 45 cows. I'd also have to spend money on transporting and feeding out the hay."

No-Brainer for Cattle Farmers

"For cattlemen and women, using cover crops for forage is a no-brainer, especially on acres that get chopped for silage," says Bill Frederick of Jefferson, who is also a cover crop seed dealer and custom applicator. "I don't understand why it's so hard to market cover crops to farmers who can recoup their costs in that same year." Bill thinks some farmers may be timid about having to kill a cover crop during the busy spring planting season. In this case, farmers could plant a species that dies on its own during the cold winter ("winter-kills," in agronomic terms), rendering spring termination unnecessary.

During the study, the only fields Bill planted with a cover crop that overwintered, such as cereal rye or winter wheat, are those he used for spring calving. For Bill, spring cover crops have provided several benefits: "Spring-grazing young cow-calf pairs and the health benefits of fresh pasture to calves were worth more than the value of the forage. Rye fields kept calves clean and dry each spring."

The economic benefits are starting to garner more attention from farmers.

Results of the PFI trial showed that the total net economic gain of feeding cover crops to cattle ranged from \$355 to \$40,192 per year. Through grazing, farmers saw a quick return on their cover crop investments.

Other Benefits

The economic analysis did not take into account potential cash crop yield increases or decreases, and other benefits such as the value of soil and nutrient retention, increased soil health, reduced weed pressure, nutritional value of forage and health benefits to livestock. Perhaps the most exciting benefit Mark has seen on his farm is increased carrying capacity of the land. "My dad ran 200 cow-calf pairs on the same acres that we now run 360 pairs," he says. "Because of cover crops, we are producing more on less land." ■

Learn More

Join Us at Spring Cover Crop Grazing Field Days

If you'd like to learn more about the practice of grazing cover crop forage, join Practical Farmers of Iowa at two field days – **April 3 in Jefferson** and **April 5 in Cumberland** – where we'll see cover crop grazing in action.

» Visit practicalfarmers.org for more details.

A Year of Equipment Education

Demystifying farm machinery through hands-on trainings

by Liz Kolbe

A sweet corn grower once told me that every good farmer keeps a sharp hoe in the back of his or her pickup. That is to say, hand tools will always be a necessary part of a well-managed vegetable farm. But as farmers scale up to 4, 5 or 20 acres, some mechanization becomes very cost- and time-efficient.

For beginning specialty crop farmers who raise upwards of 20 different crops, deciding which piece of equipment to buy next – or first – is a complicated decision. Questions they must consider include: Can this equipment be used for multiple crops? How easily can the spacing be adjusted? How much hand labor will it save? How much power do I need? Do I plan to expand my production? What is the pay-back time? Are my fields set up to accommodate this equipment? And last but not least: Do I know how to safely use and maintain this equipment?

This knowledge gap is problematic for farmers who start a small vegetable farm with a roto-tiller and hand tools but want to scale up to a few acres. It isn't the only hurdle they face, but it is a significant investment for lean budgets, and critical to their day-to-day operations. Investing in the right equipment – and being confident about using it – can help farmers make rapid changes to their production.

Danelle Myer, a beginning vegetable farmer at One Farm in Logan, was ready with the business, marketing and product knowledge, but had a steep learning curve with equipment. "I grew up on a farm, but never operated or worked on equipment other than helping my father from time to time," Danelle says. "Basically, I knew nothing about running anything. Over the course of the past six years, I have slowly and painfully learned a bit more about my tractor, implements, tillage and general mechanization. And after six years, I am finally mechanizing my farm the way it should be for efficiency and profitability."



Jeff Lauber demonstrates a range of two-wheel tractors to attendees at Jill Beebout's field day last May.

Unlike Danelle, who began her vegetable farm on less than an acre, Carmen Black purchased a full-powered farm and CSA business, jumping in with a CSA of 150 families. She credits her mentor (and former farm owner), Susan Jutz, for starting her in the right direction. "Using equipment can be one of the most intimidating parts about beginning and growing a farm for people without prior equipment experience," Carmen says. "From mid-April to Thanksgiving, I use three tractors on nearly a daily basis. Having a mentor to talk with about my equipment needs and concerns has been the most valuable thing for my learning, and the main reason why I've been able to begin farming at the scale I have."

To help farmers gain knowledge, confidence and experience with machinery and equipment, PFI organized several field days and workshops during 2017 and the first part of this year to provide hands-on, practical experience with farm machinery, equipment and tools.

Two-Wheel Tractors

In May 2017, Jill Beebout hosted a field day at her farm, Blue Gate Farm, near Chariton. The field day focused on two-wheel and

walk-behind tractors and featured Jeff Lauber, an expert and restorer of vintage garden tractors who was instrumental in helping Jill get started with her machines.

Jill likes the two-wheel tractors for their size – they're right for her farm, and for her. "I'm not a very large human being," Jill says. "If a piece of equipment is going to fight me, I don't have time for it. These machines are not intimidating; if you can run a lawnmower, you can run one of these." On her 6 acres of vegetables (and 1 acre of asparagus), the two-wheel tractors are easy to maneuver and fit the confines of her 3-foot-wide permanent bed system in her older fields.

Both Jill and Jeff are insistent that these vintage tools are the path ahead for market farmers. After leaving his family's 500 acre farm, Jeff raised vegetables on 12 acres for 10 years; he only ever used a two-wheel tractor. He now has over 100 two-wheel tractors, along with countless garden tractors (four-wheel tractors that weren't made for lawnmower decks) – but that's due to his passion for collecting and restoring, not the needs of his farm. Video-tours of Jeff's collection can be seen



Left: Using the water wheel, T.D. (center) can transplant and water very efficiently. **Right:** T.D. built several drying tables using a Hobart MIG welder. The tables are on casters so they can be easily moved in and out of the wash area. **Below:** Natasha Hegmann and Peter Kerns practice welding at the Kirkwood Community College workshop.

on PFI's YouTube channel. According to Jeff, any of the tractors at Jill's field day would be perfect for 6 to 10 acres of produce. The trick, he says, is to have your implements set up properly so you can just hook them up and go. "The worst thing that usually happens with these old tractors is that the engines wear out, then the tires and sometimes the bushings go," he explains. "You don't have to paint them to make them work – you just have to make them mechanically sound. An engine is \$128. Tires are \$60 each and you'll never wear them out. And don't be afraid of old tires with some cracks – you're not speeding down the road, you're going a half-mile per hour in the field. You can spend a lot of money on these, but the trick is not to."

For more resources on two-wheel tractors, both Jill and Jeff suggest joining Facebook groups (like Vintage Tractor and Garden

Equipment or Bolens Walkbehind Tractors) or other online forums. As Jeff says, "You can't learn anything if you don't participate."

Machinery Showcase

T.D. Holub, a beginning vegetable and poultry farmer near Coggon, also hosted an equipment show-and-tell field day at his farm, Garden Oasis Farm. T.D. grew up on the farm, and though he has a knack for working with equipment and tools, he insists he's still learning the best options for his systems and his soil. At his field day, he told the audience he continues to make small modifications to better suit his needs.

For example, if T.D. is direct-seeding (he uses a Jang to direct-seed), he first uses the Perfecta field cultivator. Then he comes back through and marks rows by just touching the top inch of soil with the cultivator, using welded-on row markers made from cut-down plow points. "If you can drive a straight line, you'll never have to run a string-line ever again," T.D. says. He transplants and does any additional "emergency" irrigation with the waterwheel transplanter, and uses an Allis Chalmers G tractor to which he adds an extra row of beet knives for cultivating.

Attendees tried out several of T.D.'s tractors and tools, including his Allis Chalmers G, RainFlo water wheel, several seeders, wheel hoes, hand tools and shop equipment.

From Hand Tools to Welding

In November, PFI partnered with Iowa Valley RC&D (IVRCD) for a hands-on

field day highlighting hand tools and small implements at the Grow Johnson County Farm in Iowa City. Through the winter, PFI again partnered with IVRCD to offer three hands-on welding workshops for farmers. Instructors from Kirkwood Community College and Iowa Western Community College welcomed farmers to their shops, provided a classroom overview of welding types and practical tips, and then got out the masks to practice. No one becomes a certified welder in only four hours, but most farmers left with more confidence to attempt simple welds, practice with a welder and be a more effective communicator about repairs and modifications.

Upcoming Machinery Workshops

Small, intensive workshops will continue in March, when Shane LaBrake will lead two hands-on workshops, both two days each, on machinery safety and maintenance for vegetable farmers. Through PFI's on-going farmer-to-farmer learning and networking, we hope the past year's injection of machinery and equipment knowledge will be passed on to other farmers throughout the state. Though she finds more to learn all the time, Carmen Black knows how helpful passing along that knowledge is: "I feel incredibly fortunate that I bought an existing farm business with equipment from someone who had a deep understanding of what equipment was necessary, safe and affordable for a beginner like myself. Becoming faster and more adept at using equipment is one of the main ways I think I'll be able to grow my business." ■



The Savings Incentive Program Class of 2019

Meet the farmers – and learn about their hopes for SIP



Andy and Betsy Boone
Lorimor, Iowa

Andy and Betsy are looking forward to the support, guidance and accountability of a mentor.



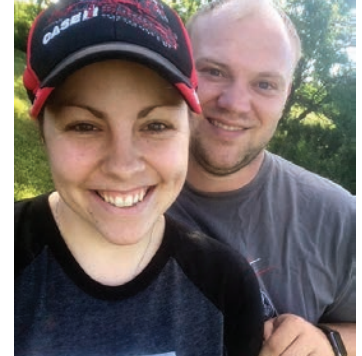
Whitney Brewer
Johnston, Iowa

Whitney hopes to gain better business planning skills and foster new relationships.



Garin and Kristen Buttermore
Ogden, Iowa

Garin and Kristen hope to use SIP to find focus and plan for their farm as they develop their farm infrastructure.



Brandon and Margo Friedlein
Guttenberg, Iowa

Brandon and Margo are eager for the guidance of a mentor to help them expand and improve their operation.



Heath Hoppes
Council Bluffs, Iowa

Heath is excited to connect with a mentor through SIP. At the end of the program, he hopes to have a workable business plan.



Jason and Angela Johnson
Derby, Iowa

The Johnsons are looking forward to accessing the knowledge of PFI members and taking the next steps towards their vision.



Innocent Kabahizi and Marie Kashindi
Des Moines, Iowa

Innocent and Marie are excited about having a mentor, meeting many other farmers and saving money to buy an asset for their farm by participating in the Savings Incentive Program.



Jake Kundert and Bridget Fonseca – Solon, Iowa

Jake and Bridget are looking forward to advice from a mentor and having a structured format to work through their business planning process.



Alan and Andrea Spencer
Stanton, Iowa

The Spencers plan to purchase additional land next to their property to expand their operation into a variety of specialty crops.



Matthew and Donna Swanson
Story City, Iowa

Matthew and Donna are planning to use their Savings Incentive Program match money to add fencing and purchase more breeding stock.



Mark and Theresa Westbrook
Waverly, Iowa

Mark and Theresa are excited about the opportunity to work with a mentor who can guide their new farm in the right direction.

Learn More:

View detailed profiles of Savings Incentive Program Class of 2019 members at:

[practicalfarmers.org/
member-priorities/
beginning-farmers/savings-
incentive-program](https://practicalfarmers.org/member-priorities/beginning-farmers/savings-incentive-program)



A Program for the Farm-Curious

Labor4Learning provides important farm experience

by Steve Carlson

Margaret and Brad Wolter are in a position that's not too uncommon in Iowa. They have lived for years in a big city (Cedar Rapids, in this case), they have well-established non-farming careers – and they have the opportunity to buy a portion of family farmland, in this case, the heritage farm belonging to Margaret's family. Over the past few years, they made the big decision to move from Cedar Rapids to Chelsea, Iowa, in rural Tama County, and take over the 10-acre homestead.

In order to realize their dream of inhabiting the old family farmhouse and turning the 10 acres into an income-generating farm, Margaret and Brad needed to overcome some common hurdles. They decided to first focus their resources on renovating the farmhouse so they could sell their home in Cedar Rapids and move to Chelsea. During this process, Margaret and Brad began to think about their transition for jobs and income. Full-time farming doesn't happen overnight, and the transition is even more difficult when relocating away from the security of existing off-farm jobs.

The next major hurdle for the Wolters was learning about the business of running a farm, not to mention deciding what enterprises to pursue. Last spring, Margaret discovered Practical Farmers of Iowa's Labor4Learning program, and particularly the job opening with Donna Warhover at Morning Glory Farm in nearby Mount Vernon, and decided to apply. It was a perfect fit.

As a trainer farm in the Labor4Learning program, Donna agreed to hire an aspiring farmer and provide additional training beyond what a typical employee might receive. Practical Farmers provided some compensation for Donna's additional time spent training, and also helped with advertising the job and overseeing the experience throughout the program.

Donna sees the value of a program that provides an immersive farm experience for those just starting out: "Farming is not for the faint of heart. Some folks think it would be so fun to be their own boss and play in the garden all day without factoring

in work days that begin at dawn and end at dark, seven days a week, for six months straight. It is hard physical labor in all kinds of weather, paired with all the brain work of running a business."

Margaret and Donna first decided on a set of topics they agreed were important for Margaret to learn about, including production issues like crop rotation and pest and disease management. They also focused on business management topics, such as market evaluation and crop decision-making, and lifestyle issues like maintaining off-farm income while starting a farm.

"Because of the contacts I have made through Labor4Learning and PFI, I feel confident things will work out eventually." – MARGARET WOLTER

"I not only got the hands-on farming experience I hoped for, but also learned much of the business side of things," Margaret says. "Both are very important components in helping me decide which direction I will go with my own farm."

In addition to learning from Donna, Margaret attended several PFI field days throughout the summer to learn from other PFI members. Seeing how T.D. Holub raises vegetables on his rural farm near Coggon, or how Jon Yagla provides for a CSA by farming in backyards in his Iowa City neighborhood, gave Margaret insights into various approaches to raising vegetables. She also visited Mike and Cheryl Hopkins' goat farm, learned from



Donna Warhover (left) and Margaret Wolter

the Tallgrass Prairie Center about using prairie plantings to add pollinator habitat and helped with a high tunnel build at Laura Krouse's farm ("the closest thing to a barn-raising that I will ever be a part of!" Margaret says). As any PFI farmer will attest, building a community of peers is an important part of starting a successful farm.

"Being a part of Morning Glory, I got a good feel for running a CSA, selling to restaurants and working at farmers markets," Margaret says. "Because of the contacts I have made through Labor4Learning and PFI, I feel confident things will work out eventually." ■

Learn More

Find a Labor4Learning Job

See the full list of trainer farms participating in Labor4Learning in 2018, along with their job descriptions, at practicalfarmers.org/labor4learning.

Applicants should contact the farm directly. For more information about Labor4Learning, contact Steve Carlson at (515) 232-5661 or steve@practicalfarmers.org

Wisdom on Farm Succession from 20 PFI Members

by Teresa Opheim

Practical Farmers just approved a new strategic plan that will help members through the rewarding, yet sometimes harrowing, area of farm succession. Fortunately, PFI has so many members who are leading the way. Here are just a few words – and deeds – of wisdom as we all work to get farms and farmland to the next generation.



Tom and Irene Frantzen

stress that the younger generation needs to control the farm's future direction. "If we said that our farm has to be an organic farm in the future, for example, we would be setting that vision for the next generation" Irene says. "Instead, we – as the retiring couple – need to listen, to accept that the farm may look different in 10 years."



The late William and Mary Gilbert

rewarded their offspring according to the contributions they made to the farm. Their strategy did not mean they loved their non-farming children less; they just knew hard choices had to be made to keep the farm going. Their vision and practice made it easier for their son and grandson, and their families, to thrive today at Gibraltar Farm.



Lee Ann and Jim Van Der Pol

know the older generation also needs to release being in charge of management decisions as well. According to Jim, "We want to avoid the old scenario of the 70-year-old doing all the farming, but he's still 'the boy' because the 90-year-old owns everything and makes all the decisions."

"I hope I can have a community where kids can ride their bikes, enjoy nature and have clean water. That's our vision for rural America."

- JIM FRENCH

"Our kids will never get a phone call where we say, 'we sold the farm today.' We will always talk to them beforehand."

- RICK AND JANE JUCHEMS



Dale Nimrod

used the farmland he inherited to help a farm family get on the land. He did not get top dollar for the land; instead he worked out a deal that made it most likely the farming family could thrive. Dale figured his strategy was the best way to help the community that helped raise him after his father died when he was young.



Dirk Mol (left)

is continuing the family farm legacy by reinventing the farm 1,000 miles away from the land he inherited. He sold his northwest Iowa land and used the proceeds to buy land for his son in the son's chosen home of New York State.



Deb Tidwell and Jeff Klinge

have documented the past, present and future hopes for their farmland through Farm Legacy Letters. More than 50 others have written these letters, which are a good way to start the farm transition discussion with your family.



“[My father] had a lifelong commitment to clearly communicate to all of us how we were the most essential part of keeping the farm going. We were his legacy, not the land and livestock.”

– DEL FICKE



Jane and Rick Juchems

focus on communicating with their children about farm succession and have a laudable goal: no surprises for their son and daughter. “Our kids will never get a phone call where we say, ‘we sold the farm today.’ We will always talk to them about it beforehand.”



Angela and John Tedesco

have permanently protected their farmland from nearby development by donating it to Practical Farmers of Iowa. Angela says: “It’s important to us that it remain a farm for someone to continue using it in a sustainable manner.”



Lisa and Jim French

know there are ways to carry on your values even if your children don’t want to farm. “I hope I can have a community where kids can ride their bikes, enjoy nature and have clean water,” Jim says. “That’s our vision for rural America.”

“... we, as the retiring couple, need to listen, to accept that the farm may look different in 10 years.”

– IRENE FRANTZEN



Helen Gunderson

is doing good by donating her land to a few organizations that have enriched her life and have the best potential to ensure ethical stewardship of the land.



Del Ficke

is clear that family – not land – comes first. Del says: “[My father] had a lifelong commitment to clearly communicate to all of us how we were the most essential part of keeping the farm going. We were his legacy, not the land and the livestock.” The seventh generation of Fickes now lives on this farmland.



Linda and Robert Lynch

have been proactive in getting the seventh generation (Jay, at left) farming through strategies that include gifting land, life insurance policies and more. Like the other PFI members recognized here, they have been generous in sharing their farm succession strategies – which in turn helps us all learn and get motivated to take action. ■

For more members’ wisdom, visit practicalfarmers.org/ blog and click on “land transfer.”

Teresa Opheim serves as a Senior Fellow of Farm Transitions at the Minnesota Institute for Sustainable Agriculture. She also works to help farmers purchase and rent farmland through Iroquois Valley Farms, a public-benefit corporation (iroquoisvalleyfarms.com).

Corn Following a Cover Crop

On-farm research is yielding more insights on how to manage this tricky rotation

by Alisha Bower

Corn has been the top crop grown in Iowa for over 150 years. Our soils excel at growing corn – and no one can argue with that. As farmers begin to add soil-building practices like cover crops or extended rotations, maintaining corn yields while integrating these systems profitably into the operation has been a key challenge. Luckily, we're learning more every year about how to manage these systems to decrease input costs and protect yields.

Grass Cover Crops Before Corn in a Two-Year Rotation

Soybean harvest happens late in the fall, while corn planting takes place early in the spring. This doesn't leave a lot of time for a cover crop to grow in the interim. Because the fall growing season is so short, an overwintering grass cover crop like winter rye, wheat or barley is the best option to maximize the benefit of a cover crop (and thus the return on investment). Cereal rye is the darling of overwintering cover crops in Iowa, because it is hardiest in Iowa's winter climate and produces the most biomass in the spring. But these same attributes make it problematic for corn.

Grass cover crops grow aggressively in the spring and can compete with corn for key resources, such as water and nitrogen, which results in yield drags on those fields. Last year, Keota farmer Tim Sieren and Rowley farmer Dick Sloan designed and conducted an on-farm research project to investigate if different yields could be achieved by varying both the rye termination date before corn planting and the nitrogen application methods used in conjunction with corn planting.

The farmers terminated the cover crop either three weeks or three days before corn planting, and applied 140 pounds of total nitrogen to each field in the study. To test the role played by the nitrogen application method, they compared the effects of applying nitrogen when the cover crop was terminated, the same day as corn planting or after corn plants had emerged (a practice known as side-dressing). The results showed that regardless of the nitrogen fertilization strategy, cereal rye terminated three days before planting resulted in yield drag. "This

shows that it's all in the timing, not so much in the form of nitrogen," Tim concludes. "Maybe we're trying to plant corn too early and need to think a little bit differently about delaying planting to make sure the cover crop is dead."

There was one exception where waiting to terminate the cover crop until three days before corn planting did not result in a yield drag. This was on Dick Sloan's farm in a corn-corn rotation where the cover crop was a mixture of winter wheat, oats, barley and rapeseed, and fall manure had been applied. This cover crop produced far less biomass than the cereal rye covers on Dick's farm. At late termination, the cereal rye had produced about 5,000 pounds per acre of biomass while the non-cereal-rye mix measured only 3,000 pounds per acre. For Dick, this means, "It's not the cover crop

termination date, it's the amount of biomass produced. When I have good cover crop growth, I will kill it early and plant corn early, a few days after termination, to get my corn planted earlier."

The results of Tim's and Dick's research provide a few key takeaways:

- First, be sure to get out in the field and keep an eye on biomass growth starting a month or two before your target corn planting date.
- If you're getting good biomass growth, start prepping to kill the cover crop early. If your cover crop is cereal rye, you'll probably be in the danger zone for biomass production and you should terminate early.
- While you're out there, check for armyworms; if you've got them, you'll want at least 10 days between termination and planting regardless of biomass.
- And if the weather doesn't cooperate with your termination plan, push back your corn planting date to ensure that you achieve a good window of two to three weeks.

Legume Cover Crops Before Corn in an Extended Rotation

With continued low commodity prices for corn and soybeans, farmers are keen for cost-cutting measures. One strategy is to extend the rotation with a lower-input crop like oats or another small grain. Not only does this reduce expenses, it allows a longer window after small-grains harvest to grow some nitrogen biologically with a legume cover that can offset the need to purchase nitrogen for the following corn crop. "You won't get nitrogen out of [a legume cover] if it's only got a couple months of growth," says Randy Hughes, a PFI member from southern Wisconsin. "So it's got to go in after a small grain."

Randy and his father, Willie – who presented at PFI's 2018 annual conference – farm



Willie Hughes



Red clover plus sweet clover on Wade Dooley's farm near Albion just prior to termination and corn planting. The photo was taken April 15, 2016.

both conventional and organic acres near Janesville, Wisconsin, and routinely use clovers and alfalfa after winter wheat to grow nitrogen for the subsequent corn crop, particularly on their organic and transitional acres. In order to get an accurate assessment of how much nitrogen they can expect from the cover, they use some rough rules of thumb: first-year alfalfa that's more than ankle-high produces about 100 pounds of nitrogen per acre, while second-year alfalfa of the same height will produce about 200 pounds of nitrogen per acre. Clover is a taller plant, but produces comparatively less nitrogen. When it's well above ankle-height but still below the knee, the Hughes' rule of thumb is that it provides 80 pounds of nitrogen per acre.

As organic growers, Randy and Willie favor the classic green-manure termination method of tillage before the main crop is planted. The key, Willie says, is that "you've got to get it dead or it'll be a weed for you too." Their preferred implement is the disc, a 50-foot Sunflower 1550, though they say plowing or chiseling could work. They do one or two passes with the disc when the soil temperature is 45 to 50 degrees, then plant corn when soil temperature reaches 60 degrees.

When it comes to the balance sheet, Randy and Willie see the benefits to their organic operation, but are less sure about the benefits for their conventional acres. "Small grains have made or saved more money organically than they have conventionally," Randy says. "You can buy nitrogen conventionally about as cheap as you can grow it, but in organic you can't." But Wade Dooley of Albion didn't let that stop him from investigating how the practice of growing nitrogen with a legume cover crop could fit in his conventional operation. In the 2015-2016 growing season, he conducted a green-manure study in which he applied less synthetic nitrogen than he normally would have – only 100 pounds per acre – to supplement his clover cover crop. The results were promising: He achieved yields of 180 to 200 bushels per acre. Wade had terminated the clover on April 16 and planted corn on May 6, 2016. Meeting the environmental conditions on the herbicide labels can be tricky, but achieving a complete kill is crucial to maintaining corn yields.

Both Wade and the Hugheses found that allowing maximal time for the legume to grow was directly linked to increased nitrogen production. Randy and Willie

found that nitrogen in the soil at corn planting was higher when they planted alfalfa into winter wheat in the early spring (known as frost-seeding) than when they planted it after wheat harvest in the summer. Wade also compared the effects of frost-seeding clover into his cereal rye crop. In his study, he looked at how yields in that field performed versus a field planted with a multi-species cover crop mix that included field peas that had been seeded after rye harvest. The yields for the plots planted with clover – which had been in the field for a whole year – were higher than the August-seeded mix in all five replications of the study by an average of 30 bushels per acre. So be careful not to overestimate the nitrogen provided by an August-seeded legume; it is, after all, only growing for eight or nine months.

Lessons Learned

Whether it's a legume or grass cover crop, killing it two to three weeks before corn planting is an essential element of success. When conditions prevent cover crop termination, push back corn planting in those fields. The next step is to alter the nitrogen plan with the cover crop in mind. Use the biomass of the legume cover crop to determine how much nitrogen the crop will receive from biological sources and back off on your synthetic or manure plan to reach your maximum return on investment rate.

For grass cover crops, use a split fertilizer application with 35 to 70 pounds per acre of the total nitrogen plan applied before or at planting. It's not a foolproof plan yet, but every season we're learning more about the pitfalls of integrating cover crops with corn production – and making progress towards doing so more profitably. ■

...Conversing & Connecting...





Opposite Page: 1) > Ann Robinson and Jon Tesdell chat during Saturday lunch.

- 2) > The silent auction connected conference attendees with the handcrafts, foods, products and gifts contributed by PFI members and sponsors.
- 3) > Angie Scharnhorst chats with Jason Grimm during a break.
- 4) > PFI lifetime member Nancy Vos (left) visits with representatives of Iowa Sheep and Wool Association, a new conference sponsor.
- 5) > Paul Swanson chats with Suzan Erem of the Sustainable Iowa Land Trust.
- 6) > Danny Harrison (left) speaks with Mike Helland. Both farm land owned by someone else, and presented together during a session on landowners and tenants working together to implement conservation practices.
- 7) > Andrew Dunham (left) chats with Barney Bahrenfuse in the Saturday breakfast buffet line.

This Page: 1) > Maggie Norton, Guang Han and another attendee connect during a networking break.

- 2) > A conference-goer (left) and Chris Stevenson have a chance to visit one-on-one with keynote speaker James Rebanks, author of "The Shepherd's Life," during one of his scheduled book signings.
- 3) > Sheldon Headings (center) and Darren Fehr (right) have a chance to visit with conference speaker Mark Doudlah.
- 4) > Guests at the PFI potluck party have ample time to meet, catch up and connect.
- 5) > Donna Prizgintas and PFI lifetime member Nick Wallace chat during Saturday lunch.



...Family & Friends...



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- 1) > Justin (left) and Rachel Petersen visit with another conference-goer between sessions.
- 2) > Earl Hafner and Helen Gunderson have a chance to catch up during the conference.
- 3) > Dean Henry and Scott Shriver chat during a break in the soil short course.
- 4) > Lorna Wilson (left) and Beverly Gilbert enjoy some laughs and a chance to reconnect during the PFI potluck party.
- 5) > Tom Frantzen (left) chats with PFI co-founder Larry Kallem.
- 6) > Parker Beard (center) enjoys a laugh with Jaron Wilson (right) and another conference attendee.



... Good Food

- 1) ▶ Bob Smith smiles at the roasted pig, which was the meat feature at the PFI potluck party.
- 2) ▶ The variety of dishes brought by potluck attendees is one of the highlights of the event.
- 3) ▶ Beth Larabee (left), a PFI lifetime member, and Lincoln Maharaj fill their plates with food provided by PFI members during Saturday lunch.



Learning & Laughter...



- 4) ▶ Carl Glanzman (left) and Charlie Costello, a documentary filmmaker from Berkeley, CA, enjoy a laugh during the potluck party.
- 5) ▶ Kayla Koether (left) and Irene Frantzen reconnect during the potluck party.
- 6) ▶ Mary Damm takes notes during Mark Bader's solar-powered livestock session.
- 7) ▶ Margaret Smith (left) and Laura Krouse share a laugh while walking to lunch on Saturday.
- 8) ▶ Gordon Brand (left), Harriet Dickey Chasins and another attendee have a chance to network and learn from one another during a group activity at the soils short course.

Committed . . . For a Lifetime

Lifetime members share why they invested in PFI long-term

by Sally Worley

A few years ago, Practical Farmers of Iowa introduced a new membership category: a lifetime membership option where people or households pay a one-time fee of \$1,000 to join PFI for life. As of press time, we are proud to report we have 72 lifetime members.

When we receive new lifetime memberships, we thank those individuals, of course! We also ask why they decided to make the lifetime commitment. For many, it's more than a matter of convenience (these members never have to remember to renew again); it's a symbolic gesture demonstrating their belief in PFI's mission and vision. Here, we share responses from some of those members who have committed to PFI for a lifetime.



Air Philavanh

“A lifetime membership in PFI seemed like a worthy 'pay-it-forward' of dues as an investment in an organization – or should I call it family – that has nurtured me and many other members, and will hopefully nurture many more in the future.”

– Angela Tedesco, Johnston, Iowa

“I chose to become a lifetime member of PFI for four reasons. I wanted to show that I am fully vested in the mission and vision of PFI; I am all in. I wanted to demonstrate my commitment to all the work PFI does to advance sustainable agriculture in Iowa. I wanted to always be able to proudly state that I am a member in good standing of PFI. Since my annual dues are paid, I can direct my future contributions to initiatives most important to me.”

– Dick Schwab, Solon, Iowa

“I am a strong believer and supporter of PFI's mission to foster a more sustainable and conservation-friendly regime of farming, and also its mission to rebuild rural community. As one who remembers the rural Midwest of the 1940s and 1950s, I believe today's mainstream agriculture could learn some valuable lessons from the recent past. There are values beyond the bottom line, and we are poorer by far when we do not honor them.”

– Anonymous



Dick Schwab

“... I did the lifetime membership because I hate renewal notices, it looked like a good way to support an organization that is doing good work and it's a small return on how generous the Iowa land has been to me.”

– Dirk Mol, Champaign, IL

“I am a Laotian who came to the United States in 1984. In 2010, I bought a small property with 11 acres in Milo, Iowa. The first couple years, I joined PFI; later on, I decided to become a lifetime member. I have been working a full-time job at Citigroup and farm on the weekends. Each year, I forgot to renew my membership because I was too busy. I love to farm, enjoy nature and have a good time all the time. I asked myself, 'why don't I become a lifetime member?' I thought \$1,000 was big money, but I think I can meet more farmer friends, get together and learn from them. Sometimes I feel I am very lucky, because without PFI staff, Iowa farmers and field days, I would not be able to learn and get more experience.”

– Phrakhounmany “Air” Philavanh, Milo, Iowa



Liz Kolbe

“We became lifetime members because we strongly believe that locally grown food can have a positive impact in many areas: creating strong small-town communities, providing fresh food with little shipping and minimizing the influence of industrial agriculture. Our current reliance on corn and beans



has created a system at great risk. We need variety in what we grow; we need farmers who want to diversify. From what [past PFI board treasurer] Gail Hickenbottom has told us, members of Practical Farmers care deeply about their land and livestock. I have been impressed with the growth in PFI's membership and attendance at events. You are doing good work that I wish could be replicated in every state!"

– *Liz and Larry Bredeson, West Des Moines, Iowa*

"We decided to become lifetime members because PFI has been a great resource for all of our family. We are hoping Practical Farmers will be around for several years and be a great group for our children to be involved with. PFI helped influence some of our landlords, who weren't landlords at the time, to search for someone like us to farm their farm. We did rent their farm for many years and now have been able to purchase it from them. We are grateful for PFI, so this is our way of saying thank you."

– *James and Julie Petersen, Knoxville, Iowa*

"I believe in the mission. I support diverse farming by feet on the ground of small- to mid-size farmers who care deeply about sustaining farming; and the families and supporters engaged in the effort in Iowa. I have known about Practical Farmers and finally am in a position to give back to organizations such as this."

– *Claire Andreasen, Ames, Iowa*

"We believe in what PFI does and want to see it continue."

– *Kent and Kathy Morris, Atlantic, Iowa*

"Practical Farmers connects me to Iowa farmers and the landscapes in which they work. It is one of the best organizations in the region. I am proud to be able to show my support for PFI by becoming a lifetime member."

– *Laura Jackson, Cedar Falls, Iowa*

"I believe it is time for a new model of farming, one that returns fertility to [and takes it from] the soil. I am hopeful this new model of sustainable farming will be developed and tested by active farmers."

– *Alice Atkinson, Iowa City, Iowa*

"I became a lifetime member because I believe the future of rural Iowa hinges on how successful Practical Farmers of Iowa is at carrying out its mission. I hope that Practical Farmers' vision for



L to R: Jim Petersen, Julie Petersen and Mary Reeves

Iowa comes into fruition in my lifetime. I hope we have a rural landscape and agricultural system that celebrates and learns from our history, one that is diverse not just in its crops and livestock but in its people and ideas, and one that is based on delicious food, strong friendships and a care for the land. I have confidence that farmers are the right people to lead this work, and that we will work together to build that shared vision."

– *Nick Ohde, Ames, Iowa*

"On a recent Colorado trip, I found myself often giving a declaration for Iowa, and then another for Practical Farmers of Iowa. I think the sheer repetition of my comments heightened my conviction and pride in both, and by the end of my trip, I was feeling pretty good about getting to go back to work at an organization I respected. Additionally, I talked with my friends about their jobs and others they had had – quite a few at non-profits. I often found PFI to be comparatively well-managed, true to mission, relevant to and engaged with members. So I decided I should join the others committed to the state and this work and become a lifetime member."

– *Liz Kolbe, Ames, Iowa*



Laura Jackson

"I have followed Practical Farmers of Iowa for many years, graduating from Iowa State in 1986 about the time PFI was founded. I remember reading about Dick Thompson and the work he was doing on his farm in Boone County. I come to know and work with PFI more closely through Sarah Carlson, and speaking about our work with no-till and cover crops. I have used PFI data and information in my PowerPoint programs and promoted PFI when I can. I agree with the mission . . . I enjoy the members and learning what we can do to improve our farm. I'm glad to be a member."

– *Steve Berger, Wellman, Iowa*



Kent and Kathy Morris



Nick Ohde

Learn More

➔ Read about our lifetime membership option – and see the full list of lifetime members – at practicalfarmers.org/lifetime-membership.

Envisioning Farm Diversity

Josh Nelson reflects on the barriers and opportunities

by Nick Ohde

“In tough times, farmers tend to innovate,” says Josh Nelson of Cardinal Prairie Farm near Belmond, “or they get focused on priorities and thinking creatively.” Josh’s family has been farming land in north-central Iowa for a long time – somewhere between four and six generations, depending on how you do the math.

He farms with his dad, two uncles and a cousin – they rent some land together, some on their own, but run the whole farm together. “We all work it as if it was one big family entity,” Josh says. Over the years, Josh’s father and uncles worked a number of off-farm jobs to keep their families fed and the farm running. They worked in factories and started their own businesses. They were welders and machine shop foremen. They all raised livestock and had smaller farm businesses, like selling sweet corn. “We’ve all hustled to find our own way of doing things on the farm,” Josh says, “and I think that ethos has kind of stayed with us.”

overproduction, as even the newer markets created over the last 20 years – such as ethanol – have become saturated. “As grain farmers, we’ve become too good at our jobs,” Josh says.

“It kind of reminds me of what my family went through in the ‘80s, which is what PFI was born out of.” Josh knows several farmers in the area who can’t cut enough costs to pay the bills. “When rents aren’t coming down, and seed corn prices aren’t coming down, and fertilizer prices are staying pretty steady and the bank’s telling you that you need to cut ex amount of dollars – you can’t do it unless a miracle happens. And so, all that, in my head, means we should be diversifying.”

Josh left the family farm to go to college at Iowa State University, where he studied journalism and embarked on a career as a reporter. He worked at several newspapers around Iowa, as well as a stint in Missouri covering politics at the state capitol. His years as a reporter gave him the chance to speak with many individuals and see the diverse approaches people can take to accomplishing something. “So it’s kind



needs to survive to keep families farming generation after generation.

Lack of Markets for Diverse Farm Products

For many farmers, this advice makes sense in theory – but Josh knows there are barriers to getting more farmers to diversify in practice. Lack of reliable markets is one big challenge, he says. In the fruit and vegetable realm, farmers growing those crops on a smaller scale have to devote a lot of time and energy to finding markets – and then marketing their products – and they must contend with the vagaries of pests and weather that can affect the quality and quantity of their harvest.

Groups like North Iowa Fresh (NIF), an aggregator and online marketplace of locally grown and produced food, can help relieve some of this burden and risk. Josh supplies produce to North Iowa Fresh, which has sold wholesale produce to grocery stores and restaurants throughout northern Iowa since 2014. Because NIF coordinates the logistics that take produce from the farm to the retailer, farmers can retain more of the profit margin. But while organizations like this have opened new markets for fruit and vegetable farmers

“The more diversified you are, the less focused you are on making every single enterprise more efficient. Instead, you’re looking at how to make the whole system more efficient.”

Many of Josh’s farming neighbors have shifted toward a focus of raising one or two specialties – such as corn, beans or hogs – and doing it well. He says this shift is understandable, especially when it reliably pays the bills. But he also worries it can limit farmers at times when creativity is really needed. “If you can’t pay your rent, it doesn’t matter how good you are ecologically,” Josh says. “But if you’re solely focused on your bottom line, and solely focused on one or two things, it’s kind of hard to innovate when times get tough.”

Up until about four years ago, specializing on cash grain made a lot of sense. Today, however, grain prices have fallen due to

of frustrating when I see people doing the same old things the exact same way – and that’s what got them in trouble in the first place,” Josh says.

When Josh came back to the family farm at the end of 2012, he knew he needed to diversify, even at the peak of the cash grain boom. He raises row crops, but also has cattle and a produce operation. “The more diversified you are, the less focused you are on making every single enterprise more efficient,” Josh says. “Instead, you’re looking at how to make the whole system more efficient.” This idea is key to Josh’s sense of what sustainability means: It’s the farm itself – the whole system – that



Above: Jan Libbey (red shirt), one of the co-founders of North Iowa Fresh, shares information about the history of the business at a field day in August 2017. **Opposite:** Josh Nelson Nelson at a PFI-sponsored high tunnel-build workshop in 2015.

around Iowa that would not have been available for them as individual farmers, these businesses face challenges, too.

"It's the chicken and the egg problem," Josh says. Understandably, retail buyers want a reliable supply at a certain quantity – and they already have ties to larger regional or national produce aggregators. "They're hesitant to buy from [local aggregators] because they already have a reliable source." Herein is the conundrum: To expand – and create opportunities for more farmers to diversify more easily – these local aggregators need more producers in their network so they can have a more reliable supply; but farmers won't take the plunge and start growing vegetables if they don't believe there's a market in place to access. (To learn more about North Iowa Fresh and read a recap of a PFI field day the group hosted, visit our blog at practicalfarmers.org and search for "North Iowa Fresh.")

The story is the same for small grains markets in Iowa. Grain Millers buys some grain from Iowa, especially organic small grains, but the majority of its grain is sourced from Canada, which can reliably supply grain that meets the quantity and quality Grain Millers requires. "I can grow oats," Josh says. "I've got farms that could

crank out oats, but I have no market. That's the hard part now." He says until we can get somebody committed to buying from Iowa farmers, it will be hard to convince many farmers to start diversifying into small grains. Until then, Josh does his best to figure out ways to make diverse crops like small grains work on his farm – he raises rye for cover crop seed and grazing, for example.

Path to Farm Country Diversity

In Iowa, this "chicken and egg problem" is a significant barrier for farmers who wish to diversify beyond the current staple agricultural products, whether they're seeking to add niche livestock, specialty crops, small grains or other diversified enterprises. How do we overcome this challenge? Josh thinks there are profits to be made for an entrepreneur looking to start a business in rural Iowa – where demand exists for meat lockers, food distributors and even feed or food mills.

"I think there's more money [in those businesses] than people realize," Josh says. "There's a hunger out there for these products. Otherwise we wouldn't be hearing so much buzz about it. I know I'd love to have a mill locally that I could take grain to, have it ground and be able to take it back to feed my animals."

And while there are three state-inspected meat processors within driving distance of Josh's farm, many farmers around the state have no local meat processors, or they have to drive significant distances to access one. "And who's to say we couldn't grow, process and sell something new, like millet?" he wonders.

To be successful at fostering this kind of diversity in Iowa's farm country, Josh believes people with a range of backgrounds and skill sets need to work together. "I've seen a lot of work in rural business development done by people with more experience in the non-profit world than the business world – and that's important," he says, especially when it comes to staying true to the values – the reason you started a project in the first place. "But sometimes margins and business planning aren't nearly as important as they should be."

For instance, to get more rural processors in Iowa – or other niche farm businesses – Josh argues that local banks and investors are going to have to be involved, helping to finance these businesses and get them established in local communities. "If new markets are going to develop, it's going to have to come from within," Josh says. The U.S. Department of Agriculture has funds and resources available through various programs to help farmers and rural businesses access capital, but Josh says those programs are often difficult to navigate. While commodity groups often have individuals dedicated to helping farmers navigate all that paperwork, no such dedicated support exists for farmers trying to grow non-commodity products. "It would be helpful if other groups, like PFI, could do the same."

Josh says we might look to the ethanol boom as an example for how to proceed. "If we look at the ethanol boom, a lot of that was guided by farmers forming cooperatives. We could form new feed cooperatives," Josh says. Hamilton County, for example, is centrally located with lots of grain farmers and livestock producers. "We would just need plenty of farmers invested in its success." ■

Finding the Cash in Cover Crops

Cereal rye ahead of soybeans is a good fit for Iowa

by Stefan Gailans

Iowa's agricultural landscape is dominated by a two-crop system that looks like this: A field is planted to corn in the spring, harvested in the fall and left unplanted over the winter (known as "winter fallowing"). The following spring, that field is planted to soybeans, which are harvested in the fall – and the field is once again left fallow over the winter. The next year, the cycle repeats with corn. While this corn-winter fallow-soybean-winter fallow system has worked to produce abundant crop yields, it has also led to worrisome levels of soil erosion and water pollution – a reality that calls into question the long-term sustainability and resilience of this production system.

Researchers argue that incorporating cover crops or small-grains crops (or both) into this two-crop system would have the greatest positive effects on soil and water quality. The Iowa Nutrient Reduction Strategy, initially released in 2012, counts cover crops like oats and cereal rye among the most effective in-field practices for reducing soil erosion and nutrient loss. This conclusion stems from numerous scientific studies conducted around the state that found levels of nitrate in drainage water – the water that eventually makes its way from farm fields to Iowa's rivers, streams and lakes – were significantly lower during the spring and fall when a living cover crop was present compared to bare soil (winter fallow). The reason? Actively growing plants, like cover crops, intercept nitrogen that's been left in the soil, locking it up; and they hold soil in place that might otherwise be lost to erosion.

Not surprisingly, Practical Farmer members are chief among the "early adopters" of cover crops in Iowa. They're also paving the way for the most successful uses of cover crops. According to our 2017 member survey, 63 percent of Practical Farmers' 3,000-plus members report using cover crops on their farms. This is reflected in our Cooperators' Program: cover crops have been the dominant focus of on-farm research projects for the past 10 years. In that time, over 50 cooperators have conducted over 160 trials involving cover crops. These trials have explored the feasibility of adding a range of cover crop species to cash crops like corn and soybeans. But by far, the most successful cover crop species in terms of fall and spring growth is overwhelmingly cereal



rye. Of all the cover crops tested, cereal rye handles our winters best – brassica and legume species just don't have enough time in the fall to grow adequately after planting. On-farm research has also shown that, with proper management, cereal rye can successfully eliminate the winter-fallow portion of our corn-soybean systems – and it can do so while remaining an economical option for farmers.

Cereal Rye Before Soybeans: All Mulch, No Weeds

Planting cereal rye ahead of a soybean crop offers the best chance for cover crop success (see also Alisha Bower's article on pg. 12 about using cover crops with corn). From the on-farm research he's conducted, Jack Boyer says, "I get the impression that with soybeans, you have considerable flexibility with termination date for the cover

crop." Jack and his wife, Marion, are lifetime members of Practical Farmers and farm near Reinbeck in Tama County. Like many others, Jack was initially under the impression that a cover crop should be terminated 10 to 14 days prior to seeding your cash crop. In all fairness, this is probably a good rule-of-thumb for first-time cover crop users. But in 2015, Jack got curious about narrowing the time between terminating the cereal rye and seeding his soybeans. That year, he found his yields were similar whether he terminated the cereal rye nine days prior to seeding soybeans or the day after. Moreover, the soybeans with the cereal rye yielded just as well as the soybeans with no cover crop, averaging 70 bushels per acre across the field.

While this was certainly a welcome result, Jack says "the most interesting part of the trial was the improved control of waterhemp in the cover crop areas versus the no-cover areas." Where he waited until the day after seeding soybeans (May 19) to terminate the cereal rye, Jack had upwards of 8,000 pounds of dry matter per acre in those strips. When it came to treat that field for weeds in July, Jack decided to not apply herbicide to the strips with all that dry matter: The resulting mulch persisted well into summer and autumn, keeping those areas mostly free of weeds. Jack figures he saved \$40 per acre in herbicide costs thanks to the cereal rye cover crop. Having spent between \$25 to \$30 per acre to seed the cover crops the previous fall, Jack came out ahead by \$10 to \$15 per acre in 2015.

Jeremy Gustafson, of Boone, conducted the same trial as Jack. In 2016, Jeremy cut weed control costs by nearly \$30 per acre by waiting to terminate his cereal rye cover crop until just two days before seeding soybeans on May 7. Just as for Jack, the cost-savings was due to the tremendous amount of cereal rye growth – which resulted in 8,000 pounds of dry matter per acre (just as Jack achieved the year before). Jeremy also observed no difference in yield compared to where he terminated the cover crop 20 days prior to seeding the soybeans in 2016, averaging 60 bushels per acre. "The beans in the late termination treatment were noticeably shorter at



Above: (Left) Soybeans with a cereal rye cover crop mulch at Jack Boyer's farm near Reinbeck on July 22, 2017. **(Right)** Jack Boyer (right) and PFI Research and Field Crops Director Stefan Gailans look at rye that has been rolled at an Iowa State University research plot. **Opposite:** Jeremy Gustafson looks at a cereal rye cover crop the day he planted soybeans in May 2016. (Photo courtesy of Dean Houghton of The Furrow)

harvest," Jeremy says, "but the plants were podded-out top to bottom."

This is the "cash in cover crops," so to speak: swapping chemical weed control (herbicides) for biological, physical weed control (cover crop). In the years since his initial trial in 2015, Jack has been able to either reduce or completely eliminate post-emergence herbicide applications in his soybeans by widely adopting this practice: waiting until soybean seeding time to terminate the cover crop. Some refer to this practice as "letting the cover crop run" in the spring.

Jack and Jeremy's findings corroborate prior university research conducted by Dr. Adam Davis in central Illinois, which showed that the residual dry matter from a cereal rye cover crop can control weeds in soybeans as well as herbicides if you can achieve over 6,000 pounds of cover crop dry matter per acre. Master cover cropper Dave Brandt shared with a busload of Practical Farmers members, who visited him last summer, that he routinely uses this technique to control weeds in soybeans on his farm in central Ohio. And after nine years of study, farmer-researchers across Iowa who've been collaborating with Iowa Learning Farms and Practical Farmers of Iowa continue to see success with a cereal rye cover crop ahead of soybeans. In fact,

over the past three years, four of the 10 trials in the study saw improved soybean yields that were statistically significant thanks to the cover crop compared to strips that did not have a cover crop.

Preparing for Planting

Proper planter or drill settings when seeding the cash crop are key to achieving success with cover crops. Jack prefers seeding his soybeans using a drill that has 10-inch row-spacings and is equipped with spiked cast-closing wheels. He typically seeds soybeans into a living cover crop and terminates within five days of seeding. The harrow on the back of the drill also helps to knock down the cereal rye plants, creating a mulch mat that lies on the ground. Jack says that when seeding into green rye, there are fewer problems with straw wrapping on the drill or planter components.

Jeremy plants his soybeans in 30-inch rows. "We have double-disk openers and floating row cleaners on the front, but we lift those row cleaners all the way up because we don't need them when planting into rye," Jeremy says. "On the back of each planter unit, we have one 15-inch spiked closing wheel and one rubber closing wheel. The spiked wheel makes all the difference when the soil is firmer because of the cover crop and no pre-plant tillage. It loosens the soil a bit, and the rubber wheel re-packs the

soil." Getting the soybean seed into the soil and covering up the slot is crucial to success. "You must account for the cover crop residue when setting drill or planter depth for seed placement," Jack says. Jeremy adds that he seeds soybeans a quarter-inch deeper when planting into a cover crop. In the end, any way farmers can effectively get the seed into the ground will be beneficial to the crop's potential.

A cereal rye cover crop ahead of soybeans, if widely integrated into our crop management systems would significantly improve our soil and water – and this practice is a good fit for our predominant cropping system. Not only does it offer the potential for farmers to reap short-term economic benefits, it could eliminate one of the major winter-fallowing periods in Iowa. Practical Farmers members know this, and are spreading the word. ■

Learn More

Visit practicalfarmers.org/farmer-knowledge/research-reports to access research reports exploring cover crops ahead of soybeans, rolling cover crops in soybeans, the effect of cover crops on cash crop yield – and more. You can search by keyword, cooperator or member priority.

Conservation Planning

A tool for sustainable agroecosystems

by Emily Zimmerman

On a cold, January morning, I sat in the kitchen of friend and PFI farmer Wendy Johnson, sharing cups of steaming coffee and eating a homegrown breakfast. While we ate in front of windows overlooking her snowy pasture, we talked about opportunities for her farm – opportunities in conservation. Using aerial images of her fields and the wide expanse of windows to guide our conversation, Wendy shared her agronomic, economic and environmental goals for her farm, and we talked about strategically locating, designing and implementing conservation practices that would align with her farm and goals. Together, we had begun the process of conservation planning.

What is conservation planning, and why is it important in Iowa?

Conservation planning is a process through which farmers and farmland owners work with natural resource professionals to identify, design and implement conservation practices that meet agronomic, economic and environmental goals. As a doctoral student at Iowa State University, conservation planning is the central focus of my dissertation research. My interest in this process grew out of observations of Iowa's landscape. One of the most prominent features of Iowa's landscape is the degree to which it has been designed, constructed and managed by humans for agricultural production. According to the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS), in 2016, 85 percent of land in Iowa was used for agriculture. Iowa leads the nation in the production of corn, soybeans, eggs and hogs, which collectively generate annual revenues of over \$20 billion and support tens of thousands of jobs.

This agricultural productivity is important – and something Iowans should be proud of. But it often comes with an environmental tradeoff: soil erosion; declines in the quality of water for drinking and recreating; and loss of habitat and food for wildlife, pollinators and beneficial insects, among others. My research lies at this complex socio-environmental intersection. I want to answer the question: How can small changes in agricultural land management expand both the economic and environmental opportunities for farmers and farmland owners to raise agricultural products while benefitting the environment?

That's where conservation planning comes in. This process helps farmers and farmland owners start to identify conservation practices that could increase environmental benefits on and off the farm, potentially boost their average yields and expand both their market opportunities and their land stewardship.

How does conservation planning work?

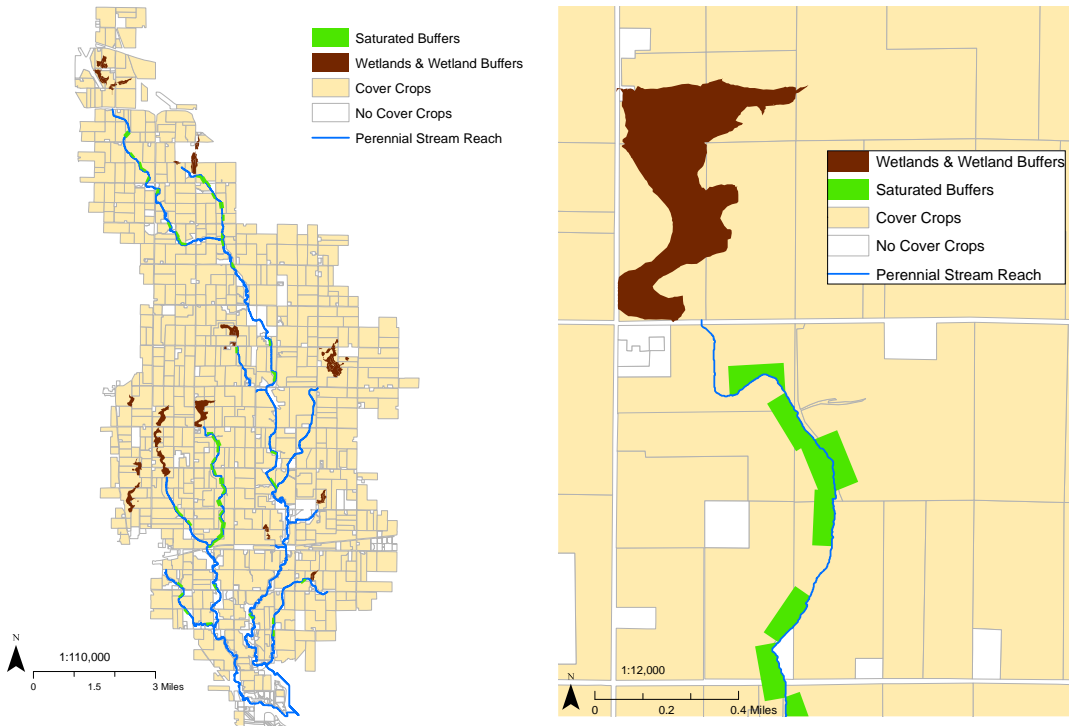
Conservation planning is a multi-step process undertaken by farmers or farmland owners in partnership with natural resource professionals, such as local Natural Resources Conservation Service staff, extension professionals and conservation experts. Similar to my conversation with Wendy, an important first step in conservation planning is understanding a farm's management and goals, and opportunities for conservation. For example, a conversation might include the following questions:

- What crops and livestock do you raise, and what management practices do you use (such as crop rotation, grazing management, nutrient management, etc.)?
- What are your current and future agronomic, economic and environmental goals?
- What opportunities exist for conservation on your farm, and how do those complement your farm management and goals?

For Wendy, the benefits of conservation planning include meeting her agronomic goals, but they also include a desire to improve her land stewardship and help the environment on and off her farm, particularly related to water management. As we chatted, we talked about the potential for installing riparian buffers and nutrient removal wetlands in strategic locations on her farm to more effectively manage water and nutrients.

To prioritize the selection of conservation practices – and guide their placement and design on a farm – geospatial data and models can be used to complement discussions with farmers and farmland owners. Geospatial data includes spatially explicit information about topography, hydrology, soils, land use and management, and property boundaries. Much of this data is available to the public and can be entered into conservation planning models, such as the USDA Agricultural Conservation Planning Framework (ACPF) toolbox. Software like this uses geospatial data to infer biophysical conditions and vulnerabilities for nutrient and soil loss at field and watershed scales, and can help users to identify locations that may be particularly important for practices such as cover crops, riparian buffers and wetlands, among others. The conservation planning software also helps with decisions on the best placement for those practices, and can highlight areas on a farm where there are opportunities to improve soil health, water quality, wildlife habitat or other environmental attributes.

Cost-accounting is also an important part of the conservation planning process. While finding opportunities to integrate environmental management with agricultural production goals on vulnerable acres is an important facet, the planning process acknowledges that there is an economic component anytime changes are made on a farm. Whenever a new conservation practice is adopted, there are costs to implement and manage it.



Conservation Planning in Action:

The map on the left demonstrates one plausible conservation scenario that includes wetlands and wetland buffers, saturated buffers and cover crops for a watershed in central Iowa. The map on the right shows a higher-resolution image of field-level conservation practices in that same watershed.

During the process of conservation planning, farmers or farmland owners, working with natural resource professionals, may consider many scenarios involving a range of practices, contour buffers to terraces to grass waterways, among others. These conservation plans were developed using the USDA ARS Agricultural Conservation Planning Framework, which is a publicly available toolbox for ArcGIS. Data and the tool can be downloaded at northcentralwater.org/acpf.

There may also be costs related to potential yield changes from in-field practices, such as cover crops, or revenue that's forfeited by removing land from cultivation altogether, such as when installing a wetland. Conservation planners can use publicly available data on cash rental rates in tandem with soil survey data on field-level productivity to infer areas of the field and watershed that are likely to be the most productive – and hence the most economically valuable for agricultural production.

Using this approach – where farmer or farmland owner insights are paired with biophysical and economic data – the conservation planning process can identify fields that are good candidates for adding conservation practices that address environmental goals at the lowest cost. Conservation planning can also streamline the process of implementing new conservation practices. For instance, once suitable locations have been identified on a farm, the conservation planning process can help to strategically place and prioritize the practices best suited to those vulnerable areas. The conservation planning models can produce field- and watershed-level maps of plausible conservation scenarios, which farmers or farmland owners and other stakeholders can use to help determine how those conservation practices align with farm goals and management.

Once the scenarios are created, conservation planning can help participants evaluate the extent to which adopting a given scenario would benefit the environment. More broadly, the process can envision the impacts on a regional scale. For example, at the watershed level, would adopting a conservation practice, or set of practices, reduce nutrient loss to a level that meets the goals of the Iowa Nutrient Reduction Strategy?

A win-win for farmers and the environment

Identifying high-impact conservation areas and removing them from cropping can be a win-win for farmers and the environment. Not only can farmers reduce agronomic costs, installing appropriate practices in these areas typically boosts average crop yields – and can improve moisture management, nutrient cycling and soil health. Long-term, these environmental gains can boost crop yields and minimize fertilizer and soil management costs. At the broader watershed level, the benefits extend to the wider community through improved water quality, flood mitigation, recreational opportunities and more.

As Wendy and I continue to discuss conservation planning on her farm, we will work together, using her knowledge of her farm in tandem with geospatial data and models, to identify suitable practices that meet her goals and can lead to environmental benefits on and off the farm. This collaborative process is one of the strengths of conservation planning: It empowers farmers and farmland owners to forge a path that integrates land stewardship with their unique goals and needs. ■

Emily Zimmerman is a PFI member and a doctoral candidate in Sustainable Agriculture and Environmental Science at ISU. To talk more about agricultural conservation planning, Emily can be reached at emilyz@iastate.edu.

Make Your Ask

by Sarah Gilbert

A beekeeper from Michigan, a vegetable grower from California and a seed scientist from Florida walk into a Senate office building . . . I don't have a punch line yet, but I did have the privilege of meeting those three farmers, and 11 others from across the country, in Washington D.C. last November.

We were brought together by the National Sustainable Agriculture Coalition (NSAC), which represents over 100 grassroots organizations including Practical Farmers of Iowa. NSAC's mission is to advocate for the sustainability of agriculture, food systems, natural resources and rural communities – in this case, by bringing farmers to share how conservation and beginning farmer programs have benefited their operations.

The current farm bill is scheduled to expire on Sept. 30, 2018, so now is the time for discussions about the direction of the next farm bill legislation. Along with Anna Johnson from the Center for Rural Affairs, I met with staffers for Iowa Republican senators Joni Ernst and Chuck Grassley. I shared specific examples of how my family has used the Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP), and explained PFI's Savings Incentive Program and Labor4Learning program, which receive funding through the farm bill's Beginning Farmer and Rancher Development Program.

I also met Rep. David Young from Iowa's 3rd District (Des Moines and southwest Iowa), and was part of a larger group of farmers who met with the minority staff of the House Committee on Agriculture. These staffers write the actual language minority Democrats will propose, and they had specific questions about the implementation and results of conservation and beginning farmer programs.

Most staffers and legislators were primarily concerned with the tax bill being written at the time of our visit, but some also seemed relieved to be focusing on something else like the farm bill. Conserving our working landscape and supporting the next generation of farmers should be no-brainers, but at each meeting, we heard a healthy dose of budgetary caution and a hesitation to commit to championing these programs. I was heartened by the knowledge and passion of the NSAC staff that trained and accompanied us. The fact that they are in Washington gives me hope for this farm bill and sustainable agriculture policy moving forward.

In our orientation, NSAC staff helped us practice making the "ask" – directly asking the Congress member or staffer to co-sign a specific bill or commit to supporting specific programs. The ask for all of these meetings was to maintain current funding for conservation programs in the next farm bill, and to include the Beginning Farmer and Rancher Development Program in the



funding baseline. Looking around the hallways and cafeterias of the House and Senate office buildings, watching lines of people shuffle through the doors and metal detectors, it struck me that everyone was there to ask for something. The staffers seemed legitimately interested in hearing from constituents. If you've ever wondered if calls, emails and faxes make a difference, I believe they do. But if you ever have a chance to meet with your representatives or their staff in person, take advantage of that opportunity to make your ask. Organizations all over agriculture encourage farmers to "tell your story." This goes for politics too; your representatives need to hear details of how policies impact your life and your business.

I encourage every PFI member to make your ask this year, whether over the phone, via email or fax, or even in person. Find an issue that excites you and tell your story. Make your ask! ■

Sarah Gilbert farms with her husband, John C. Gilbert, and his family near Iowa Falls at Gibraltar Farms, a diversified crop and livestock farm with a 60-cow dairy, farrow-to-finish hogs, corn, soybeans, small grains, hay and silage crops.



Earl Hafner Receives 2018 Sustainable Agriculture Achievement Award

by Tamsyn Jones

Earl Hafner, of Panora, is the recipient of PFI's 2018 Sustainable Agriculture Achievement Award, granted each year to someone who has shown exemplary commitment to sustainable agriculture, generously shared his or her knowledge with others and been influential in efforts to foster vibrant communities, diverse farms and healthy food.

Earl farms with his son, Jeff, at Early Morning Harvest and Hafner, Inc., a 2,000-acre diversified farm that includes certified organic row crops and grass-fed cattle; hogs; small grains; vegetables and tilapia raised in an aquaponics greenhouse; pastured poultry for egg production; honey; flours milled on-site from certified organic wheat, rye, buckwheat and corn raised on the farm; and value-added products made from their cereal grains. The Hafners use cover crops and extended rotations to help build soil health, and they don't use any synthetic chemicals – a fact Earl takes great pride in. The diversity of enterprises on the farm is a reflection of Earl's belief that farm sustainability must encompass not just land stewardship, but economic resilience as well. "Sustainable means you survive through all conditions," Earl says. "The farm has to pay its way, whether you're paying 18 percent interest like we did in the '80s, or you have \$3 corn. The farm has to sustain itself and the family."

The Vital Art of Observation

Earl says that mentality – and the kind of diversified farm that was a natural extension of it – was common when he was growing up on the farm in the 1940s and '50s. He adds that, back then, sustainability had an entirely different meaning – one related to farmers' ties to both the land and the surrounding community. "In the '40s and '50s when you talked about sustainability, it meant the farmer's ability to observe his soil, his crops and his livestock in order to have a healthy farm, because he did not have



all this modern technology. It was also a matter of commonality between farms. Back then, there was a farm every quarter-section, every half-section. There were a lot of farmers to trade ideas with – much like Practical Farmers of Iowa does – that helped farms to survive, and observation was key to everybody's survival."

Concern Over Chemicals' Impacts

Earl's journey to his present way of thinking traces back to his upbringing on the farm – though it also evolved as he saw the advent of synthetic chemicals, both their benefits and their perils. Growing up, his family never used chemicals on the farm – though they did later adopt some of the new chemicals that were being developed. At first, Earl says the new products held great promise to reduce farm costs and improve farmers' standards of living. "When chemicals first came along, it was great," Earl says. "Your cost of production went down and you could have more volume, so you actually increased your income and could improve your lifestyle."

His family farm increased from 120 to 400 acres, and when he returned to the farm in the 1980s after years working several agriculturally related jobs off the farm, he too initially adopted synthetic chemicals as part of the farm's management practices. But he became increasingly disillusioned with them. From his military training in

nuclear, biological and chemical warfare, he had a deeper understanding about the properties that made chemicals work, and the negative effects they could have on the health of people and animals. He was also dissatisfied with how they performed on the farm – and he became increasingly concerned about the lack of safety protocols and the impacts of chemical residues.

"I never liked the results I saw," Earl says. "We just didn't realize the long-term effects of chemicals on the soil. I did a lot of research and reading, and concluded that if you have a chemical residue that's in the food chain in a minute amount, it can affect your microbiome. Everything has its personal microbiome, whether people, animals or the soil. Anything that interrupts that population of bugs will have an effect on health. With pigs and cattle, they're not going to perform as well."

Pioneering a Path to Sustainability

These mounting misgivings led Earl to abandon synthetic chemicals altogether. In the late 1990s – a time when crop technology was moving rapidly in the other direction, towards chemical-based farming and genetically modified crops – he started switching the farm to organic, and has been certified organic for about 20 years. In 2011, Earl and Jeff opened Early Morning Harvest, which added the aquaponics greenhouse, chickens and on-farm milling to their suite of commercial enterprises.

These ventures had started as personal hobbies. Jeff had returned from his second tour in Iraq, where he studied aquaponics and agriculture. Meanwhile, Earl had been making his own breakfast cereal and was inspired by the possibility of turning cereal grains – which the Hafners already raised – into homemade flour.

(Continued on pg. 28 →)

We've Moved!



If you haven't yet heard the news, we moved to a new office at the end of February. As our work has amplified – and with it our staff size – we finally outgrew our cozy office in downtown Ames and relocated to a much more expansive location in the Aspen Business Park, on the south side of town.

Our new office is located at **1615 Golden Aspen Drive, Suite 101, Ames, IA, 50010**. This new space will comfortably

(← Continued from pg. 28)

"It was a hobby that went wild," Earl says. "We started on a personal level, but we started getting calls for 500 pounds of cornmeal. We were getting enough requests for more volume that we put in a bigger mill."

Now, Early Morning Harvest flours and value-added products can be found in stores across Iowa. Earl and Jeff have also cultivated markets for their tilapia – customers who believe it tastes better than typical tank-raised fish, Earl says – and they direct-market their vegetables to customers via a weekly email newsletter.

An Unassuming Leader

For Earl – who has also been active in Practical Farmers of Iowa, hosting field days and tours on his farm, leading sessions at the annual conference, participating in on-farm research, serving

accommodate our growing staff, including more offices and meeting rooms. The office includes a large meeting space – which we are happy to loan out to friends and partners when it is available. Please come visit us at our new office! We also plan to host an open house on April 2; stay tuned for more details.

Questions? Need directions? Our phone number has stayed the same. Call us at (515) 232-5661. ■

on PFI's board of directors and helping to mentor beginning and aspiring farmers – his farm's accomplishments are just an extension of his personal beliefs about farming, resiliency and taking the wellbeing of people, animals and the land seriously.

This humility is also a core part of his character. When PFI board president Mark Peterson, of Stanton, notified him that he had been chosen for the award, he says he didn't believe it at first.

"I was giving a tour in the greenhouse and I said, 'Bologna. There's got to be better, smarter people than me.' When he said [the board] voted on me, I had to step back and think," Earl says. "I consider myself blessed my whole life – and receiving this award is a part of that." ■

Richard Lane Joins PFI's Cover Crop Team



Richard Lane is the newest addition to the Practical Farmers of Iowa staff. In January, he joined PFI's cover crops team and will serve as our new strategic initiatives assistant. Richard grew up in Newton, Iowa, on his family's row crop and livestock farm along the South Skunk River, where he helped with all aspects of the farm, from raising sheep and goats to baling hay to helping with the corn and soybean acres. He enjoys learning about new technology and how it can help people and farms stay organized and be more productive.

While working toward his bachelor's degree in chemical engineering at Iowa State University, Richard worked for the City of Ames for nine years as a driver for the CyRide bus system. In 2012, he moved back home to work on the family farm and learn about managing a large number of corn and soybean acres, which taught him the importance of sustainable practices in modern agriculture.

Richard lives in Huxley with his wife, Megan – who works as a designer and editor with Gannett Publishing in Des Moines, proofreading Wisconsin newspapers – and their adorable dog, Alvin, a Chihuahua-Chinese Crested mix who loves going to the dog park and playing with dogs five times his size.

You can contact Richard at (515) 232-5661 or richard@practicalfarmers.org. ■

Get Ready for Spring Cover Crop "Caravan" Field Days!

For the second year, we have organized a series of spring field days devoted to cover crop issues in row crops and livestock. Please join us at an event near you to network with and learn from other farmers. All events are free, start with lunch and run from noon – 3 p.m.

COVER CROPS for CORN and SOYBEANS

MARCH 27 – Hosted by Mike Jackson – Oskaloosa (two stops)

TOPICS: Cover Crop Species Selection • Spring Cover Crop Management • Scouting for Insects • Achieving Long-Term Goals with Cover Crops

MARCH 28 – Hosted by Josh Nelson and Austin Charlson – Clarion & Belmond (three stops)

TOPICS: Cover Crop Species Selection • Spring Cover Crop Management • No-Till and Strip-Till

MARCH 29 – Hosted by Clark Thompson – Story City (two stops)

TOPICS: Cover Crops in a No-Till System on Heavy Soils • Herbicide Plan for Establishing Cover Crops • Planter Set-Up • Bioreactors

APRIL 4 – Hosted by Don Elsbernd – Postville

TOPICS: Cover Crop Seeding Dates for Northern Iowa • Delayed Cover Crop Termination • Soil Health Benefits of Cover Crops • Interseeding Cover Crops in Corn



Guests learn about cover crops from Russ Brandes during a field day in last year's spring cover crop series.

GRAZING COVER CROPS

APRIL 3 – Hosted by Bill Frederick – Jefferson

TOPICS: Cover Crop Grazing Mixes and Rates • Fall and Spring Grazing Management • Spring Termination

APRIL 5 – Hosted by Zac Kennedy – Cumberland & Atlantic

TOPICS: Grazing Backgrounders and Cow-Calf Pairs • Tea Bags and Soil Health • Grazing Potential of Varied Fall Planting Dates

Please RSVP for events to Debra Boekholder at (515) 232-5661 or debra@practicalfarmers.org – and watch practicalfarmers.org and Practical News for more specific details about each event. ■

Welcome, New Members!

District 1 – Northwest

- Doug Andresen – Alton
- Mark Donkersloot – Sanborn
- Bridget Durst – Cherokee
- Laura and Bill Foell – Schaller
- Joel and Maureen Horsley – Ruthven
- Michael and Debbie Jensen, Moonshadow Farm – Castana
- Sarah Nizzi – Cylinder

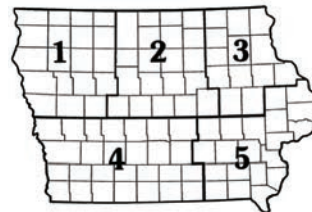
District 2 – North Central

- A.J. and Kellie Blair, Blair Farm LLC – Dayton
- Rachelle Boekholder – Iowa Falls
- Brenda Brink – Huxley
- Joshua Budi – Ames
- Cornbred Barbecue, Ryan Newstrom – Ames
- Clarence Ginder – Osage
- Guang Han – Ames
- Mark and Kathy Hansen – Woodward
- Mary and Steve Hinderhofer – Marshalltown
- Samuel Ikendi – Ames

- Leonor Leandro, ISU Plant Pathology and Microbiology – Ames
- Leeward Solutions, LLC, Leland Searles – Marshalltown
- Carly McAndrews – Ames
- Zach Minnihan – Jefferson
- Maggie Norton – Ames
- Benjamin Pederson, Vital Grains – Lake Mills
- Martiza Pierre – Ames
- Tracy Rasmussen – Ames
- Erika Rodbell – Ames
- Ann Russell – Ames
- Matthew Swanson, JSC Stock Farms – Story City
- Thomas Thurston, Thomas Taylor Designs – Marshalltown
- Emily Waring – Ames

District 3 – Northeast

- Amy Andrews – Shellsburg
- Ronald Bedford, Cedar Rapids
- Jon and Amy Feldmann – Epworth
- Bridget Fonseca, Matthew 25 – Cedar Rapids



- Brandon Friedlein, Friedlein Produce – Guttenberg
- Karen Gregoricka – Springville
- Tor Janson – Calmar
- David Johnson – Ocheyedan
- Northeast Iowa Food Bank, Michelle Sullivan – Waterloo
- Jason Oylo – Decorah
- Erich and Abbylee Priebe – Sumner
- Connie Reiersen – Clermont
- William Rogan – Troy Mills
- Ben and Sarah Rothman – Independence
- Jonathan Specht – Decorah
- Kurt Uhlenhake – Ossian
- Tricia and Dave Welter – Cedar Falls
- Fred Young, Gayle Clark – Hiawatha

(Continued on pg. 30 →)

Watch for Field Day Guide!

After a long, cold winter – one both uniquely beautiful and taxing this year, with its distinctly hyperborean attributes – we will all be anticipating the coming spring with greater appreciation for its warmth, the return of green to the landscape and the prospect of easier days ahead – and the chance to once again connect with one another for learning and camaraderie on PFI member farms across the state.

In response to your feedback, we have started our field day planning process earlier this year, in hopes of getting the finished 2018 Field Day Guide delivered to your mailboxes by the end of May. Stay tuned for updates! ■

New Members & Upcoming Events

District 4 – Southwest

- Gordon Brand – Newton
- Kari Carney, 1000 Friends of Iowa – Des Moines
- Barrett Chambers, Barrett Chambers Ag – Treynor
- Craig Cheatham, Urbandale
- Roxanne Dunn, Dunns Sunset Farms – Prole
- Tim Gannon – Des Moines
- Jeff Hanselman – Earlham
- Innocent Kabahizi and Marie Kashindi – Des Moines
- Roth Mallen – Leon
- Linda and George Marshall – Malvern
- Darcy Maulsby – Lake City
- Ray McNaught – Afton
- Matthew Moore, Green Grass Farms – Bedford
- Matt Noble – Des Moines
- John Norris – Des Moines
- Larry Plagman, Rainbow Hills Inc. – Carson
- Andrew Plate – Grinnell
- Mitch Ramsey – Osceola
- Dean Scott – Adel

- Evelyn Shawver – Des Moines
- Martha Skillman – Indianola
- Bob and Marianne Sullivan – Woodbine
- Cole Thompson – Elkhart
- Sharon Tinker – Ankeny
- Jeff Topel – Des Moines
- Wayne Wilson – Urbandale
- Curtis Wilson – Guthrie Center
- Grace Yi – Des Moines
- Andrew Yoder – Decatur
- Ali Young – Des Moines

District 5 – Southeast

- John and Tasha Beghtol, and Dennis Boecker – Washington
- Riley Bossard, Gold Standard Ag, LLC, – Monticello
- Jeff Buresh – Marengo
- William Fortin, Fortin Farms Inc. – Danville
- Jerry Fottrall, Plum Creek Farm – Swisher
- Anna Hankins – Solon
- Isaac Hooley – Iowa City
- Tanner Jewett – Solon
- Todd Kiefer – Kalona

- Craig Lang, Prairie Strategy Group – Brooklyn
- Ariel Levin – Solon
- Connie Mathes – Montezuma
- Erin Melloy – Solon
- Claudia Putnam – Letts
- Laurel Tuggle – Grinnell
- Bob Walker, Walker Homestead – Iowa City
- Paul Wells – Milton
- Ellen Wrede – Iowa City

District 6 – Out of State

- Rob Banger – Rolling Meadows, IL
- Kurtis and Patricia Birusingh – Los Angeles, CA
- Jodi Bunting, Simple Traditions Farm – Redwood Falls, MN
- Steve Buxton, Two Mile Creek Organic Farms – Sullivan, IL
- Randy and Crystal Clair, Sunset Lake Organics – Loraine, IL
- Brian Corkill, B. A. Farms, Inc. – Galva, IL
- Carl Eliason – Renner, SD
- Andy Faeh, Andlor Inc. – Marquette, NE
- Marc Hemmes – Estes Park, CO
- Justin Jones, Jones Produce – Crete, NE
- TJ Kartes – Shedd, OR
- Jim Knopik – Belgrade, NE
- Sally McCoy – Edgerton, WI
- Curt McNamara – Minneapolis, MN
- John and Molly Meyer – Bellflower, IL
- Herbert Miller – Poynette, WI
- Joe Mutschler, Mutschler Organic Farm – Wells, MN
- Wayne Peterson – Dayspring Farm, Northfield, MN
- Louis Pofahl – Norfolk, NE
- Debra Robinson – Omaha, NE
- Ryan Robinson – Renville, MN
- Allan Roby – Brentwood, CA
- Thomas Salter, Golden Circle Farms – Unionville, MO
- Glen Schlueter, Schlueter Farms – Winthrop, MN
- Matthew Tentis, White Barn Acres, LLC – Rochester, MN
- Tiffany Tripp and Andy Olson – Faribault, MN
- Mike Williams – North Bend, NE

UPCOMING EVENTS ~ MID-MARCH | APRIL | MAY

MARCH

March 17: On-Farm Poultry Processing | Story City | 1 – 5 p.m.

Learn about safe and efficient poultry processing for on-farm exempt processing (fewer than 1,000 birds). Ty and Bobbie Gustafson of Story City Locker will review safe, small-scale butchering procedures. An organic certifier will answer questions about organic poultry requirements, and Tom Watkins will show a processing set-up. To learn more and RSVP, visit iowaorganic.org/poultry.

March 21 – 22: Iowa Water Conference | Ames

This multi-disciplinary gathering brings together a diverse mix of stakeholders, from farmers and researchers to community planners and others, to discuss relevant water issues across Iowa. Explore current trends in water resource management in both urban and rural landscapes, with a particular emphasis on the interconnected nature of our water resources, and the opportunities this offers for collaboration. To learn more, visit: aep.iastate.edu/iwc/homepage.html.

March 22: Agritourism Destination Safety and Health Best Practices Workshop | Altoona

In this free ISU Extension workshop, learn safety and health best practices for your agritourism operation. Topics will cover food safety, legal risks, play area safety, pesticide safety, biosecurity risks and emergency preparedness. To learn more, visit: visitiowafarms.org/events-0.

March 23 – 24: Good Food Expo | Chicago

Join others from across the Midwest and U.S. who are passionate about the benefits of a sustainable, local food system. The event will feature a mix of sessions and panel discussions on a range of farm and policy topics; a trade show with more than 100 sustainable food exhibitors; a "good food commons" featuring more than 150 vendors of artisanal products; chef demos and workshops; and more. To learn more, visit: goodfoodexpo.org.

APRIL

April 3 – 5: Our Farms, Our Future Conference | St. Louis, MO

This national, once-in-a-decade event will bring together farmers and ranchers, agribusiness stakeholders, students, researchers, scientists, agency representatives and non-profit leaders. Every decade SARE hosts a conference to look at the progress of sustainability in agriculture and to understand our trajectory for the future. The agenda includes farm tours, networking, plenary and breakout sessions, local food and more. To learn more, visit ofof.sare.org.

April 7: Morel Mushroom Identification | Ames

Every spring, ISU Extension leads certification workshops for those interested in legally selling morel mushrooms in Iowa. This is the first of three identical workshops offered this year (the other dates are April 14 and 21, all at ISU). By the end of this three-hour class, you will be able recognize true morels from false morels. To learn more, visit ipm.iastate.edu/morel-mushroom-certification.

April 27 – 29: New Farmer U | Wisconsin Dells, WI

MOSES and Renewing the Countryside are excited to partner with Land Stewardship Project to bring New Farmer U home to Wisconsin. Prepare yourself for a weekend of learning and networking with other farmers at a lovely outdoor learning center in the Wisconsin Dells. Consider taking a full-day pre-course about farm finances or compliance with new food safety laws. To learn more, visit mosesorganic.org/newfarmeru.

MAY

May 11: Renew Rural Iowa: "The Journey to Your Vision" Seminar | Algona

This half-day seminar will help you understand the stages of business growth, their unique challenges and methods to overcome them. (The event, hosted by Iowa Farm Bureau, will also be offered on May 16 in Cedar Rapids). Mike Kleis, president of Renaissance Executive Forums of Iowa, and Joel Bennett, with Veel Hoeden Consulting, will facilitate this "hands-on" event. You'll have an opportunity to discuss your challenges with other business owners and use the collective power of their experience to help you address these barriers. To learn more, visit iowafarmbureau.com/Article/Renew-Rural-Iowa-The-Journey-To-Your-Vision-Seminar-Algona-Iowa.

For more events, visit practicalfarmers.org



Grow Your Farm with Practical Farmers. Join or Renew Today!

JOIN or RENEW

< **This annual membership is a:**

- New Membership
 Renewal

< **I am joining at the level of:**

- Student – \$20
 Individual – \$50
 Farm or Household – \$60

Organization – \$110

Lifetime Member* – \$1,000

* See details at <http://bit.ly/PFI-lifetime>

< **I am joining or renewing as:**

- An Aspiring Farmer A Farmer or Grower Non-Farmer

< **How did you hear about PFI?**

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For the sake of the long-term health and vitality of Practical Farmers of Iowa, we ask you to consider making a donation above and beyond your membership fee.

I would like to make a one-time, tax-deductible donation to PFI in the amount of:

- \$1,000 \$500 \$250 \$100 \$50 \$_____

Or, make a recurring monthly or quarterly donation.

- Yes, I would like to give \$_____ per month per quarter

(This will be automatically charged to your credit card on the first day of each month or quarter).

Practical Farmers of Iowa is a 501(c)3 organization. Your gift is tax deductible to the extent allowed by law.

Thank You!

MEMBER INFORMATION

Contact Name(s)*: _____

Farm or Organization Name: _____

Address: _____

City: _____ State: _____ ZIP: _____ County: _____

Phone 1: _____ Phone 2: _____

Email 1: _____ Email 2: _____

*** For Farm or Household membership, please list names of all persons included. For Organization membership, please list one or two contact persons.**

EMAIL DISCUSSION GROUP SIGN-UP

When you join our email discussion groups, you can network, build community and exchange ideas from anywhere, at any time. **Sign up for as many groups as you'd like (be sure to include your email address above)!**

- Cover Crops Field Crops General Horticulture Livestock Policy

PAYMENT

Membership level \$ _____ per year, for _____ year(s) = \$ _____

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Check or money order is enclosed. (Please make payable to "Practical Farmers of Iowa.")

Credit card (Visa, MasterCard or Discover only).

Name on card _____ Number _____ Exp. _____

Please automatically charge this credit card each year for membership

Practical Farmers of Iowa

1615 Golden Aspen Drive, Suite 101

Ames, IA 50010



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Farms that are prized for their diversity of crops and livestock; their wildlife, healthy soils, innovations, beauty and productivity; their connection to a rich past and a fulfilling present; where individuals and families are earning a good living.



Healthy Food

Food that is celebrated for its connections to local farmers, to seasons, to hard work and good stewardship. Communities alive with diverse connections between farmers and friends of farmers.

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Places where commerce, cooperation, creativity and spirituality are thriving. Places where the working landscape, the fresh air and the clean water remind us of all that is good about Iowa.

