

the PRACTICAL FARMER

AUTUMN 2018



Conservation and Community

Lifetime member Brent Larson farms 650 acres of row crops near Fort Dodge. His busy workload kindled a passion for regenerative soil health.

Stewarding Land for the Future

Resiliency is a core value for Farmland Owner Legacy Award recipients Maggie McQuown and Steve Turman.





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PRACTICALfarmers
of Iowa
working together, always learning

WHAT WE DO

Practical Farmers of Iowa was founded in 1985 as an organization for farmers. We use farmer-led investigation and information sharing to help farmers practice an agriculture that benefits both the land and people.

OUR MISSION

Practical Farmers of Iowa's mission is equipping farmers to build resilient farms and communities.

OUR VISION

An Iowa with healthy soil, healthy food, clean air, clean water, resilient farms and vibrant communities.

OUR VALUES

- Welcoming everyone
- Farmers leading the exchange of experience and knowledge
- Curiosity, creativity, collaboration and community
- Resilient farms now and for future generations
- Stewardship of land and resources

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.



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Creativity and Curiosity Abound

Practical Farmers of Iowa values include: welcoming everyone; farmers leading the exchange of experience and knowledge; curiosity, creativity, collaboration and community; resilient farms now and for future generations; and stewardship of land and resources.

Elizabeth Gilbert's book, *Big Magic*, brings a lens to curiosity and creativity. In this book, Elizabeth defines creativity as choosing the path of curiosity over the path of fear. She also refers to creativity as every day attainable magic. When I read her definition, I immediately thought of the many PFI members leading change in agriculture by exercising curiosity.

Elizabeth writes how creativity is innate in all humankind and doesn't just apply to an elite, gifted few. She says, "If you're alive, you're creative." Fear is also instinctual, particularly when you are about to embark on something new. Elizabeth doesn't promote a fearless life. When in balance, she argues, fear helps us stay safe. "Fear is a companion," she writes. "Acknowledge and invite it, but don't let it drive."

Fear of failure is common when venturing into something new or creative. Another common fear is that 'it' has already been done before. Elizabeth counters by saying that most everything has been done before. Rather than fretting about being original, she argues that we should strive for authenticity – and following the path of curiosity can help us in that quest. "Curiosity is our friend that teaches us how to become ourselves. And it's a very gentle friend, and a very forgiving friend, and a very constant one."

Elizabeth warns that perfectionism is a creativity and curiosity inhibitor. Strive for done, not perfect. "It's a simple and generous rule of life that whatever you practice, you will improve at," she writes. She also warns that following curiosity down a creative path isn't blissful and stress-free, referring to Mark Manson's theory, "Everything sucks, some of the time." Manson explains it this way: "If you want to be a professional artist, but you aren't willing to see your work rejected hundreds, if not thousands, of times, then



Emil Fagan (left) and Hannah Breckbill (right), of Humble Hands Harvest, created an innovative farm business agreement, setting up their operation as a cooperative. This arrangement let them create a sustainable farm business on land they own.

you're done before you start. If you want to be a hotshot court lawyer, but can't stand the eighty-hour workweeks, then I've got bad news for you."

Elizabeth claims that 90 percent of all jobs are boring – including her career as an author. "It's certainly tedious," she writes. "I mean, it's a boring job I would rather do than any other boring job. It's the most interesting boring job I've ever had."

I believe in Elizabeth's claim that everyone is creative. This is apparent at every single Practical Farmers event, and in the articles in this newsletter. Here are just three examples of curiosity leading to creativity from this year's field days:

Jordan Clasen, of Johnston, says, "I try to learn two new things a year to put into action." Listening to his customers and being change-savvy has led Jordan to add laying chickens and egg sales, a greenhouse, transplant sales and farm dinners. Jordan also corroborates Elizabeth's 90-percent rule. "If you're not having fun, why are you doing it?" Jordan says. "It's a lot of hard work in the sun. It sucks a lot of the time, but it is still fun. I get to work outside every day, and my office is nice."

Hannah Breckbill, of Decorah, gave herself an ultimatum in the fall of 2016: "I don't think I can farm next year unless it's on my own land, and unless I have someone to farm with me." Creativity led Hannah and her cousin, Emily Fagan, to form an innovative cooperative farm business agreement for their farm, Humble Hands Harvest – one that provides a framework for them to create a sustainable farm business on land they own.

Arlyn and Sue Kauffman, near Weldon, shared details of a Practical Farmers on-farm research trial they are participating in to help determine how to best time cover crop termination prior to corn. Knowing these details will help them reach their goal of cover crops on 100 percent of their acres. Practical Farmers' on-farm research program, the Cooperators' Program, is a hub of creativity.

Thank you all for your curiosity that leads to creative actions and a more diverse and interesting Iowa!

Sally Worley

Reflections on the Grassfed Exchange

Conference brought together graziers and sustainable food supporters from around the world

Regeneration is defined as the renewal or restoration of a biological system after injury or as a normal process. The concept of regenerative agriculture was at the core of The Grassfed Exchange, a conference now in its 10th year that draws like-minded people who are passionate about grass-fed livestock production. Held in South Dakota this past June, several Practical Farmers members decided to make the trip. The two-day conference was preceded by ranch tours that showed off the best of the mixed and shortgrass prairies.

Regenerative Ranching

South Dakota leads the nation in bison production, much of which is holistically raised to support conservation. As part of the conference, Rebecca Baldwin-Kordick, a graduate student in soil science at Iowa State University, toured 777 Bison Ranch in southwestern South Dakota. "When I visited the ranch, I understood the ecological importance of bison to the American West," Rebecca says. "I listened to the ranchers talk about winter hardiness of the bison, and their easy calving. Since running bison, the ranchers have documented the tremendous return of plant and bird wildlife on their ranch. Indeed, the ground cover was not uniform, but dotted with yellow flowering legumes, and red hues, amid a gradient of greens. They oscillated on the breezy hills, celebrating diversity like a colorful crowd in a football stadium. As the ranchers spoke, I watched the bison behind them; they ran together atop the plateau and down the green escarpments like water."

Reverence for Diversity and Soil Health

Christine Jones, a soil scientist from Australia, presented on the extraordinary power of above- and below-ground diversity. "When we're standing on soil, we're standing on a rooftop to another world," she says. Healthy soils and all-around diversity are at the root of grass-fed livestock production – and were the main focal points of the conference. Christine advocates for having 10 to 12 plant species present at any one time, and says the tipping point for soil biological activity is a minimum of eight species.

"Diversity is king," says Bruce Carney, of Maxwell, reflecting on his experience at the conference. "Diversity in plant species, diversity in livestock species and diversity with animal impact. You shouldn't do the same things in the same location all the time." On the drive home, Randy Riediger, of Hinton, expressed that he wants to experiment with early interseeding of shade-tolerant cover crops into his standing corn. He wants to plant seven species (corn being the eighth) in order to reach the tipping point for soil activity proposed by Christine Jones.

"I walked away from this conference and the lectures, like those given by soil scientist Dr. Jones, and ecologically focused rancher

Glenn Elzinga of Alderspring Ranch, with an enhanced appreciation for diversity's power to influence soil and agroecosystem health," Rebecca says. "I took with me new insight into the ability to harness the power of grazing animals to hasten soil regeneration, not to hinder it."

Reshaping the Paradigm

"We are the ones we've been waiting for," proclaimed Christine Su, co-founder of Pasture Map, a grazing app that tracks grazing moves and herd performance. Christine facilitated a young-farmer panel and explained that as we embark on this new era of regenerative agriculture, the next generation of farmers gets to define what the movement looks like. To get past the barriers of land access and capital investments, these young farmers have taken unconventional routes – such as leasing livestock and land from absentee owners, or contract-grazing farms owned by a real estate company. One woman on the panel, who doesn't currently own land, secured a private investment to purchase a herd of bison managed by others rather





Above: Prairie grasses evolved with grazing and trampling disturbances provided by bison. Without bison, humans are obliged to manage farm and rangelands to avoid stagnation, manage fire risk and promote ecosystem balance and productivity. (Photo courtesy of Rebecca Baldwin-Kordick) **Opposite:** PFI members Rebecca Baldwin-Kordick and Randy Riediger traveled from Iowa to attend the conference.

than herself. Over the course of four years, this woman is working up to full responsibility of the herd and securing land. Another farmer funded a meat cooperative with the help of a social finance loan from RSF Social Finance, an organization that lends and grants money to entrepreneurs creating social and ecological change.

Fred Kirschenmann, of Ames, presented on the future of agriculture, stating that we'll need "creativity, imagination and spiritual conviction" to remain resilient over the next 50 years. "Farmers are transitioning from input-intensive systems to systems that are more self-renewing," Fred said during his session. "In the process, they are bringing the soil back to life, which dramatically reduces the need for inputs, and makes farms profitable again." Fred acknowledged models like OneHealthAg, an organization working to modernize our meat supply by meshing the interests of farmers raising food with integrity with the goals of large buyers trying to meet goals of consumer well-being and climate stability.

According to The Land Institute's proposed 50-year farm bill, as supplies of fossil fuels, rock phosphate and fresh water deplete, we'll experience a decline in annual grain crops. Perennial grains like kernza, and perennial forages could take their place. In the future, federal subsidies may also

provide incentives for perennial agriculture. In the next 50 years, we could see an incredible shift that would support and reward regenerative farmers.

Ruminations from PFI Members

By the end of the conference, it was hard to not feel overwhelmed with knowledge and inspiration. Shea Velez-Westphal, a beginning farmer in Cedar Rapids, received a scholarship to attend the conference as part of the Herd Fellows program to support young farmers. "The Grassfed Exchange was an amazing learning experience. I learned about raising livestock in a humane, restorative way that ensures an outcome for quality meats and products," Shea says. "There was a large focus on the importance of rotational grazing, multi-species grazing, restoring and maintaining soil health, cover crops, marketing and building community. Using these practices can help restore Iowa's land, and I look forward to gaining more knowledge and skills in regenerative agriculture and grass-fed livestock as I progress in my farming endeavors."

Rebecca Baldwin-Kordick learned more about third-party certifications, like the Conservation Ranching program offered by the Audubon Society. "These are great opportunities to showcase, at a premium, the ecological benefits that can be had from

holistic grazing practices," she says. "I think, in collaboration with organizations like this, adding livestock back onto the farm is as crucial as ever to regenerating Iowa soils, and restoring water quality, native grasses and bird populations.

"I traveled to the conference with a group of Iowa farmers," Rebecca adds, "and was energized by their enthusiasm to go home, incorporate new cover crop cocktails, maximize the photosynthetic capacities on their land by adding more soil carbon, and graze the cover with livestock, all while spreading manure sans fuel."

For Connie Carney, of Maxwell, the conference was both overwhelming and inspiring: "It was a bit overwhelming to see so many people share their hopes, dreams and struggles. The Grassfed Exchange delivers a message of hope and optimism to farmers of diverse agriculture backgrounds, who are working and often struggling daily, to figure out how to improve and regenerate their land, animals and lives."

Next year, the Grassfed Exchange conference will take place April 3-5 in Santa Rosa, California. ■

Honoring the Gifters

Helping to grow PFI's network and finances

Last edition, we shared a list of people who donated above membership, and some insights as to why people donate to Practical Farmers. However, we erroneously omitted an important group: **the gifters**.

These generous people purchased gift memberships for people they wanted to bring into Practical Farmers of Iowa's network. This brings Practical Farmers of Iowa funds and people, both ingredients vital to our ability to equip farmers to build resilient farms and communities.

BETH HENNING, DES MOINES

Beth Henning, of Des Moines, is one of those gifters. She manages farmland owned by the Henning Sisters Partnership, which includes her two sisters in California and a nephew who lives in Omaha.

"The partnership gifted memberships to the operators on our family farms: Rod and Shannan Potts on one farm, and Tony McDonald and Matt Christensen on the other farm," Beth says. "The reason for the gifts was that I often found myself thinking, 'Our operators might be interested in this,' when I was reading the discussions on the PFI email groups.

"The partnership decided to purchase a gift a membership for one year for them to try it out. The respectful and supportive information-sharing in the PFI discussion groups, field days, meetings and conferences has been a great resource to me as a landowner, and I hope the operators find it useful, too."

THANK YOU for taking the time to bring others to Practical Farmers, and for your financial support as well! ■



"The respectful and supportive information-sharing in the PFI discussion groups, field days, meetings and conferences has been a great resource to me as a landowner, and I hope [my gift recipients] find it useful too."

- BETH HENNING

Donors Who Provided Gift Memberships in Fiscal Year 2017

Gifter	Donation Amount
Helen Gunderson	\$220.00
Beth Henning	\$180.00
Mark and Melanie Peterson	\$150.00
Jeff and Gayle Olson	\$150.00
Liz Kolbe	\$120.00
Jen Colby	\$120.00
Barbara Hueneke	\$60.00
Laura Frescoln	\$60.00
Wendy Johnson	\$60.00
Dick Sloan	\$60.00
Ethan and Sarah Roos	\$60.00
Rhonda Keller	\$60.00
Dan and Lorna Wilson	\$60.00
Seth Worthington	\$60.00
Stephanie Gadzik	\$60.00
Brent Schlenker and Marilyn Barnes	\$50.00
Jessie Nichols	\$50.00
Jim and Mary West	\$50.00
Gail Hickenbottom	\$50.00
Larry and Ruth Nepl	\$50.00
Edwin Ramsey	\$50.00
Jean Caspers-Simmet	\$50.00
Martha McFarland	\$50.00
Jon Bakehouse	\$20.00
Beth and Randy Larabee	\$20.00
Claire Runquist	\$20.00
Karen Gregoricka	\$20.00
Sean Skeehan and Jill Beebout	\$20.00

Sharing Skills for the Greater Good

Volunteers are a vital part of PFI, bringing diverse backgrounds and skills

Throughout the year, we rely on individuals, as well as groups, to help meet a variety of needs. We enlist volunteers that range in age from 8 (Sadie Carlson, daughter of PFI staff member Sarah Carlson) to 88 (Kelly Tobin, PFI member since 2010).

Their reasons for volunteering vary. Some want to support a group that aligns with their values, others volunteer because they have a family member who works for PFI. Still others volunteer to gain access to events and opportunities to learn and network – and some volunteer for multiple reasons. Practical Farmers member Beth Grabau, of Adel, says she volunteers at our annual conference for the fun of it, and also because it helps her feel more connected to agriculture. “I have such fun working with the staff, the vendors and the members who attend the event each year,” Beth says. “It is such a fun day for me. They usually have to kick me out as I don’t want to leave. On a more serious note, it helps keep me connected to agriculture. I didn’t have the opportunity to be in production ag, so being a part of the conference and PFI helps me stay connected.” Whatever the reasons our volunteers choose to participate, they all play an integral part in helping us accomplish our mission.

How Do Members Volunteer?

The event that requires the most help is our annual conference. This event draws more than 1,000 attendees and offers opportunities for volunteers with a wide range of skills and abilities. We rely on groups such as Central Iowa RSVP (through the Ames Convention & Visitors Bureau) to help at the registration desk. Students from Scattergood Friends School often help provide childcare. And many individuals, – including PFI members Jordan Schiebel of Grinnell, Julia Slocum of Ames, Beth Grabau, Santos Nunez of Ames, Alice McGary of Ames, Deb Draper of Eddyville



“I have such fun working with the staff, the vendors and the members who attend the [annual conference] each year . . . It helps keep me connected to agriculture. I didn’t have the opportunity to be in production ag, so being a part of the conference and PFI helps me stay connected.”

– BETH GRABAU

and many more – help with logistical tasks from monitoring our silent auction table and ushering at lunch to taking head counts during sessions and helping with cleanup, among other things. Because of the size and complexity of organizing such a big event, the efforts of these volunteers lend critical support and help keep the conference running smoothly.

Throughout the year, we rely on volunteers to help in numerous other ways, from stuffing envelopes for our mass mailings each spring and fall (this year, Dennis Lippon of Okoboji, Kelly Tobin of Ames, Chelle Boekholder of Ames, Sharon Tinker

of Ankeny, Frank and Judy Maly of Ames, and Lois DeWaard of Pleasantville helped with our spring appeal in May); filing and organizing in the office (Beth Larabee of Ames and Nan Bonfils of Madrid); growing, preparing and sharing delicious, nutritious food for our events; and various work in the artistic realm (Lonna Nachtigal of Ames creates centerpieces for the annual conference potluck).

And there are countless other, more discreet opportunities that tap into the generous and loving hearts of PFI members, from offering car rides to members wishing to attend field days in the far reaches of the state; to offering a comfortable place for members to stay during events; to offering to share their experience and knowledge with beginning and aspiring farmers. Because of the many passionate Practical Farmers members who find value in donating their time and talents, we have been able to facilitate educational events throughout the year and work toward our mission of building community – by connecting people, by filling a need and by tapping into individual skills for the greater good. ■

If you would like us to contact you about future volunteer opportunities with PFI, please contact Debra Boekholder at debra@practicalfarmers.org or call the office at (515) 232-5661.

Conservation and Community

Brent Larson is a lifetime member with a passion for regenerative soil health

Brent Larson is a busy man. He is the vice president of his family's farm management company, Sunderman Farm Management, and he personally has a share in farming about 650 acres of row crops around his home town of Fort Dodge. It was this heavy workload that not only set Brent on his path to using reduced tillage, cover crops and extended crop rotations, but also kindled his passion for regenerative soil health.

In 2005, I came back to Fort Dodge after finishing my active-duty service in the Air Force," says Brent, as we rumble down the road in his red 1988 Chevy truck. "I decided that this is where I wanted to grow my family and put money back into my community. With full-time jobs in town and farming, we were looking for ways to reduce labor. It takes a lot of time to till, and [Iowa State University] has said for years that soybeans don't care about tillage. So that's what got us looking at reducing tillage." Beyond the soil benefits of reduced tillage, farmers who switch to no-till or reduced tillage practices save on equipment and labor costs, and their insurance payments decrease. Aware of these benefits, Brent felt it was a no-brainer to start strip-tilling all the acres the family farms themselves. A year or two later, the Larsons moved to full no-till for soybeans while maintaining a strip-till program for corn. "We started to see the soil health come around then, with more earthworm activity, macro-pores and micro-pores in the soil, leading to better infiltration all around."

For Brent, who became a lifetime member of PFI in 2017, seeing this shift in his soil's health ignited his passion for conservation and managing for soil health. "We are a unique farm management company because we also farm ourselves. So we like to prove the theory on our own farmland first," Brent says. "Then it's fun to talk with landowners about conservation. More and more folks are interested in doing it – we're now doing cover crops for several farms we manage."

Getting Started With Covers

At first, Brent seeded cover crops with an airplane to make the most of the last fall heat in his northern Iowa location. But

he felt this method was "too spotty," and forced people to "manage to the lowest common denominator in the field." So he switched to hiring a high-boy seeder to broadcast the seed. "It is fencerow to fencerow and allows me to get in the field before corn harvest," Brent says. "I do have to increase my seeding rate of the cover crop – because it's still broadcast, I estimate half of it won't germinate." Since Brent's goal is to use the cover crop to suppress weeds and reduce herbicide use, having a thick, even stand of rye is very important.

"I could grow crops for many years without giving anything back, but at some point we'll use up all of that flexibility and resilience in the soil. So my primary goal is to guard the soil now so that doesn't happen."

– BRENT LARSON

"Treat your cover crop like a crop," Brent says. "Don't go buying variety-not-stated seed. You never know what seed is in there, so your rye might mature at different rates, which can lead to an uneven kill when you try to terminate. I use mostly Elbon and Aroostook rye." Brent started using the Aroostook variety because it has an earlier maturity date compared to other ryes, making it ideal for roller crimping. While many organic farmers use a roller crimper to terminate their rye after soybean planting, Brent has gotten even more creative in using it after planting his corn.

Pushing the Envelope

On one field this year, he strip-tilled and planted corn into 4-foot-tall pollinating rye. "Then I sprayed it with glyphosate and drove through the night to haul a roller crimper up from southeast Iowa to roll it down," Brent says. By late June, he says you couldn't tell the difference between the crimped section and the un-crimped check strips he left for comparison. "So my new policy is if it's under 4 feet tall, I'll just terminate with glyphosate and leave it." To save time, Brent has reduced trips across the field by adding nitrogen to his planter in a big way. He applies both in-furrow fertilizer on his planter, and additional nitrogen next to the furrow. The latter is applied 2 inches away from the seed trench and 2 inches deep in the soil. In total, Brent applies about 80 pounds of nitrogen – about half of his total nitrogen plan for the year. This, combined with his strip tillage, has allowed him to experiment with killing his cover crops close to or after corn planting without significantly reducing yields.

Pushing the envelope on cover crop termination to just before corn emergence put Brent in a bit of a sticky situation this year with all the wet weather. He plants mostly non-GMO corn and soybeans. So when the corn emerged on one of his fields before he could get out to spray the rye cover crop, he was flummoxed as to how he would kill the cover crop. Spraying the usual treatment of glyphosate would kill the corn along with the rye. Following a local agronomist's advice, he decided to spray a mixture of Corvus and atrazine with methylated seed oil. These chemicals work by stopping further vegetative growth – and the effects were evident on Brent's farm. At the end of June, the corn in that field was head- or shoulder-high, while between the rows, the rye still stood as if frozen in time when sprayed in late May. But the chemicals did not break down the rye stalks like glyphosate tends to do. Nonetheless, Brent is excited about further exploring this technique to see if it can let him push his normal cover crop termination closer to corn emergence.



Above: Brent demonstrates the effect of putting 80 pounds of nitrogen on with his planter. The corn on the left side of photo received the nitrogen, while the shorter corn on the right did not. You can still see the standing rye in between the corn rows, which was terminated after corn emergence this year.

Expanding His Crop Rotation

Brent's ultimate aim is to eliminate chemicals altogether. "My goal is to work towards using nothing that ends in c-i-d-e, to essentially work with Mother Nature to control the system," he says. "That will require some fundamental changes – shifts to the paradigm." This aspiration led Brent to raise his first crop of cereal rye this year. "Why not raise a crop that we need to use anyway?" Brent says, referring to his use of cereal rye seed for his cover crops. "I would like to get to a three-crop rotation everywhere on our farm."

Last fall, Brent hired Iowa Cover Crop to drill cereal rye on Oct. 6, establishing his rye early to ensure good yields for the following summer. In March 2018, he broadcast a mixture of crimson, berseem and mammoth clovers into the field to establish a nitrogen-fixing cover crop early that can grow quickly once the rye is harvested. Next year, he hopes the nitrogen added to the soil by this clover trio will let him reduce how much purchased fertilizer he needs to apply to this field.

On his rye field, Brent is participating in a PFI and Iowa Soybean Association water quality monitoring study. Four or five times over the course of the 2018 growing season, he scabbles down the side of a steep drainage ditch to take a water sample from his tile line and measure the rate of flow, or how much water is coming out of the tile and how fast. Because relatively little water quality data is taken on farms using a three-year rotation that includes corn, soybeans and cereal rye with a legume cover crop added, this information will fill in a key gap in understanding how this cropping system affects the landscape around it.

At the end of the day, Brent's long-term goal is to protect and build his soil. "I farm on Clarion-Nicollet-Webster soils, some of the richest in the world. I could grow crops for many years without giving anything back, but at some point we'll use up all of that flexibility and resilience in the soil. So my primary goal is to guard the soil now so that doesn't happen."

Inspiration From PFI Members

Brent appreciates the resources and community PFI has provided on his journey towards greater conservation and soil health. "If I have a question about a new practice I'm trying, the first place I go is PFI's website," he says. "I'll read the study and then call up the farmer, like Tim Sieren, and have a conversation. In PFI, the other members are just a phone call away." Brent also appreciates Practical Farmers' diverse community of farmers and farm enterprises. He says he enjoys going to events that are about farm practices and operations different from his. "There's always a golden nugget or two I can pull out that I can apply to what I do," Brent says. "People ask me, 'Why are you going to that meeting?' I think it's interesting, and I can learn more from someone who does things differently than I can from someone who does the same thing as me."

Brent became a lifetime member of Practical Farmers of Iowa in 2017. "I became a lifetime member because I believe 100 percent in what PFI does. As long as we keep on the path we're on, I want to be a member for my whole life." ■

Where Garlic Rules

Two farmers share how they have made garlic central to their farm businesses

Garlic isn't yet an Iowa crop staple like tomatoes and cucumbers, but this aromatic allium is gaining popularity among farmers – it's fun to grow, stores well and sells itself.

Planted in the fall, over-wintered garlic is the first thing out of the ground in the spring (right alongside cereal rye, and just before asparagus). Garlic requires many touches. Before planting, individual cloves are peeled and sorted. In June, the green flower stalks, called scapes, are harvested. In July, bulbs are harvested, sorted, bundled and hung to cure until September, when they are finally trimmed and the bulbs peeled for sale. Two farmers – Alley Swiss, of Filaree Garlic Farm in the Okanogan Valley of Washington State, and Jordan Clasen, of Grade A Gardens in Johnston, Iowa, share the details of their garlic-growing practices.

Alley Swiss at Filaree Garlic Farm

Born and raised in Iowa, Alley Swiss was introduced to farming through the legendary Bob Braverman at Friendly Farm in Iowa City. Drawn to the West in 2008, Alley bought the garlic portion of Filaree Farm in 2010 after two years working closely with the retiring owner. He and his wife, Phoebe Webb, now own and operate Filaree Garlic Farm, a certified organic farm that maintains and grows the largest privately held collection of garlic varieties in North America, with about 115 varieties in the field. Filaree Farm sells all its garlic as seed garlic to gardeners and farmers around the country, often in half-pound to 5-pound orders, but increasingly at farm-scale orders.

Alley plants his garlic unusually dense: six rows per bed, where plants are spaced at 9 inches apart with 6 inches between rows. "I've experimented with wider spacing, but I didn't see much yield increase," Alley says. "We're trying to take advantage of our limited space, and the dense planting allows us to save on per-acre costs, like fertilizer. We fit into 2 acres what most people would fit in 4 acres."

Because of the tight spacing, proactive weed management is important, and Alley never cultivates within the beds. After planting in the fall, Alley and four employees – two on each bale chopper and one spreading in the beds – lay a chopped alfalfa mulch about 1.5 inches thick. By the spring, the mulch has reduced to just a half-inch thick; the leaves have decomposed to dust, the stems to a more visible fibrous material. With dew and rain, the mulch seals, creating a papier-mache effect over the beds. "With this mulch, we have few to no early weeds," Alley says. "When the pigweed and lambsquarter break through in mid-May, we can usually get away with one big weeding and a second, less-intensive weeding."

The garlic varieties are organized in the field to allow chronological harvest spread over about five weeks, with the turbans and Asiatics first, followed by the porcelains and purple stripes. Alley's garlic has a lot of eyes and hands on it throughout the season. Because they are a seed farm, the Filaree crew scout for diseases every week, removing any problematic plants. Scapes are cut off at full curl and sold to a box delivery service. "There's a rumor out there that garlic isn't a heavy feeder," Alley says. "It is. It takes a lot of nitrogen to get a sizeable crop. Don't skimp on nutrition before or during



the season." Alley applies fish meal and kelp every seven to 10 days beginning when the garlic emerges, and adds potassium and calcium toward the middle of April. "Potassium in particular seems to correspond to bulb density," Alley says. "We're finding that our cloves are denser, which makes better seed and is better for storage." For bulb harvest, Alley prefers to use an undercutter blade, which is a wide blade pulled by a tractor that loosens the earth, making it easier to pull each bulb of garlic. He then hand-harvests and ties the garlic to cure. "We do a lot of peeling before we cure the garlic. I prefer to take off a few layers and hang the bulbs clean," Alley says. "After a morning of harvesting, it allows the employees to work in the shade during hot July afternoons, and saves us a lot of time later. It's a good labor decision in July. After the garlic is cured, we only have to snip the tops and the roots and it's ready for grading at the warehouse."

To cure, Alley ties the garlic in bundles of eight to 10 bulbs and hangs them from fencing above the rafters of a shed (soft-neck garlic is wrapped, rather than tied). Below the rafters, 4-foot-by 8-foot racks are stacked four high, with plenty of air flow between. After the garlic is cured,





Above: Filaree Garlic Farm maintains and grows the largest privately held collection of garlic varieties in North America. **Opposite: (Above)** Jordan Clasen discusses his garlic production practices during his May 31 PFI field day. **(Bottom):** Alley Swiss, of Filaree Garlic Farm, poses by some of his curing garlic crop.

it is cleaned, graded and stored in the warehouse at 55 degrees.

Jordan Clasen and Whitney Brewer at Grade A Gardens

As Alley was starting to farm in the Pacific Northwest, Jordan Clasen began growing garlic near Des Moines. In 2012 he quit his day job and planted almost 20,000 garlic plants. In 2013, the farm started a vegetable CSA, added chickens and increased the garlic field to 25,000 plants. Now with Whitney Brewer on the farm, the pair have 60,000 garlic plants, several acres of diversified produce and 285 laying hens. Jordan and Whitney have a 120-member CSA, and sell at Des Moines' Downtown Farmers' Market and a few restaurants.

To prepare garlic beds, Jordan first rips the soil with a Yeoman's plow, subsoiling 22 inches deep where the bed goes. Then he passes with the tiller over the Yeoman's plow marks. Lastly, he drives the tractor the length of the bed and uses the space between the tire tracks to mark the bed. "I can't tell you how much time this has saved me," Jordan says. "I used to use a BCS walk-behind [tractor] and would spend hours and hours, and days and days

making giant raised beds, building the soil and raking them smooth. I didn't need to." After the bed is marked, he sprinkles the cloves in three lines along the bed. He then adjusts the spacing on his hands and knees, working to keep a consistent grid of about 10-by-10 inches. "You see all these people that want fancy dibblers and row markers, but it's really just a matter of sticking them in," Jordan says. "I can keep a pretty consistent grid." Jordan only plants 1 to 1.5 inches deep – which he feels gives him bigger bulbs and makes it easier to harvest – and he plants three cloves wide per bed, but sometimes goes four-wide.

To manage weeds, Jordan and Whitney use a straw mulch over the winter, cultivate between the beds with a walk-behind BCS and hand-weed as needed. Their garlic crop follows their chicken tractors, which provide all the fertility they need. Jordan breaks up the cloves the night before he plants, separating out the largest (best) cloves. Any "non-primo" cloves get planted last, packed-in tight and harvested for green garlic. "It's a good way to use up small bulbs, and by saving them until last you know you'll have plenty of space and nutrients for your big bulbs," Jordan

explains. "I'm trying to save the best of the best." From the bulbs of the hard-neck varieties, Jordan harvests the scapes, which he can sell at the farmers market by the garbage bag-full.

"For harvesting the bulbs, when you see only four green leaves remaining, it's time to pull your garlic," he says. After the wave of garlic comes up behind the undercutter, a crew of three or four sorts bulbs in the field into big and small – big on one side of the bed, small on the other. At the end of the sorting, the team brings the bulbs to the end of the field and bands them with size 64 bands from Office Max, which provides three wraps around eight large bulbs. "We pack as many as can fit in the band for the small bulbs," Jordan says. "That way, when we hang and dry it, we can easily see which are big for seed, and which are small for market." ■

Learn More

➔ [Read the full summary of Jordan and Whitney's field day at practicalfarmers.org/blog.](https://practicalfarmers.org/blog)

Sharing Decades of Fruit Production Experience

Labor4Learning offers vital hands-on farm experience

Dean and Judy Henry of the Berry Patch Farm in Nevada planted their first fruit more than 50 years ago. Over the years, they've continually added new acres and fruit types, learning along the way and sharing their experiences with others. Through Practical Farmers of Iowa's Labor4Learning program, the Henrys continue to impart their knowledge to those who are eager to learn.

Ames resident Teresa Pelzer grew up in town but has always sought farm-like experiences that took her to rural Iowa. While in high school, her summers consisted of jobs caring for horses, managing vegetable gardens, harvesting sweet corn and selling produce at farmers markets and corner stands, among other things. A passion for working with crops and animals has led Teresa to pursue a degree in agricultural studies at Iowa State University beginning this fall, as well as a summer job through PFI's Labor4Learning with Dean and Judy Henry.

Teresa knows she'd like to work in the agricultural industry, but is not yet sure what that will look like for her. While the agricultural studies program at Iowa State will allow her to learn about a wide range of subjects – including horticulture, animal science and agronomy – Teresa chose to participate in Labor4Learning so she could gain extra farm experience before starting college. Her summer experience with Dean and Judy at the Berry Patch exposed Teresa to what it's like running a pick-your-own fruit farm, as well as the wider picture of orcharding in Iowa. "I want to get as much experience as possible, because unlike a lot of ag majors, I have not grown up on a farm and have no family members that own a farm," Teresa says. "I also never had the opportunity to be in FFA, as Ames High School did not offer it."

Teresa's path fits well with what Dean and Judy feel is essential for someone in her situation. "We believe it's important



Teresa Pelzer (center) with Dean and Judy Henry of Berry Patch Farm.

that aspiring farmers have hands-on experience, in addition to study and formal schooling," Dean says. "This affords a realistic, three-dimensional experience to help plan for their future."

"I was drawn to this job because of its focus on learning, and I was interested in working with fruit crops, which I hadn't done before." – TERESA PELZER

The Henrys have learned the importance of mentorship and knowledge-sharing over their 50-plus years growing fruit. When they began in the 1960s, there were few resources for them in the state, but they found guidance from Oris and Jean Hinegardner of Hinegardner Orchard in Montour, Iowa. Since then, they've advised many new growers, joined Practical Farmers of Iowa and held four on-farm field days, and this year became a trainer farm in PFI's Labor4Learning program.

Through the program, the Henrys have agreed to hire someone eager to learn

about their farm, and to provide additional training on topics important for running a farm like Berry Patch. Teresa is a perfect fit for the program, and together she and the Henrys decided on topics they would focus on throughout the growing season. "I was drawn to this job because of its focus on learning, and I was interested in working with fruit crops, which I hadn't done before," Teresa says, adding "and my family has picked strawberries and pumpkins from the Berry Patch every year since I was fairly young."

While it wasn't possible for the Henrys to share all aspects of their fruit production and business management in the short time before Teresa started at ISU, Dean and Judy are willing to provide guidance for Teresa in the future should she need it. In true Practical Farmers fashion, the Labor4Learning program helps connect those eager to learn with farmers willing to share – and helps foster connections that can benefit both aspiring and established farmers in Iowa. ■

Finding Balance

Listening sessions capture challenges of advanced beginning farmers

“I have found the need for continued guidance on labor management, business direction, improving efficiency, settling on the right markets and more,” says Jordan Scheibel, who is now in his seventh year farming at Middle Way Farm near Grinnell. “Supporting beginning farmers to not just start businesses, but to move toward financial and operational stability in their middle years is really critical to having a sustainable farm economy.”

At Practical Farmers, we have a sizeable group of advanced beginning farmers – those who have been farming on their own for five years or more. These farmers echo Jordan: They are still seeking guidance to continue strengthening their budding farm businesses. In March, we held listening sessions across the state to hear from these advanced beginners and learn about some of the challenges they face. Here is a snapshot of what we learned.

Finding Balance

For most farmers who participated in the sessions, finding a balance between work and life was at the top of their list of challenges. “I feel like all of our topics were about this question of finding balance, or how to navigate these opposing things,” shared Alice McGary, of Mustard Seed Farm near Ames. Many people start farming because they are drawn to the lifestyle they perceive farming can offer – one where they set their own hours, are more connected to the land, engage in meaningful work and can live out their values. The reality, however, is often stressful and chaotic. The isolation of living in rural Iowa can take a toll on your wellbeing, especially when you are fighting changing weather patterns, broken machinery, financial duress and more.

Marketing

In order to start a farming operation on their own, several beginning farmers find they need to start small and grow their business over time. Because of their small scale, most choose to direct-market their products, a strategy that lets them earn premium pricing and avoid the added cost of paying a middleman to market their products. Jason Johnson, who raises heritage livestock and sells the meat directly to customers, said that one of his biggest challenges is connecting with customers who “are able and willing to buy your product, through virtual or personal interaction, farmers markets or otherwise.”

Land and Equipment

Finding land to expand their current operation was another challenge shared by many advanced beginning farmers. Equipment issues – from determining which tools and machinery they need, to figuring out when they’ll need to use it and how to get it at the right price – ranked as another stressor for farmers of all enterprises. Wade Dooley, who operates a diversified crop and livestock farm near Albion, shared his struggle with the price of new equipment and working with older machinery. “The stuff you can afford on a smaller operation is going to be decades old, upwards of 50 years in some cases,” Wade said, “and that means you need to be good with a wrench in your hand, or know someone who is at a very low cost.”

For these farmers, who have established themselves but are seeking to grow or operate at a larger scale, equipment is essential to operate more efficiently – but many farmers said they can’t afford to buy the equipment they would need and still remain profitable. Even if they have access to funding, they often struggle with the burden of too much debt. The high cost of land augments the problem. With soaring land prices and stiff competition, advanced beginners are forced to work with the land they already have instead of adding more acres to expand their businesses. The result is that many must confront the problem



“I have found the need for continued guidance on labor management, business direction, improving efficiency, settling on the right markets and more.” – JORDAN SCHEIBEL (above)

of how to increase production without depleting the land.

Next Steps for PFI

Now that we’ve gathered this information, we will use the feedback to create programming that helps advanced beginners find solutions to their challenges. Over the coming months, we will plan events and workshops that address the obstacles they shared. We’ll share how other farmers are overcoming barriers they face, and connect advanced beginning farmers to others who can help them find ways of achieving better work-life balance in their operations. ■

Learn More

➔ To learn more about what advanced beginning farmers are sharing, visit our blog at practicalfarmers.org/blog.



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1) Andrew Dunham (right), of Grinnell Heritage Farm, and Sarah Foltz Jordan, pollinator specialist with Xerces Society, look at field thistle, a non-invasive native thistle popular with pollinators that Andrew and his wife, Melissa, have planted on their farm.

2) Arlyn Kauffman (second from right) looks at corn planted into a winter cover crop with Allison Robertson of ISU (left) and other attendees.

3) Brightly colored signs tell RAGBRAI riders where to stop for fresh fruits and veggies at the PFI tent, set up near Newton on July 25.

4) Iowa German White is one of several garlic varieties that Jordan Clasen and Whitney Brewer grow at Grade A Gardens.

5) Guests at Nelson Smith's field day on July 11 learn why longer crop rotations are important for weed control in organic crop production.

6) Jered Finley shows how a rainfall simulator works at Gary and Scott Wedemeier's field day near Maynard on July 14.



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1) Dwight Rutter (left) shows the pea gravel bed where he starts prairie plants. He and his wife, Bev, hosted a field day near Spencer on Aug. 9 highlighting their prairie-farming business.

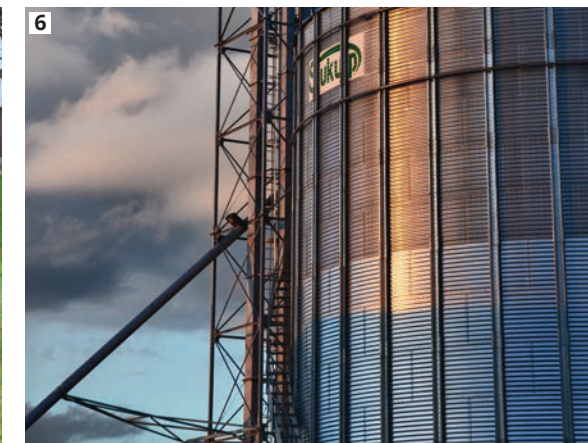
2) Dan and Lorna Wilson, accompanied by grandson Walt, welcome guests to their Paullina farm on July 20. The Wilson family shared how they are working to improve their organic crop production systems.

3) A goat eyes the camera at the field day hosted by William and Stacey (center) Borrenpohl near Dubuque, as Stacey demonstrates moving their goats to a new paddock.

4) A guest decided to ride a bike to Western Illinois University's Organic Research Farm on Aug. 15 to learn about strategies for cover crop diversification.

5) On July 17, PFI lifetime members Kellie and A.J. Blair shared how they are integrating cover crops and small grains on their farm near Dayton.

6) The setting sun reflects off of a grain elevator at Michael and Denny Vittetoe's field day on June 26.





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1) Young calves greet guests at the Wedemeier field day on July 14.

2) Randy Hughes (holding mic), with his son Willie (at right) explains how the addition of cover crops and small grains improves their corn and soybean yields. The Hughes family hosted a field day on July 12 in Janesville, Wisconsin.

3) Numerous RAGBRAI bikers stopped at the PFI stand near Newton on July 25.

4) A cat watches guests while a chicken takes a break to eat at Woven Strong Farm near Dubuque on June 28.

5) Guests at Hannah Breckbill and Emily Fagan's June 21 field day near Decorah learn how the farming partners raise poultry using a chicken tractor.

6) Guests view assorted farm equipment and learn from Scott Shriver about the pros and cons of using those machines for weed control at the field day Scott hosted near Jefferson on Aug. 7.



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1) From left to right: Doug Adams, Seth Watkins, Chris Henning and Mitchell Hora shared their knowledge with guests at the cover crops and soil health workshop at the Grundy County Fair on July 18.

2) David Freeseaman, a combine technician at Titan Machinery in Grundy Center, explains combine adjustments for small-grains crops on June 27.

3) An old tractor sits idle at Grinnell Heritage Farm on Aug. 10.

4) Guests at Kate Edwards' field day on July 7 got to peek inside the greenhouses on her farm near Iowa City.

5) Terry Troxel demonstrates tomato and pepper seed-saving techniques at the field day she hosted at her farm in Crescent on July 26.

6) Paul Ackley, a farmer in Bedford, shares his experience and perspectives on growing small grains at the field day hosted by Rick and Pam Sprague on June 28.

7) Guests tour the Vittetoe farm on June 26 and learn from hosts Michael and Denny about the benefits and challenges they've experienced on their cover crop journey.



From Disconnect to Opportunity

A brief history of food additives may shed light on the rising interest in local food

As a food scientist and lecturer at Iowa State University, I spend a lot of time with food. My ongoing fascination with how food is produced and how ingredients function started long ago: I grew up on a family farm with a large garden, diversified crops, dairy cows and pigs.

I enjoyed science in school and wanted to be able to explain how quality of food related to how crops and livestock were grown. I also loved to bake with my mom and grandmothers. From an early age, I was asking about ingredients and wanting to experiment with new recipes. I still enjoy trying new foods, baking and sharing good food with friends and family. And now, as an educator, I work to inform many students about food. Most of the time it's fun, but sometimes it can be an uphill battle. As with many issues that PFI members care about, often the extreme views get the most attention. Sometimes it can seem like *either* the new food, technology or trend is a wonderful scientific breakthrough *or* it will kill you. In my experience, that's far from the whole story.

The ingredient make-up of many grocery store food products is one example. Many consumers have lost a connection to their food, so when they start reading food labels, unfamiliar ingredients can be overwhelming and disconcerting. This unease has led to greater consumer demand for products with fewer and more recognizable ingredients, and has spurred the push for "clean labels" – such as "all natural," "non-GMO," "organic" and "no additives or preservatives." While this reaction is understandable, it does not address the real question: Why are those ingredients in the food in the first place?

Brief History of Food Additives

Before explaining the role of some ingredients, it's helpful to stop and think about how we got the range of foods in grocery stores today. It took time for all the food products – any food with a package

and ingredient list – to be developed, and perceptions have changed over time. Wonder bread was one of the first loaves of bread to be pre-sliced in the 1920s. The convenience of the new product led to the phrase "best thing since sliced bread." Similarly, when the TV dinner was introduced in the 1950s, it was advertised as a time-saver for housewives. At that time, food manufacturers focused on convenience and nutrition, which usually just meant having enough calories. As time passed, food knowledge and preparation skills decreased to the point that prepared food wasn't just a convenience; it was – and remains – a necessity for many consumers, and grocery store aisles reflect that.

What Do Those Ingredients Do?

Ingredients and processing steps (mixing, baking, canning, freezing, etc.) all play a specific role in a food product's story. Some ingredients, for instance, can increase a product's shelf life by controlling decomposition, deterioration and nutritional losses. Some ingredients improve food safety as well. When a food scientist develops a new product, he or she must ensure the new food product tastes and looks good, that it can be made consistently and within budget, and that the food product will last long enough for it to get to the grocery store and then

to the consumer. The upshot of these additional requirements is that it takes many more ingredients to make a food destined for the grocery store than it does at home.

Take a family favorite: homemade ice cream. I grew up on a dairy farm, so ice cream is special in my family. We use an old family recipe (see insert – Jensen was my mother's maiden name). It is not overly difficult to make, but it does take a bit of preparation and time. Milk, cream, sugar, vanilla and pasteurized egg, when mixed together and frozen, produces ice cream that is clean, sweet and creamy. It is best right after it is made. If there are leftovers, and that ice cream is stored in the freezer for a few days, the flavor is still good, but the texture changes: the ice cream becomes icier and less smooth.

Ice cream manufacturers have this same challenge. Each time the ice cream changes hands – ice cream plant to store, store to cart, cart to car, car to freezer – the temperature increases and decreases, and there is potential for the water in the ice cream to melt and refreeze as larger ice crystals. The added ingredients in commercial ice cream – such as guar gum, carrageenan and cellulose gum – are there to protect it from these temperature swings. These three additives help thicken the liquid or water phase to slow melting





Above: Dairy cows much on hay at Gibraltar Farms, where Kate Gilbert grew up. **Opposite:** Kate Gilbert (right), her mother, Bev, and niece, Isabel, enjoy an ice cream outing together. Growing up on a dairy farm, homemade ice cream was a special family tradition.

and refreezing. Guar gum is a seed extract of the guar plant. It is cold-water soluble and thickens a large amount of liquid at low concentrations. Carrageenan gum is extracted from seaweed and is often used in dairy products. Carrageenan gets added to chocolate milk to keep the cocoa suspended; it thickens dairy desserts by interacting with the calcium and proteins. Cellulose gum is a modified version of cellulose fiber. It is used often because it is very pH-stable and is easy to incorporate. Adding these gums to ice cream ensures it will remain smooth and creamy through the temperature fluctuations of the distribution chain. It is possible to make commercial ice cream with fewer ingredients, but one of two results will follow. Either each step of the distribution chain must be controlled, resulting in a more expensive ice cream; or the ice cream's texture may change, which could render it less appealing to consumers.

Role of Food Scientists

As consumers ask for foods with fewer and more recognizable ingredients, food scientists have been working to meet that demand. In some instances, it is difficult or nearly impossible to replace ingredients. If food safety would be compromised, ingredient substitutions are not made. In other instances, food scientists are able to evaluate and update old recipes. New

Jensen Family Homemade Ice Cream Recipe

- 1 $\frac{3}{4}$ cup sugar
- Pinch of salt
- 3 cups of cream
- 6 cups of milk
- $\frac{1}{2}$ cup pasteurized egg (was originally 2 eggs, but has been modified for food safety)
- 1 $\frac{1}{2}$ tablespoons vanilla

Mix ingredients together long enough to ensure the sugar and salt have dissolved. Pour into a 1 gallon ice cream maker and churn until frozen. The recipe makes ~1 gallon.

processing methods, for instance, have made it possible to reduce preservatives in some foods.

New technology, such as blockchain, could also improve supply chain management and decrease the required shelf life of foods. Food scientists and food companies are also learning to spend more time explaining how their food is made and why the ingredients were chosen. While the work of food scientists has not significantly changed the food products in grocery stores, it seems that food scientists are starting to ask better questions about the food they are developing. Researchers want to know what consumers want and what they are actually willing to pay for.

If the food companies can make it – and make a profit – they will.

Is There a Local Foods Link?

The short answer is that I do not know for sure. I have learned a few things from teaching college students, though. The first is that the majority of students do not know very much about where food comes from nor how to prepare it. The second is that many want to know more, and they want to make healthy and ethically sound decisions. While the loss of food skills is a problem, the desire to learn is a great opportunity. Local food appeals to many consumers because, unlike with confusing food labels, buying locally lets people connect directly with farmers who can help them understand more about where their food comes from. Many consumers want to purchase food raised locally. While they don't necessarily have the skills to prepare it, this renewed interest in the origins of food presents an opportunity for farmers – and for building the kinds of connections between producers and consumers that can help to foster more resilient farms and vibrant food systems. ■

Kate Gilbert is a lecturer in the Food Science and Human Nutrition Department at ISU. She grew up on Gibraltar Farms, near Iowa Falls, where her parents, uncle brother and sister-in-law still farm.

Stewarding Land for the Future

Resiliency is a core value for Maggie McQuown and Steve Turman

When Maggie McQuown became a farmland owner in 2009 after inheriting part of her family farm, she knew her choices as a farmland owner could make a positive difference in the health of the environment and community. Maggie and her husband, Steve Turman, live at Resilient Farms near Red Oak, stewarding 170 acres of the farmland where Maggie grew up.

Their efforts to manage that land with long-term sustainability in mind led to their selection by Practical Farmers' board of directors as the 2018 recipients of PFI's Farmland Owner Legacy Award, which was presented at a ceremony in Red Oak on July 31.

The Farmland Owner Legacy Award is granted annually by Practical Farmers of Iowa to landowners who use their land to help the next generation get started, advance land stewardship and promote long-term sustainability of farm businesses, environmental quality and rural communities. With this award, Practical Farmers calls attention to the important role non-operator farmland owners can play in the future success of sustainable agriculture.

Commitment to Conservation

Since retiring to the farm in 2012, Maggie and Steve have worked closely with their farm operators, Bryan and Lisa Huff, to incorporate conservation practices that improve soil health, reduce erosion and nutrient loss, create wildlife habitat and increase biodiversity.

"We feel very strongly about soil health and regeneration," Maggie says. "Just like with genome research, the same is happening with soil biome research. There is so much we're learning about microbiology and the whole environmental cycle, about the role of microbes and soil health. Farmers really have to take notice."

In addition to no-tilling and planting cover crops on the entire 132 acres of row-cropped ground, Maggie and Steve have installed a native tree, shrub and prairie riparian buffer and added native prairie strips. They also have grassed waterways, wetlands, terraces and have put several acres into conservation reserve and conservation stewardship practices.

"Maggie and Steve were one of the first farmland owners to step forward and show a willingness to work with the STRIPS team to test the prairie strips conservation practice," says Lisa Schulte Moore, a professor of natural resource ecology and management at Iowa State University and co-leader of ISU's Science-based Trials of Rowcrops Integrated with Prairie Strips project.

"It's been very clear from our first discussion that they have a passion for their land, for protecting water and providing pollinator habitat, and that they seek to do it in ways that also support rural livelihoods."

Lisa also serves on Practical Farmers' board of directors, and presented the Farmland Owner Legacy Award to Maggie and Steve at the ceremony.

A Holistic View of Farm Sustainability

In addition to their land stewardship efforts, Maggie and Steve raise produce to sell through a small CSA and at the local Red Oak Farmers Market, and they are working to make their farm energy-efficient. They built a solar-powered PassivHaus home, which eliminates the need for a furnace, and converted an old building on the property into an energy-efficient wash and pack house for their produce enterprise. They also have plans to expand their solar capacity and add wind generation to the farm.

While Maggie and Steve both had an affinity for nature, and an awareness of environmental challenges facing the planet – Maggie says her great-grandfather was a "pioneer of conservation" who added terraces and an evergreen windbreak in 1920, and Steve was an active hiker and backpacker – they say the urgency of living





Above: Some of the land stewardship efforts at Resilient Farms – including prairie strips, seen in the foreground here – were on display at a PFI field day Maggie and Steve hosted last year. **Opposite:** Maggie and Steve pose with Lisa Schulte Moore, who presented the couple with the Farmland Owner Legacy Award at the award ceremony.

“We want to provide an example of sustainable land use, including how to transition from the typical corn-soybean rotation to something that more closely mimics nature.” – STEVE TURMAN

with a regenerative mindset didn’t hit them until the spring of 2006, when they started reading and hearing more about the issue of oil depletion.

“It hit us like a brick wall,” Maggie says. “First we were stunned and amazed how this wasn’t an issue that was being talked about. Then we went through a period of mourning and depression. Then we said, ‘We’ve got to do what we can, make change, reduce our carbon footprint.’”

Maggie had always stayed in the loop about the happenings on the farm when she was living and working out of state in the fashion, advertising and marketing industries. But when the parcel of farmland she now owns transferred to her in 2009, after her mother’s death, she and Steve realized they could take tangible action towards living more sustainably through their decisions as farmland owners.

“We want to provide an example of sustainable land use, including how to transition from the typical corn-soybean rotation to something that more closely mimics nature,” Steve says.

Planning for a Resilient Future

Maggie and Steve were living in Dallas, Texas, at the time, and started planning their energy-efficient house and learning all they could about farming – a process that continued after they moved to Iowa. They subscribed to numerous farm publications, read books, attended conferences and joined Practical Farmers of Iowa. “Steve and I started devouring information,” Maggie says. “The good news is I’m not farming the row crop part. Our farm operators, Bryan and Lisa Huff, have been farming for our family for over 20 years, and Bryan is definitely into conservation practices and no-till. We have really robust conversations with them.”

Maggie and Steve have even bolder goals for the future of Resilient Farms, including expanding the produce enterprise, someday integrating livestock, increasing their energy-efficiency, restoring some of the historic buildings on the property and turning the farm into an educational hub for the community.

“We’re working on a long-term master plan for what the farm should be,” Maggie says.

“We realize this landscape was tallgrass prairie and savanna, periodically grazed by large herbivores and burned every five or six years,” Steve adds. “That’s how it is healthiest, and we’d like to mimic that as much as possible.” ■

Learn More

- ➔ [Listen to a podcast interview with Maggie and Steve at \[practicalfarmers.org/podcasts\]\(http://practicalfarmers.org/podcasts\) \(Episode 004\).](#)
- ➔ [Maggie and Steve share memories of the farm, and their goals for the land, in their farm legacy letters, which were published in the book “The Future of Family Farms,” available from University of Iowa Press \(\[uipepress.uiowa.edu\]\(http://uipepress.uiowa.edu\)\)](#)

Testing Solutions for Cover Crops in Iowa

New grant funds will let PFI research improved practices for cover crops

Of the 30.5 million acres of farmland in Iowa, cover crops were seeded onto only about 760,000 acres in 2017, according to Iowa Learning Farms. While this represents a 22 percent increase over 2016, it's still a far cry from the 12 million acres of cover crops called for by the Iowa Nutrient Reduction Strategy to meet soil and water quality goals. Why the lag in adoption?

In a recent report, Alejandro Plastina, Iowa State University economics professor, suggested that "the necessary conditions to substantially scale up the use of cover crops are currently missing." He highlighted a range of barriers farmers face, from lack of location-specific guidelines for working with cover crops to potential planting and termination costs – but especially, possible yield drag on corn and soybeans. Getting more farmers to adopt cover crops will require overcoming these barriers and finding ways to make cover crops more economically viable for both beginning and experienced cover crop farmers.

PFI Research is on the Case

Practical Farmers of Iowa has been working with farmers for years to explore their cover crop questions through on-farm research with our Cooperators' Program. Earlier this year, we were awarded grant funding to further explore cover crop practices that have shown promise in past on-farm research and demonstration projects. One project, funded by the Division of Soil Conservation and Water Quality of the Iowa Department of Agriculture and Land Stewardship, involves farmers attempting to achieve production cost offsets from using cover crops as a weed control strategy for soybeans – for instance, through less reliance on herbicides or mechanical cultivation. A second project is funded by the Natural Resources Conservation Service's Conservation Innovation Grants program, and will test ways to reduce costs associated with cover crops by evaluating cover crop seeding dates and rates when preceding a corn crop.

Both projects will involve several cooperators across the state conducting coordinated on-farm strip trials. Borrowing

a page from variety trial work the cooperators in the horticulture program have been conducting, cooperators in the field crops program have recognized the power of multi-location trials.

Cover Crops as Weed Control in Soybeans

In the past few years, PFI cooperators have documented increased cover crop growth and no reduction in soybean yield when cover crop termination occurred within one day of soybean planting. Moreover, cooperators found reduced potential for loss of soil nitrogen and reduced weed pressure with this strategy. "I view PFI as a research authority in the field of cover crops," says Sam Bennett, who farms near Galva in Ida County and will participate in the project. "I am proud to contribute to and build on a legacy of farmer-led research with PFI."

Recognizing the need for the "many little hammers" approach when it comes to weed control, cooperators in this research project will further explore how cover crops can be used to manage weeds. They'll test the seeding of soybeans

into a living cover crop, and the effects of waiting two to three weeks before terminating the cover crop. The goal is a thick cover crop mulch resulting from the cover crop being allowed to grow with the soybeans and put on a substantial amount of above-ground growth. The mulch has the potential to prevent weed emergence through the rest of the growing season. The control treatment will involve farmers terminating the cover crop before or at the time of seeding soybeans. "One of my goals in using cover crops is to reduce my production costs by reducing my reliance on herbicides to control weeds in soybeans," Sam says. "I've been impressed with other PFI farmers who have conducted research and shown some potential for cereal rye to reduce weed pressure in soybeans."

As with many past PFI research projects, this one looks to ground-truth work done by researchers at academic institutions. A recent study from Brazil, for instance, showed that reducing or eliminating tillage and incorporating cover crops significantly reduced the weed seed bank in the soil. Scott Shriver is an organic farmer near Jefferson in Greene County who is also participating in the project. He has been experimenting with different soybean row-widths and roller-crimping dates when seeding soybeans into a living cereal rye cover crop. "This practice needs some more investigation, and I'm happy



"I view PFI as a research authority in the field of cover crops. I am proud to contribute to and build on a legacy of farmer-led research with PFI."

– SAM BENNETT



Above: Scott Shriver showed where he planted soybeans and roller-cripped a cereal rye cover crop at the field day he hosted on Aug. 7. **Opposite:** Sam Bennett, left, attended fellow cooperators Arlyn Kauffman's field day on June 19.

to be part of a group of fellow organic and conventional PFI farmers that are looking to further explore this practice," Scott says. Last year, Scott encountered some challenges in planting soybeans into a thick, living cereal rye cover crop. Difficulties closing the seed trench during planting, coupled with a very dry June, stunted soybean development. He did witness, after roll-cripping the cereal rye in early June, the tremendous potential for the cover crop to keep weeds at bay. "If we can refine this practice," Scott says, "it could go a long way to reducing production costs, improving soil health and overall helping farmers learn more about sustainable agriculture practices."

What's The Right Seeding Rate?

Reducing cover crop seeding rates could be a more viable strategy for reducing costs when preceding a corn crop. Current NRCS recommendations for Iowa insist on a cereal rye cover crop seeding rate of 55 pounds per acre when drilling the cover crop, and a rate of 61 pounds per acre when broadcasting and incorporating the cover crop. As many PFI farmers are quick to point out, seed size can vary depending on the cereal rye variety used. This means that the number of seeds planted to a field on a per-pound basis can

vary substantially. Additionally, previous PFI research has shown that a cereal rye cover crop seeded in late August resulted in twice as much above-ground dry matter produced than a cereal rye cover crop seeded in late September at the same seeding rate. To shed more light on this subject, PFI is partnering with the Iowa Soybean Association, as well as a few watershed project coordinators, to conduct on-farm trials at several farms across the state.

Tracy Church is the project coordinator for the Rock Creek Watershed Project. As part of this research project, Tracy will work with local farmers in her area to conduct strip trials on their farms and assist them with data collection. Farmers participating in this project will compare the NRCS recommended seeding rate for cereal rye of 55 pounds per acre with a half-rate of 28 pounds per acre. They'll also test how seeding date in the fall affects cover crop performance at both seeding rates. "We have several farmers [in my area] that have been using a lower seeding rate and are seeing results that are just as good as the higher seeding rate," Tracy says. "We are consistently fielding questions of why our NRCS seeding rates are so high when it is clear the lower rate works." Put simply,

reducing the cover crop seeding rate would lower costs. If a reduced seeding rate can still provide adequate cover crop growth necessary for holding soil and nutrients in place, the practice stands to become more easily adoptable on a wider basis.

Getting the Word Out

The cooperators involved in conducting these on-farm research trials will also play a major role in sharing their research results. They'll host future field days, speak at PFI's conference and be featured in the media – all in an effort to teach others about best management practices for cover crops.

"If one farmer changes their view of what's normal as a result of my trials with PFI, then we've succeeded," Sam Bennett says. "To paraphrase something Arlyn Kauffman said at his field day: I don't have enough money, or enough time, to test these things out all on my own, but because of PFI not all of us have to make every mistake in the learning process." ■

A New Addition to PFI's Policy Work

PFI's board approves crop insurance advocacy as it relates to existing policy areas

As Practical Farmers' network of farmers and leaders has grown, so too have the requests for PFI to state a position, or become involved in the process of agricultural policy rulemaking. Acknowledging the impact government programs have on the lives of our members and in shaping agriculture in Iowa, the board of directors approved the formation of a policy committee in 2009 to oversee the organization's involvement.

When the committee was formed, the board also authorized Practical Farmers of Iowa to take an official stance on three specific areas within the federal farm bill: the Conservation Stewardship Program (CSP); the Environmental Quality Incentives Program (EQIP); and the Beginning Farmer and Rancher Development Program (BFRDP). This board authorization gave PFI staff permission to share recommendations with policymakers, and to articulate positions relative to these three specific realms.

Longtime PFI member Gayle Olson, a current board and policy committee member from Winfield, knows the important policy role Practical Farmers can fill. "In earlier days, PFI's strategy on policy was to absolutely not get involved, but to focus on research, education and relationship-building," Gayle says. "Yet, if an organization is focused on sustainability – by definition a long view – it is difficult to completely shut out the role that policy plays. Also, policy will happen regardless, so I think it should be informed by the best research and the best thinkers. If Practical Farmers of Iowa stays away from the table, there is a big hole in the knowledge of the policymakers as they try to craft good policy."

While acknowledging the importance of our involvement, Gayle also supports our narrow focus on a few key issues:



"When [Practical Farmers] does speak on policy, it speaks with a single, vetted voice on a narrow range of issues that are directly related to PFI's mission and the difference it wants to make in the world."

– GAYLE OLSON

"PFI is not – and I hope never will be – a lobbying organization. When it does speak on policy, it speaks with a single, vetted voice on a narrow range of issues that are directly related to PFI's mission and the difference it wants to make in the world."

When forming the policy committee in 2009, the board also laid out the process for adding a new policy area to the list of approved topics: Each year, a single proposal can be made to the board – but only if the committee votes 100 percent in favor of hearing it. Only twice has the committee, and the board of directors, approved a new policy issue. In 2010, the board approved adding a policy focus on the Sustainable Agriculture Research and Education (SARE) program. And earlier this summer, at its June meeting, the board adopted crop insurance reform as it relates to PFI's already existing policy areas.

Because crop insurance is an enormous area within the farm bill – and one where a lot of disagreement exists regarding what should be done to reform or strengthen it – adopting crop insurance reform broadly does not fall within Practical Farmers' values of welcoming everyone and their opinions. Therefore, PFI's policy committee sought approval to advocate for crop insurance reform only as it fits with our existing interests in beginning farmers, working lands conservation or sustainable agriculture research. "One of the major barriers for greater adoption of conservation practices is their cost," explains policy committee member Anna Johnson. "Changes to crop insurance that remove barriers to conservation practices, and even create incentives for them, are vitally important for building an Iowa of the future, with clean water and healthy soil statewide."

Practical Farmers is grateful for the seven committee members who are thoughtful in guiding the organization's policy work, as well as the dozen other committee members who have previously served. We're also thankful for the partner organizations that provide us with updates, insights and action items to make policy advocacy easier, including the National Sustainable Agriculture Coalition and the Center for Rural Affairs. "Policy happens at many different levels," Gayle says. "Impacting federal policy is a rough and competitive process, so we must work with knowledgeable partners with similar goals and morals, which we are doing." ■

Note: PFI's policy involvement also includes state-level work on the Nutrient Reduction Strategy, and working with each county's soil and water conservation district commissioners. More details about PFI's policy work can be found at practicalfarmers.org/policy.

Review of: “Letters to a Young Farmer: On Food, Farming and Our Future”

I once asked my grandparents why they got married. They responded, “because we thought we could make a go of it.” After they were married, they farmed together for close to 60 years before my grandfather passed away last year. I was reminded of their response while I was reading the book “Letters to a Young Farmer.”

The book is a collection of short essays written to young farmers. In the essay by Barbara Damrosch, I was struck by her comment: “It is best to go into farming knowing that it’s very unlikely to make you rich. Many young farmers have trouble making a go of it at all.” I feel lucky to be a part of Practical Farmers of Iowa, a collection of farmers making a go of it despite tough farm times. The book reads almost like a series of graduation speeches aimed at young, bright-eyed farmers starting on their own in the big, wide world of animal husbandry and tending plants. Essays include business advice, philosophical thoughts on farming, history about the Native American roots of agriculture, practical farming advice, agricultural policy history and more. The book also includes writings by some of the luminaries of sustainable agriculture, such as Wendell Berry, Mas Masumoto, Alice Waters, Michael Pollan, Richard Wiswall, Fred Kirschenmann, Will Harris and others.

In the conclusion of his essay, Will Harris writes: “Transitioning an industrialized, centralized and commoditized farm to a farm that is focused on animal welfare, environmental sustainability and fairness to all of the people involved is difficult; it is the hardest damn thing that I have ever done. But it also the best damn thing that I have ever done.” The book includes an essay from Ben Burkett, a fourth-generation African-American farmer who serves as president of the National Family Farm Coalition. I especially enjoyed reading his essay, as I was able to meet him in person at a conference a few years ago. His essay ends with the quote: “Whether you farm for



a lifetime or for three years, remember the land will always take care of you as long as you take care of it and pass it on.”

While reading the book I was struck that I would like to hear from the experienced farmers in PFI, and their words to young farmers. While the book was good, it included many non-farming authors who, while well-intentioned, do not quite understand what it is to be on the front lines of what we do. A few years ago, I was at a PFI meeting. Afterwards, I had a wonderful conversation with some longtime Practical Farmers members. We spoke about the numerous new farmers in PFI that would be at one conference and not at the next; the turnover among beginning farmers is quite high. Those of us who do make it through those grueling beginning years are yearning for more connection to the broader farming community. We need to learn from our elders, or we won’t make it through the next set of grueling years.

I recently got married, and when I had my bridal shower, my grandma asked what I wanted for a bridal shower gift. I told her I wanted a letter. A letter to a young farmer. I often tell the story of when I decided to leave my engineering job in 2009 to begin farming the next year. When I called my grandma and told her I was going to quit my job and start a farm, she said “we farmed so our children and grandchildren didn’t have to.” The very first year I started

farming, my grandma wrote on my farm’s Facebook page how proud she was of me. But I think she has often felt bad that she didn’t encourage me from the very beginning. I’ll leave you with her words in her “letter to a young farmer” – and I also challenge the experienced farmers in PFI to write to us young farmers. Maybe start a column in the newsletter titled “letters to a young farmer,” or maybe reach out to a young farmer you know. Either way, we need to hear from you. Without you, we won’t make a go of it.

In this excerpt from my grandmother’s letter, she references many people who have helped me. Without PFI members, I don’t think I and other young farmers I know would have “made a go of it”:

“Kate, I was not on the top of your list of the people who encouraged you to fulfill your dream of farming while you were young. You could make a list of the people who have encouraged and helped you, providing land to rent, gathering knowledge of when, what and how to plant your seeds. You have proven yourself capable and I now hope to see my name on the list of people who said ‘go to it . . . If you try, you will really do it.’” ■

Kate Edwards, pictured above with her husband Derek, raises vegetables on 8 acres for a 200-family CSA near Iowa City. 2018 is her eighth season farming.

New Faces and Roles at the PFI Office

Meet the staff members who have joined our team or expanded their duties

Celize Christy – Swine and Poultry Coordinator

Celize joined the PFI staff in June 2018 as the swine and poultry coordinator. Her work in this new position focuses on swine and poultry production systems, on-farm research and the uses of small grains in swine and poultry feeds.

A native of Dallas, Texas, Celize obtained her Bachelor of Science from Iowa State University in 2016, majoring in animal science and global resource systems with a minor in Spanish. Her studies at ISU allowed her to take her curiosity about livestock production systems worldwide: In 2014 and 2015, she traveled to Uganda to work with farmers on their poultry production practices and with women who obtained microloans to raise chickens.

Celize then earned a Master of Science from Penn State University in 2018, where she majored in rural sociology and international agricultural development. Her thesis research focused on how

poultry farmers in Rwanda use local knowledge to aid in addressing poultry health issues.

In addition to her interest in poultry and livestock systems, Celize has been a supporter of sustainable and equitable food systems. She is an advocate of validating farmers' voices and highlighting their significance by sharing their stories and lessons.

In her spare time, Celize enjoys hosting meals for family and friends, hiking, wine-tasting and planning her next worldly adventure. ■



Shannon Kooima – Strategic Initiatives Assistant

Shannon Kooima joined the PFI staff in June 2018. While studying community and public health at Iowa State University, Shannon learned how the choices farmers make about what to plant, and how to plant it, can have a big impact on the health of the community.

While working at The Cafe, a popular Ames farm-to-table restaurant, she saw firsthand how local food systems can thrive when farmers build close relationships with their consumers. Shannon is inspired by the work



of PFI and is excited to be part of a team connecting local farmers to resources that can help their farms flourish.

Shannon grew up in central Iowa and now lives in Ames. She stays busy running around after her son, Will, and her dogs, Annie and Oakley. She spends as much time as possible outdoors camping, paddling and gardening – but on rainy days, you can find her in the kitchen or curled up with a good book and a cold beer. ■

Maggie Cannon – Membership Manager



Maggie joined the PFI staff in July 2018. Maggie's work focuses on membership recruitment and communication, event and office management, and fundraising support.

A native Iowan, Maggie was raised on a row crop and cattle farm west of Newton. In 2011, she graduated from Iowa State University with a degree in communications. She has worked in livestock show

management for the Iowa State Fair and Rodeo Austin in Austin, Texas. Maggie has a passion for youth agricultural education opportunities. Most recently, she worked in College Station, Texas with the Brazos Valley Fair and Rodeo organizing competitive events, a large volunteer base and agricultural education displays.

With her return to Iowa, Maggie is excited to focus on producers and their continued pursuit for knowledge that can help their operations and the resources they manage. Outside of work, Maggie enjoys board-game nights, movies, sports and pop-culture podcasts, as well as spending time with family and friends. ■

(Article continues on next page →)

Sarah Krumm – Graphic Design and Multimedia Coordinator



Sarah joined the PFI staff as graphic design and multimedia coordinator in July 2018. Her work in this newly created position focuses on publication, online and digital graphic design, as well as telling stories through photography and videography.

A native Iowan, Sarah obtained her Bachelor of Arts from Wartburg College in 2009, where she double-majored in graphic design and art. She completed internships at the Indianapolis Museum of Art and at a local photography studio, where she gained more interest and skills in the field of photography. Sarah has experience as a designer for a full-service design group,

specializing in ad design. She has also worked as a freelance designer and photographer for many individuals, organizations and non-profits. For the last six years, she worked as the store graphic artist for Whole Foods Market in West Des Moines, which entailed graphic design, marketing and creating hand-drawn artwork on chalkboards for the store. During that time, her love for food, art and everything local coalesced. She is excited to support local farmers and share their stories through design, photos and video.

Sarah and her husband, Alex, currently reside in Ames and love being a part of the community and their church. Sarah also enjoys spending time with her two cats, traveling the world, trying out new restaurants with her husband, gardening in her backyard and cooking. ■

Nick Ohde – Communications and Marketing Director



Nick joined PFI in December 2014. Earlier this year, he was hired to fill the newly created position of communications and marketing director. In this role, Nick oversees all communications and marketing work for PFI, including strategy, brand, publications and our digital presence. He ensures that farmers

are the voice of all PFI outreach. Before his current position, Nick led multimedia work for Practical Farmers of Iowa, producing videos, podcasts and writing articles.

Nick grew up in rural southeast Iowa, outside of Wapello. He earned a Bachelor of Arts degree from the University of Iowa in

2008, where he majored in journalism and English. In 2011, he received his Master of Science from Iowa State University, where he majored in sustainable agriculture. Nick's research interests focused on soil erosion, water quality and the use of conservation practices.

From 2012-2013, Nick worked for a non-profit organization in rural Ecuador, where he worked with farmers, interns and volunteers on rural community development projects. Before joining Practical Farmers of Iowa, Nick worked as the kitchen manager at Cafe Beaudelaire in Ames. When he's not working, he enjoys hunting, cooking, traveling and eating, as well as spending time with his girlfriend, Emily, and their dog, Ginger. (Ginger is a golden retriever who accompanies Nick to work most days, and will likely greet you if you visit the PFI office.) ■

Jason Tetrick – Media Assistant



Jason Tetrick joined Practical Farmers of Iowa in January of 2018 as an intern. He graduated from Iowa State University with a public relations degree in May 2018. Starting in May, Jason was hired to work part-time in the office. Recently, he became a

full-time employee of PFI. Some of Jason's duties include shooting and editing videos, producing podcasts, designing outreach

materials, social media management, and writing blogs and other materials.

Jason grew up in Waukee, where he currently resides. Jason was first exposed to Practical Farmers of Iowa when he worked for PFI member Ben Saunders, who operates Wabi Sabi Farm in Granger.

In his spare time, Jason enjoys gardening, chickens, baseball, cooking, reading and listening to podcasts and music. ■

There's Still Time to Apply to the Savings Incentive Program

Applications are still being accepted for the Savings Incentive Program Class of 2020. **To apply, you must submit the online form, found at practicalfarmers.org, by Oct. 10.** The two-year program aims to help beginning and aspiring farmers through

mentorship, business plan support, a savings match up to \$2,400, numerous opportunities to network and learn, and more. Don't miss your chance to participate! ■

Get Ready for Fall Farminars

With autumn officially here, we are working on the line-up of topics and presenters for our 2018 fall farminar series. The first farminar of the series will take place on Tuesday, Nov. 13 at 7 p.m. Central time. These online events will happen live each Tuesday night from 7 – 8:30 p.m. through Dec. 18, and resume again in January.

Farminars are interactive, farmer-led online presentations that cover a range of row crop, livestock and horticulture issues. The series is free and easy to access: Tune in anywhere you have an internet connection; listen as a farmer or business expert presents over a slideshow; and ask questions in real-time using a chatbox.

Full topic descriptions can be found in November at practicalfarmers.org/farminars. To participate in a live farminar (or watch a recording), visit the same link and click the "Join In" button. ■

Don't Miss Our Final 2018 Field Days

Three events are still in the offing

If you haven't yet had a chance to attend a PFI field day this season – or want to make a few more connections with fellow farmers and members – you still have a few opportunities. View full details at practicalfarmers.org:

Cheese and Ice Cream Production at Kalona Creamery

Oct. 5 • Kalona • Kalona Creamery
Enjoy a tour of Kalona Creamery, learn how different products are produced – including cheese curds, ice cream and Kalona SuperNatural organic products – and see the technology of the receiving bay. This family-friendly event will also feature a children's cow coloring station.

Forage Chains and Forage-Finishing: 3 Days With Anibal Pordomingo

Nov. 1 – 3 • West Branch • Scattergood Friends School
NOTE: This event is full (it's limited to 24 attendees) – but you can still join the waiting list. Call (515) 232-5661 or contact

The Cornucopia



meghan@practicalfarmers.org to be added to the list.

Root and Tuber Crop Production

Nov. 14 • Sioux Center • The Cornucopia
Learn from John and Janna Wesselius about production of potatoes, carrots, sweet potatoes, beets and turnips. They will demonstrate implements, including a bed lifter (undercutter), and will show their walk-in cooler and root cellar. Stay for dinner afterwards. ■

Note: The field day scheduled for Oct. 14 at Echollective Farm has been cancelled.

Save the Date for the 2018 Beginning Farmer Retreat

Annual gathering will take place Nov. 30 – Dec. 1, in Montour

Beginning farmers, mark your calendars for Practical Farmers' annual beginning farmer retreat. This year, we will gather at the Pilgrim Heights Retreat Center in Montour, Iowa. The event will start in the afternoon on Friday, Nov. 30 and run through the following afternoon.

In addition to networking with other farmers, you will have a chance to make progress on setting goals and creating action plans for



Jenny Quiner (right) chats with Ryan Marcus of Farm Service Agency during PFI's beginning farmer retreat in February 2017.

achieving them. The retreat will offer programming for both aspiring and beginning farmers, with experts and peers facilitating the sessions and assisting with work time.

Registration will open in October. Stay tuned for more details, or visit practicalfarmers.org/beginning-farmer-retreat to see updates as they are added. ■

Host a Social and Help Build Community



Judy and Frank Maly of Ames, members since 1999, attended Helen Gunderson's social in August.

One of the ways PFI works to fulfill our mission is by holding social gatherings where members can get together, build community and celebrate agricultural diversity. So far in 2018, PFI and members have hosted five socials across the state, including Helen Gunderson, of Ames; Ray Bratsch-Prince, of Ames; John and Janna Wesselius, of Sioux Center; Whiterock

Conservancy, in Coon Rapids; and a social held at the Van Horne library that featured a book reading by PFI member and author Susan Futrell, of Iowa City. If you would like to host a social and help build community in your area, please contact Debra Boekholder at debra@practicalfarmers.org or (515) 232-5661. ■

WELCOME, NEW MEMBERS!

DISTRICT 1 – NORTHWEST

- Jay Dahlhauser, The Bridge of Storm Lake – Storm Lake
- Reed Jensen – Spirit Lake

DISTRICT 2 – NORTH CENTRAL

- Doug Adams – Humboldt
- Matt Anderson – Tama
- David Bacon – Garwin
- Steve Black – Cambridge
- Allen Burt – Marshalltown
- Brandon Carpenter – Ames
- Kris and Deb Corbin – Nevada
- Eric Engle – Marshalltown
- Kim and Todd Flynn – Nevada
- Lynn Knutson – Story City
- John Lundvall – Ames
- Roger Lutes – Gilman
- Jan McGinnis – Marshalltown
- Teresa Pelzer – Ames
- Bret and Liz Pierce – Woodward
- Charles Puffer – Iowa Falls
- Casey Robinson – Ames
- Bruce and Jenny Wessling – Grand Junction

DISTRICT 3 – NORTHEAST

- George Beardmore – Dorchester
- Tom Brincks – Waucoma
- Jamie Foxen – Jesup
- Alan Gunderson – Postville
- Kit Kirby – Cedar Rapids
- Dennis Messingham – Waterloo
- Jennifer Nieland and Ray Kruse – Dyersville
- Pat Sperfslage – Delhi
- Wayne Wagness, Quality Organic Producer Cooperative – Decorah

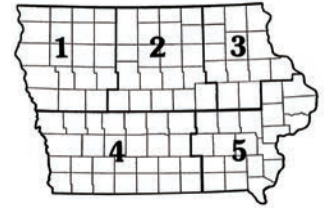
DISTRICT 4 – SOUTHWEST

- Monte and Debra Akers – Kellerton
- John Askew – Thurman
- Missy Bice – Woodward
- Kevin Briggs – Russell
- Liv Charlton – Des Moines
- James Colwell – Knoxville
- James Comes – Atlantic
- Dan DeVries – Prairie City
- Dustin Gleason – Audubon
- Travis and Kaylene Hawkins – Akron

- Bob Kerrigan – Afton
- Kyle Kjergaard – Audubon
- Mike Lamair – Des Moines
- Rick Pellett – Atlantic
- Jon Peterson – West Des Moines
- Carl Phillips – Shenandoah
- Randolph Schaefer – Adel
- Zane Schaefer – Adel
- Grant Stuart – Walnut
- Matt and Terri Thielen – Atlantic
- Joel Thomas – Adel
- Mike Van Zee – Pella
- Alan Zellmer – Atlantic

DISTRICT 5 – SOUTHEAST

- Roger Bartenhagen – Muscatine
- Josh and Ivy Crawford – Grinnell
- Rose Danaher – Amana
- Erich Crill – Delta
- Patti Edge – West Branch
- Will Luers – Keota
- Matthew McAndrew – Coralville
- Murry Mente – Tipton
- Carol Oetken – Mediapolis
- Joyce Otto – Grinnell



- Greg Shepherd – Mount Pleasant
- Diane Van Duzen – Burlington
- Washington Soil and Water Conservation District – Washington

DISTRICT 6 – OUT OF STATE

- Aaron Pellett – Alborn, MN
- Kevin Ellis – San Antonio, TX
- Martin Larsen – Byron, MN
- Renewing the Countryside – Minneapolis, MN
- Ronald Leum – Westby, WI
- Jean Rothfusz – Weslaco, TX
- Dean Schimek – Easton, MN
- Ward Laboratories – Kearney, NE

Guests take a hay rack ride and listen to Jerald Deal talk about his pumpkin patch at the field day he hosted on Sept. 13 at Deal's Orchard in Jefferson.



UPCOMING EVENTS: SEPTEMBER – NOVEMBER

SEPTEMBER

SEPT. 26: Monarch and Pollinator Field Day | Winterset

Iowa State University Extension and Outreach and Pheasants Forever will host a monarch and pollinator field day. The field day is designed for landowners and families who want to learn more about planting monarch and pollinator habitat. The day will include a field tour of pollinator habitat planted by local landowners Don and Chris Eyerly and J.D. Schreurs. Attendees should meet at the Eyerly farm (1671 Fox Trail, Winterset). For more information, visit extension.iastate.edu/news/monarch-and-pollinator-field-day-sept-26.

SEPT. 27: 2018 Fall Annual Conference | Iowa Environmental Council | Des Moines

Iowa Environmental Council will hold its 2018 annual conference at the Holiday Inn Express Airport, Des Moines. The theme for this year's conference is Iowa Values: Conservation, Preservation and Progress – Incorporating Iowa Values into a Sustainable Future. For full details, and to register, visit iaenvironment.org/get-involved/council-events/annual-conference/default.aspx.

OCTOBER

OCT. 1 – 2: Nobel Conference 54 | Living Soil: A Universe Underfoot | St. Peter, MN

The Nobel Conference brings students, educators and members of the general public together with leading thinkers of our time to explore revolutionary, transformative and pressing scientific questions and the ethical issues that arise with them. The Nobel Conference 54 invites participants to consider the vast diversity and complexity of soil, and to ponder the challenges we face in protecting this most fundamental resource. For full details, and to register, visit gustavus.edu/events/nobelconference/2018.

OCT. 5: Lancaster Kernza and Silvopasture Field Day | Lancaster, WI

The University of Wisconsin-Madison's Lancaster Agricultural Research Station will host a fall field day highlighting innovative grazing practices: managed grazing of Kernza, a perennial grain and forage crop; and silvopasture, where trees are intensively managed with pasture. Participants will learn about the latest advances in Kernza research and watch beef heifers grazing a mixture of Kernza and alfalfa in a rotational grazing system. To learn more, or to register, visit cias.wisc.edu/lancaster-kernza-and-silvopasture-field-day.

OCT. 6: Trees Forever Backyard Forest Conference | Iowa City

Join the experts to learn about how you can improve native habitat in your woodland. Learn land management techniques, become an advocate for healthy forests and polish your skills to be a better environmental steward of the land. Participants will take part in a two-hour walk in the woods with a forester to learn about forest health and history. Following the walk, those in attendance will be able to attend four 45-minute sessions presented by local forestry and conservation experts. For more details, visit treesforever.org/BackyardForest.

OCT. 10: Managing Shade for Profitable Beef Production Field Day | Saint James, MO

This producer field day will take place at the Mingo Farm. Guests will tour an operation that uses natural shade in rotationally grazed paddocks, and learn about managing forages, timber and livestock in an integrated system. The day will also feature an equipment display, talks on genetics and a portable breeding barn demonstration. For more details, and to register, visit centerforagroforestry.org/events/MingoFarm.pdf.

OCT. 13: Harvest Festival | Seed Savers Exchange | Decorah

Soup cook-off, pumpkin carving, garlic workshop, cider pressing and more: It's time for Harvest Festival at Heritage Farm. Vote for your favorite soup, attend a workshop, take a hayride and make your very own corn husk doll. This family-friendly event is a favorite. For more details visit seedsavers.org/harvest-festival.

OCT. 18: Pumpkin Carving | Iowa Arboretum | Madrid

Test your carving skills and enjoy a hot bowl of chili, a warm piece of cornbread and a cool dessert at this free event. The pumpkins will be displayed during the Arboretum's Halloween events. For more details visit iowaarboretum.org/calendar.

THROUGH OCT. 28: Tallgrass to Knee High: A Century of Iowa Farming Exhibit | West Branch

Visit the special Tallgrass to Knee High: A Century of Iowa Farming exhibit at the Herbert Hoover Presidential Museum. The exhibition showcases historical highlights of farming in Iowa and the Midwest from 1910 through our near future, and looks at crops, conservation, livestock, machinery, buildings, people and farm life in Iowa over the last 100 years. Period objects from some of these topics are on display. The sponsor, Iowa Farm Bureau, is celebrating

100 years of service in Iowa and will display its digital timeline and memorabilia throughout the exhibit to help tell the story of farming in Iowa. For more information, visit hoover.archives.gov/special-exhibits.

NOVEMBER

NOV. 2 – 3: Women Food & Ag Network Annual Conference | Des Moines

WFAN's mission is to engage women in building an ecological and just food and agricultural system through individual and community power. Our members work every day to fulfill a vision for a food system that supports farmers, eaters, and the environment. This two-day annual conference is an opportunity to learn from our diverse peers, build a stronger network and foster connections for long-lasting change. The conference will feature women in our network through regional field tours; day-long intensives; a farm-to-table dinner; an art-plus-story gallery featuring work by women farmers; creative community building; and workshops. For full details and to register visit wfan.org/2018-wfan-annual-conference.

NOV. 8: ISU Extension | Greenhorn Grazing Workshop | Chariton

Livestock producers who want to learn about optimizing forage and livestock production while conserving natural resources are invited to attend the Greenhorn Grazing series at the Iowa State University McNay Research Farm near Chariton. Joe Sellers, ISU Extension beef specialist, says the series has been a popular management course for producers over the years. For full details, or to register, visit iowabeefcenter.org/news/GreenhornGrazingMcNay2018.html.

NOV. 27–28: Farm Progress Tech Forum | Iowa City

This event is presented by the agricultural information platforms Corn and Soybean Digest and Farm Futures. The conference is designed to help producers advance their precision ag production and data handling skills, and will answer the question: "How do I build a successful real-world tech and data strategy for my farm that improves my business, both short- and long-term?" Attendees will walk away with immediate action items to implement while gaining a better understanding of where precision ag is headed in the coming years. For more details, visit farmprogress.com/events/farm-progress-tech-forum.

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A DRONE'S-EYE VIEW





A Patchwork of Diversity:

In mid-July, we visited Dustin and Jenni Farnsworth, who farm land owned by Dustin's father, Alan, near Adair. Dustin is transitioning some of the farm to organic, and you can see that work in progress (his fields are between the road on the left and the small creek on the right).

His organic corn is dark green and in good shape for mid-summer – that's the result of a diverse rotation that includes small grains, clover and the application of cattle manure. You can also see oats in various stages of harvest; soybeans; hay; and buffers.

A big goal of Dustin's farm, in addition to profitability, is to provide abundant wildlife habitat. You can see Conservation Reserve Program (CRP) ground at the edges – home to quail, pheasants and a myriad of other animal species.

Drone:

This photo was taken by PFI's drone, Otis, a Phantom 4 Advanced drone, at 385 feet. The drone, piloted by PFI's multimedia assistant, Henry Corbin, was facing due south and flying into a strong headwind.



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