the PRACTICAL FARMER



SPRING 2020



Staying Safe and Connected as We Confront COVID-19 Together

Dear Members, Friends and Supporters,

At the time this issue went to press, the impacts of COVID-19 were mounting with dizzying speed, with each day seeming to add a new dimension to the severity and scope of the pandemic. As we all continue to adapt to our present daily and social reality, we want you to know that the staff and board of directors of Practical Farmers of Iowa are thinking about you and your safety, as well as your challenges – and we are here to support you in whatever way we can.

We continue to monitor developments locally, regionally and nationally and have taken steps to ensure we're doing our part to limit the spread of COVID-19. Since March 18, our Ames office has been closed and staff have been working remotely, until further notice.

We have also canceled in-person meetings and events, moving some online or postponing them until it is deemed safe to reconvene in person again. Please watch for updates on our website (we're sharing rolling updates on the "PFI COVID-19 Updates" post; you'll find a button to it at the top of practical farmers.org). We're also sharing updates in "Practical News"; on our Facebook page; and on our email discussion lists.

Despite the disruptions to our usual ways of working, we want to assure you that we are continuing to work on behalf of our members and our mission.

- We are readily available by phone and email. When you call the PFI office at (515) 232-5661, you will be directed to leave a voicemail for the staff member you wish to speak with. Once you have done so, the phone system will automatically send your voicemail as an email message to that specific staff member. Rest assured, we are monitoring our email and will respond to you!
- While it is likely we will be virtual for the entire season, we don't know that for certain and we need to continue to be flexible. We continue to plan for what we hope will be an inspiring and practical field day season. While we don't know whether in-person events will be possible this season, we are preparing a suite of virtual events for part or all of the season depending on how long physical distancing is recommended. We are blessed with members who are abundantly creative and eager to share their experience, regardless of the format.
- In the days ahead, we will continue to find ways to bring our network together to learn, share knowledge and support one another through virtual events, meet-ups and other online forums.

We know it's easy in unprecedented times like these to feel anxious and overwhelmed by the scope of unfolding events. We also know the upheaval from this pandemic is impacting rural communities and farm businesses. In the midst of this uncertainty, we encourage you to lean on the Practical Farmers of Iowa network.

Our supportive community has always been our strength. We were born in a time of crisis – the farm crisis of the 1980s – and together, we forged an enduring network of hope and solidarity. We got through that crisis together, and we will emerge from this one too, stronger and more connected.

While this pandemic will impact everyone in some way – know that you are not alone. As we all practice social distancing, we don't have to become socially isolated. Take advantage of PFI's many resources to stay in touch and continue learning from one another as you get ready for the spring planting season.

Watch for pop-up online events, take advantage of our email discussion lists, talk to one another by phone – and remember that we will all come together again to enjoy the beauty and diversity of Iowa farms.

With heartfelt wishes for your health and wellbeing,

Sally Worley, PFI executive director

Sally Worley



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** NOTE ABOUT CALENDAR **

Because so many events are in flux due to widespread cancellations, postponements or restructuring during the COVID-19 pandemic, we have removed our calendar of events from this issue.



ON THE COVER:

Private lands wildlife specialist Matt McClanahan (left) discusses grazing native perennials in the Little Sioux Watershed during a field day hosted by John Rock and Aaron Nelson near Peterson, Iowa, in June 2019.



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.

Magazine 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.





BOARD MEMBERS & STAFF

We love to hear from you! Please feel free to contact your board members or staff.

General info and staff connections: (515) 232-5661. Staff email addresses: @practicalfarmers.org.

DISTRICT 1 (NORTHWEST)

Nathan Anderson - Secretary

400 Locust St., P.O. Box 14 Aurelia, IA 51005 (515) 708-5199 n8andy@gmail.com

DISTRICT 2 (NORTH CENTRAL)

Wendy Johnson - President

2038 March Ave Charles City, IA 50616 (562) 852-7044 207wendy@gmail.com

DISTRICT 3 (NORTHEAST)

Ann Franzenburg - Vice-President

6925 19th Ave. Van Horne, IA 52346 (319) 640-0262 eafran@netins.net

DISTRICT 4 (SOUTHWEST)

Mark Peterson

2311 N Ave. Stanton, IA 51573 (712) 370-4004 markpete@myfmtc.com

DISTRICT 5 (SOUTHEAST)

Gayle Olson

2272 140th St. Winfield, IA 52659 (319) 931-1351 olsongayle@gmail.com

AT-LARGE FARMERS

Carmen Black

5025 120th St. NE Solon, IA 52333 (319) 331-3957 localharyestcsa@gmail.com

Jack Boyer

1031 Hwy T55 Reinbeck, IA 50669 (319) 345-2265 jboyerfarms@gmail.com

Vic Madsen

2186 Goldfinch Ave. Audubon, IA 50025 (712) 254-3057 vcmadsen@iowatelecom.net

Mark Ouee

1951 Delta Ave. West Branch, IA 52358 (319) 530-3782 farm@scattergood.org

David Rosmann

1809 N Willow St. Avoca, IA 51521 (612) 219-7396 davidrosmann@hotmail.com

AT-LARGE FRIENDS OF FARMERS

Kristine Lang

509 Cedar St. Brandon, IA 52210 (515) 825-7525 kristine.lang@rodaleinstitute.org

Lisa Schulte Moore - Treasurer

728 Brookridge Ave. Ames, IA 50010 (515) 294-7339 lschulte@iastate.edu

PFI STAFF

Debra Boekholder

Membership & Events Assistant (debra@)

Alisha Bower

Strategic Initiatives Manager (alisha@)

Sarah Carlson

Strategic Initiatives Director (sarah@)

Steve Carlson

Membership Manager (steve@)

Celize Christy

Next Generation Coordinator (celize@)

Rebecca Clay

Strategic Initiatives Assistant (rebecca@)

Josie Dubiel

Office Support (josie@)

Meghan Filbert

Livestock Program Manager (meghan@)

Laura Frescoln

Associate Director (laura@)

Stefan Gailans

Research & Field Crops Director (stefan@)

Suzi Howk

Finance & Benefits Director (suzi@)

Monserrat Iñiguez

Latino Outreach Contractor (monserrat@)

Tamsyn Jones

Editor & Outreach Coordinator (tamsyn@)

Liz Kolbe

Horticulture & Habitat Programs Manager (liz@)

Sarah Krumm

Graphic Design & Photography Coordinator (sarah_k@)

Hayley Nelson

Research Assistant (hayley@)

Maggie Norton

Farmer Outreach Coordinator (maggie_n@)

Nick Ohde

Communications & Marketing Director (nick@)

Greg Padget

Next Generation Director (greg@)

Jorgen Rose

Habitat & Farm Transfer Coordinator (jorgen@)

Chastity Schonhorst

Bookkeeper (chastity@)

Jason Tetrick

Digital Media Coordinator (jason@)

Sally Worley

Executive Director (sally@)

CO-FOUNDERS

Larry Kallem 1417 Indiana Ave. Ames, IA 50014

(515) 337-1272

Sharon Thompson Boone, IA

Boone, IA

The late Dick Thompson

Boone, IA

CONTACT US

Practical Farmers of Iowa

1615 Golden Aspen Drive, Suite 101 Ames, IA 50010 (515) 232-5661

practicalfarmers.org facebook.com/practicalfarmers twitter.com/practicalfarmer youtube.com/pfivideos linkedin.com/company/practical-farmers-of-iowa

Welcome to the Neighborhood

uring our Cooperators' Meeting in December, my colleague Nick Ohde and I talked about something Nick had been musing on: how PFI is kind of like "Mister Rogers' Neighborhood," the classic and groundbreaking children's program created by Fred Rogers that aired from 1968-2001. The conversation continued into lunch on Friday, where I shared a table with Jeremy Gustafson and Arlyn Kauffman.

I mentioned that what we are trying to create at PFI is akin to what Fred Rogers strove to foster in his show. Jeremy nodded, but Arlyn – who is Amish and didn't watch Fred Rogers on TV during his childhood like Jeremy, Nick and me – was unfamiliar with "Mister Rogers' Neighborhood."

Jeremy described the show to Arlyn: Mr. Rogers enters in song, changes into his house shoes and sweater and directly welcomes you, his neighbor. He takes viewers into his magical world of makebelieve, featuring a cast of puppet and human characters, on an iconic miniature red trolley while welcoming visitors each episode and sharing life wisdom. Fred Rogers repeated this pattern 895 times on his show. Why did this show resonate with so many people, and why is it relevant to Practical Farmers today? Community is at the heart of the show's staying power. Fred Rogers welcomed everyone as his neighbor. He appreciated everyone's uniqueness and belonging in this world. He encouraged kindness. He fostered creativity and connection.

Among Fred's many enduring quotes, he proferred this wisdom:

- "Imagining something may be the first step in making it happen, but it takes the real time and real efforts of real people to learn things, make things, turn thoughts into deeds or visions into inventions."
- "If you could only sense how important you are to the lives of those you meet; how important you can be to the people you may never even dream of. There is something of yourself that you leave at every meeting with another person."



From left to right: Sally Worley; New Zealand agroecologist Nicole Masters, who keynoted our 2020 annual conference; and PFI board president Wendy Johnson.

 "All of us, at some time or other, need help. Whether we're giving or receiving help, each one of us has something valuable to bring to this world. That's one of the things that connects us as neighbors – in our own way, each one of us is a giver and a receiver."

I was reminded of this conversation recently when Nick suggested I listen to a podcast about Fred Rogers titled "Welcome to the Neighborhood." Here is part of host Rick Lee James' introduction: "We want you to know that no matter where you are coming from, we want this to be a safe place for you. We know that you are coming from all walks of life and we want you to know that you are welcome here. We hope this will be a place for you to feel welcomed and find encouragement, and even friendship with those who believe differently from you. Welcome to the neighborhood. May this be a place of refuge for you."

This sense of community was felt strongly at our conference in January. Despite the horrendous weather, 745 of you, neighbors, showed up to learn and connect.

Community-building was in full force.

During the business meeting, PFI president Wendy Johnson said, "PFI began out of difficult and really hard times in the 1980s.

Some farmers decided they wanted a different trajectory for their future. More and more farmers felt the same, and 35 years, 4,250 members later, our community is strong and resilient."

Wendy continued, "As we navigate farming in a changing political landscape, a changing climate, a changing economy where there will be some rough times, remember that we are doing it together. Farming in general is full of variables, ups and downs, and wins and losses. Remember that you always have us, a base of people that believe in you and what you're doing and whom you can learn from and lean on. We are in this together, weathering this storm figuratively and literally."

Thanks to each of you for being part of PFI's neighborhood.

Sally Worley

"Imagine what our real neighborhoods would be like if each of us offered, as a matter of course, just one kind word to another person." - FRED ROGERS

Funding Conservation

Making working lands programs work for you

The farm bill (now technically the Agricultural Improvement Act of 2018) is a massive piece of legislation signed into law roughly every five years. Amongst its many provisions is what's known as the Conservation Title – Title II – which authorizes a host of conservation programs and is perhaps the single largest source of legislated conservation funding in the world.

alling roughly into three broad categories (see the table below), these programs provide financial and technical assistance to producers and landowners for a variety of purposes. Two of the most popular conservation programs today are the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP). These two initiatives are commonly referred to as "working lands" conservation programs, and they are designed to

encourage conservation activities on privately owned lands that are in active agricultural production.

Environmental Quality Incentives Program

The Environmental Quality Incentives Program is one of the largest federal conservation programs by dollar value. In federal fiscal year 2018, EQIP (usually pronounced "equip") provided \$1.87 billion in financial and technical assistance. That money was used for a variety of on-farm practices, from construction of manure management systems and cover crops to prescribed grazing, riparian buffers, high tunnels and everything in between. If you can think of a conservation practice, EQIP has likely provided support for it – there are several hundred conservation practices to choose from, many of which can be combined as needed to meet conservation goals and address resource needs. EQIP contracts usually last one to three years (there are exceptions) and provide payments,

typically 50-75% of estimated total cost, for specific practices or activities.

Conservation Stewardship Program

The Conservation Stewardship Program is by some measures the largest private lands conservation program by acreage – over 70 million acres are covered by CSP contracts. Established in 2002 through the Farm Security and Rural Investment Act, the program supports on-going and new practices by farmers who are implementing whole-farm conservation systems. To compete for a CSP contract, producers must demonstrate a high level of conservation - CSP is often considered an "above and beyond" program, designed to reward farmers for beneficial management practices across the whole farm. Conservation Stewardship Program contracts last five years and can be competitively renewed.

PFI member and farmer Rob Stout has participated in different state and federal

Program Type	Major Programs				
Working Lands Programs	Environmental Quality Incentives Program	Conservation Stewardship Program			
Focused on maintaining agricultural production while addressing resource concerns	• Financial and technical assistance to producers to plan, install and implement conservation practices	• Financial and technical assistance for maintaining and improving conservation systems			
Revolve around conservation practices	Includes vegetative, structural and land management practices	Generally focuses on management practices			
	• Short (usually 1- to 3-year) contracts	5-year contracts with competitive renewal			
Land Rental Programs	Conservation Reserve Program (General)	Conservation Reserve Program (Continuous)			
Often referred to as "set aside" programs These programs make payments to producers for temporary land use changes	Provides annual rental payments in exchange for removing land from production and converting to	Like General CRP, provides annual payments for establishing perennials Relates to CRP sub-programs that address			
	various types of cover				
	Prioritizes applications based on an Environmental Benefit Index	specific resource concerns (e.g., CP42 Pollinator Habitat)			
	Typically 10-year contracts; applications accepted during a sign-up period	Applications accepted on a continuous basis; generally fewer acres per contract			
Land Easement Programs • Programs that offer payment for voluntary,	Agriculture Conservation Easement Program – Agricultural Land Easements	Agricultural Conservation Easement Program - Wetland Reserve Easements			
long-term, often permanent land-use restrictions	Provides payments equal to 50-75% of the fair market value of the easement	Provides payments equal to 100% of the easement value			
	Protects land in perpetuity for agricultural use	Provides 75-100% of restoration costs			
		Restores and permanently protects wetlands; prohibits agricultural uses and development			
		Previously known as the Wetlands Reserve Program (WRP)			



Rob Stout (left) and his stepson, Alex Zimmerman, raise corn, soybeans and hogs in Washington County, Iowa.

"It's nice to get a little cost-share out of [the Conservation Stewardship Program]. A lot of the things I'm doing, I don't see the benefit on my farm. Those benefits are downstream and in the future, so I don't feel bad about taking the cost-share.

- ROB STOUT

cost-share programs. He and his stepson, Alex Zimmerman, farm about 1,000 acres of corn and soybeans in Washington County, and they also own around 9,000 hogs. Rob says he first learned about the Conservation Stewardship Program, which was new at the time, from his local Natural Resources Conservation Service staff. Because of his ongoing conservation efforts and his desire to do more, he says CSP was a natural fit. Rob is now roughly halfway through his second five-year CSP contract, and so far he's been satisfied with the program.

"Even the first time around, some things I was doing already," Rob says. "I had only just got started in cover crops, so that first contract I did more acres. I also did some fall nitrate tests and fine-tuned my nitrogen application."

As mandated by the program, Rob's second contract required him to add an additional layer of conservation. He chose to add more diverse cover crop mixes that included peas, radish and oats, among other things. He also started doing some soil health testing to better understand how his farm's soil is reacting to his suite of conservation practices. Through his CSP contract, Rob

receives an annual payment each year for five years in exchange for adopting a suite of conservation practices across his farm. The payment amounts vary based on the practices being implemented, but this broad-based compensation is the primary way in which CSP differs from EQIP. Where EQIP generally offers only short-term contracts to pay for specific conservation practices, many of which are structural, CSP offers longer-term contracts designed to provide cost-share for a system of whole-farm management.

"I'm not sure how they come up with the number," Rob says, referring to the payment amounts. "But generally it works out okay. Sometimes it can be tricky to cash-flow expenses like buying cover crop seed while you're waiting on the CSP payment."

Overall, however, Rob says he's happy with the way CSP works. If he could change anything about the program, he would like to see farmers get more credit for work they're already doing. To illustrate his point, Rob explains that over the course of his first CSP contract, he and his stepson really increased their conservation efforts outside the scope of the cost-share program. In other words, they decided to do more conservation on their own without any government support. When the time came to renew their CSP contract, however, Rob feels they didn't get enough credit for that significantly expanded conservation work.

"They want you to add something new," Rob explains, "but we were already doing a lot. People have really stepped it up on their own and it seems like maybe they're not given enough credit for that."

Despite this, Rob appreciates the program and intends to pursue another contract renewal. But he adds that while CSP has been good to him, it hasn't been his primary conservation motivator. "I'll keep doing what I'm doing anyways," Rob explains. "I don't get cost-share to do all I'm doing anyways, but if money is available I'll take it. It's nice to get a little cost-share out of it. A lot of the things I'm doing, I don't see the benefit on my farm. Those benefits are downstream and in the future, so I don't feel bad about taking the cost-share to reap some of the rewards."

Variety Selection is Key to Small-Grain Success

PFI research and partnerships are helping farmers make better decisions

Plant breeding has been practiced since ancient times, when the first wild crops were domesticated for agriculture, but it's come a long way since then. Today, plant breeders can select for a myriad of different traits, from grain qualities like low protein or high test weight to innate resistance against particular pests and diseases.

his is a boon for farmers because it gives them access to plant varieties that may perform well in their soils and climates. It also means they can produce a product keyed into the demands of their target market. Unfortunately, funding for breeding during the 20th century and into the 21st was slowly funneled into a narrower and narrower set of crops, leaving lowa and other Midwestern states with few or no breeders of oats, rye, barley, triticale and wheat.

For farmers, this lack of research and development of small-grain varieties translates to real risks and costs to their bottom lines. Less disease-resistant small-grain varieties may require more fungicides. Lower-yielding varieties cut into revenue. And certain grain specifications, like test weight in oats, can slam the doors to the more lucrative markets for food-grade products. To address this gap,

Practical Farmers has been trialing oat varieties at three lowa locations since 2015, adding a fourth spot in 2018. The aim is to arm farmers with better data so they can estimate how varieties will perform in their patch of lowa soil. In 2018, we launched a project to organize small-grain breeders throughout the Midwest and build a new tool to predict the best-yielding varieties based on a farmer's zip code.

Five Years of PFI Oat Variety Trials

Since 2015, Practical Farmers has organized variety trials at several locations in Iowa. In 2019, our fifth year conducting this research, we also expanded our trialing to include rye for the first time. From 2015-2019, all trials were conducted on Iowa State University research farms at Kanawha (northern Iowa) and Nashua (northeastern Iowa), as well as on one PFI farm location. Starting in 2018, we expanded the oat trialing to the ISU Ag Engineering and Agronomy Research Farm in Boone (central Iowa).

PFI member and current board president Wendy Johnson and her neighbor and fellow PFI member, Wayne Koehler, have traded the honor of hosting the trials through the years. "It was very interesting the two years I had the trial to see the variation in the variety," Wayne says. "Some of [the plants] will be different heights. Some, when they start to head out, you can tell differences in the maturity speed. Closer to harvest, you can tell differences in which varieties will lodge and not stand as well."

The results of these variety trials are published as research reports on PFI's website each year and serve as a resource for farmers who want to select the right small-grain variety for their operation and goals. "A major component of the [variety selection] decision for me is: What is the intended use of the oats? Why am I producing them?" Wayne says. Potential uses for oats include as

"A major component of the [variety selection] decision for me is: What is the intended use of the oats? Why am I producing them?"

- WAYNE KOEHLER

livestock feed (hay or grain) or bedding (straw); as a nurse crop for alfalfa; for milling or food-grade markets; or for seed. "Over the years, I've grown oats for all of these different reasons," Wayne says, "so the market identification is important."

If your end use for the grain is livestock feed, you probably want the biggest yield possible, whereas if you'll take oatlage or oat hay, you might want to look at plant height as an indicator of potential tonnage. "If you're in an area with a miller or processor for food-grade [oats], then test weight becomes a higher priority," Wayne says. "Other times, I have seed contracts, where I grow [oats] for seed. Then it's more of whoever you're growing the seed for will determine the variety." This past year Wayne grew certified Natty for a cover crop seed business. When growing oats for seed, special care must be taken, as the vast majority of oat varieties have legal restrictions on the conditions under which they can be marketed as seed.

Variety trial results can also give farmers clues as to how to manage the crop in our lowa soils and high-moisture climate. At the Nashua research location, an ongoing fungicide trial shows the response, and thus return on investment, of fungicide applications to key varieties. In 2019, researchers conducted the fungicide trial on four varieties (Deon, Hayden, Horsepower and Shelby 427) and showed that Hayden and Horsepower statistically increased yield and test weight with a fungicide application, while Deon and Shelby 427 did not. This is likely due to Deon and Shelby 427's innate disease resistance – their genetics render them resistant or moderately resistant to more diseases. The results show that producers who wish to avoid fungicide applications can do so without sacrificing yield by selecting more highly resistant varieties. Another perk: these varieties are easier to manage. "Pay attention to disease resistance and tolerance ratings," Wayne says. "It helps give you an indication of how closely you might have to manage the crop as far as scouting for disease and the likelihood of whether you may or may not need to apply fungicides."

It's important, however, to recognize the limits of variety trial data. While they can empower you to make educated guesses about how the season will go, the locations where the research was conducted all have inherent differences – physically, in terms of soils; temporally, in terms of weather from year to year; and managerially, in terms of the tools and tenets a farmer uses to manage their system. "[The trial] yields were lower than my own oats were this past year [in 2019]," Wayne says. "My own oats were able to get drilled earlier than the trial plot was – at least a week earlier. I no-tilled my oats, which gained me a day or two because I didn't have to wait for it to be dry enough to do a tillage pass." By contrast, the trial plots were planted with a standard drill, so a pass of soil finishing was conducted on the day of or prior to oat planting.

Selector Tool Leverages Variety Trial Data

The phenomenon of spotting differences between the same varieties at different locations, and seeing the top-yielding varieties shuffle at each site, has a technical term: genotype by environment interaction. Lucia Gutierrez, assistant professor in the Agronomy Department at University of Wisconsin-Madison, researches these interactions and breeds oats, wheat and barley. "A genotype by environment interaction means that if we have two varieties and we grow them in two different environments, the best variety might be different in each environment," Lucia explains. "Small grains, particularly, have a large genotype by environment interaction, so one variety is not going to work for the whole U.S." Therefore, the best data on variety performance for crops like oats or wheat would be to have a full-blown variety trial in every single field across the region – which is obviously unrealistic.

One area of Lucia's research addresses this gap in field data by developing models that can predict very localized small-grain variety performance. In 2018, PFI organized a team of 14 researchers and successfully applied for a Sustainable, Agriculture Research and Development (SARE) grant to develop one such model that would help farmers better predict the top-performing variety for their location – even if there wasn't a variety trial location nearby.

With this project, Lucia's lab will use oat and wheat variety trial data provided by researchers in six states throughout the Midwest to build a statistical model that will classify a farmer's location as a certain mega-environment. The model will take into account topography, soils, climate and other factors, and then access the data from the variety trials conducted in the most similar mega-environment to predict oat and wheat variety performance in that



Above: Wayne Koehler inspects a near-mature field of oats on a hot July day on his farm near Charles City, Iowa. *Photography by 'Gil Gullickson'. Reprinted with permission from Meredith Corporation.* ©COPYRIGHT 2020 Meredith Corporation. All rights reserved. **Opposite:** Lucia Gutierrez stands in one of her barley breeding test plots located in Wisconsin.

farmer's location. "With only three or four variety trial locations in lowa, we don't know if a farmer's location will perform like the one they're closest to or the one farther away that has more similar soil or terrain, for example," Lucia says. "The genotype by environment model we are building seeks to understand why the varieties change in the ranking and then use this information to predict the top varieties for farmers."

Eventually, the model will be publicly accessible on the Practical Farmers' website, where any farmer in the coverage area will be able to enter their zip code, their crop (oats or wheat) and their end market to generate the model results for themselves. But first, the model's predictions will need to be tested on farms. "The next step will be to trial the model-predicted varieties on farms so we can assess variety performance between research stations and trials. That way we're not just working with a theoretical 'how will it work?' but we'll have actual data to continue to improve the model in the future," Lucia says. "Farmer participation will be very important."

If you're interested in getting involved as a trial location for the selector tool for oats or winter wheat, contact Becca Clay at (515) 232-5661 or rebecca@practicalfarmers.org. ■



Crowdsourcing Vegetable Yields

A special PFI portal helps vegetable farmers share their production data – and fortify their management

By Liz Kolbe

Given the prevalence of yield discussions among corn and bean farmers and annual yield surveys in the ag media, some readers may be surprised to learn that many vegetable growers are not tracking their yields in a manner consistent with other growers, or tracking them at all!

Thy aren't they? Several factors make yield data collection more difficult, and less important to vegetable farmers. First, most vegetable farmers are selling directly to consumers. Direct sales retain a larger portion of the consumers' food dollar, but also mean farmers are busy with multiple weekly markets, and with upwards of 20 types of crops from May to November (and into the winter months). Farms keep detailed sales records, but because they are often selling by the bunch or piece, does it truly matter how many pounds come out of the field?

For such a complex set of cropping, harvest and sales records, having the wrong system for recording yields is more frustrating than not doing it. No two vegetable farms are set up alike. Most harvest and packing is done manually, and recordkeeping preferences vary widely – from paper notebooks or whiteboards to spreadsheets and smartphone apps. And yet, for farmers to plan, grow and become more efficient and consistent in their field planning and marketing,

"Yield information just isn't as available for vegetable growers This website has the potential to fill that gap and make information available about many crops and varieties that are relevant to my climate and growing zone."

- EMILY FAGAN

they need to be able to compare their production values to benchmarks; ideally to benchmark values relevant to their farming systems. Having accurate farm-level data helps farmers scale appropriately for customer demand, and confidently approach opportunities for insurance and investment.

The USDA Census of Agriculture collects and reports vegetable production data, but once the data are aggregated, reported yields are primarily driven by larger, more mechanized and specialized vegetable farms, with no information about production methods or varieties. Some university extension programs have collated "small-farm vegetable yields," but again, lack information on varieties and production methods.

Primarily, diversified vegetable farmers rely on conversations with their seed salespeople and fellow farmers to learn the nuances of varietal qualities that are important for direct marketing, such as taste, color, shape, uniformity and yield (in counts and weights).

Farmer to Farmer Data: an openaccess PFI website for sharing vegetable yield and production data

Vegetable farmers in PFI wanted a way to more efficiently share production and yield information. To meet this request, PFI launched the Farmer to Farmer Vegetable Yield and Production Data website, "Farmer-to-Farmer Data", for short, found at data.practicalfarmers.org. At this site, farmers and members of the public have open access to view, filter and download farmer- and researcher-submitted production and yield data. Farmers, researchers and other growers who choose to contribute data create a profile, and then can enter production and yield information as many crops as they wish.

This is the only open-access yield-data tool of its kind. To jump-start the website, PFI has also entered over 500 crop production and yield records from Cooperators' Program research trials on crops including: asparagus, beans, broccoli, cabbage, carrot, cauliflower, sweet corn, cucumber, eggplant, garlic, Chinese cabbage, kale, kohlrabi, leek, lettuce, melon, okra, onion, peas, peppers, potato, pumpkin, radish, shallot, squash,

Input fields on the Farmer-to-Farmer Data website. Only fields with an asterisk (*) are required.

- Crop*
- Variety*
- Area planted (ft²)*
- Total yield (lbs)*
- Harvest window (dates)*
- Transplanted/direct seeded
- Within-row plant spacing
- Between-row spacing
- Infrastructure (none, high tunnel, greenhouse, row cover/low tunnel, trellis)
- Irrigation (Y/N)
- Mulch (none, straw, plastic, paper, fabric, other)
- State
- Zip code
- Hardiness zone
- Additional notes

strawberry, sweet potato, Swiss chard, tomato, turnip and watermelon.

"Yield information just isn't as available for vegetable growers. You hear conventional crop farmers talking about yield per acre all the time, and it is really useful information, but it doesn't really exist in the vegetable world," says Emily Fagan, who farms at Humble Hands Harvest near Decorah. "This website has the potential to fill that gap and make information available about many crops and varieties that are relevant to my climate and growing zone."

Our hope is that farmers, researchers and seed companies will all find value in contributing to and accessing yield data through this website. We believe farmers can benefit from the experience of other farmers to more confidently draft cropping and business plans. For researchers, we believe a publicly accessible dataset of on-farm yield data will improve research outcomes for many types of university studies, from horticulture and agronomy to food systems and future-visioning mapping projects.

Please support this effort and your fellow farmers: log-on and enter your data! ■





Clockwise, from left: The main screen of the Farmer to Farmer Vegetable Yield and Production Data site. Emily Fagan weighs cabbages on her farm near Decorah, which she'll enter into the vegetable data site. The search function on the vegetable data site.

Opposite: Sisters Danielle (left) and Rebekah Heartsill help harvest beans at Blue Gate Farm, run by Jill Beebout and Sean Skeehan near Chariton.

p fi				CROPS ▼	FARMS	ADMIN ▼	MY ACCOUNT ❤
Search Crops Filter and export crop data All Crops New Search							
Crop Name:		Variety:		Harvest Date(s):			
- Any -	- 14	- Any -	Ψ.	Select An Option +			
Advanced Search							

Honored for a Commitment to Research

Mark Quee and Bruce Carney receive PFI's Master Researcher Award

"Every farm is different, you cannot buy the answers in a bag," the late Dick Thompson, Practical Farmers co-founder, was known for saying. He was referring to the ethos that drove, and continues to drive, PFI farmers to conduct research to seek solutions on their own farms.

ho better to answer questions than the farmers posing those questions? PFI's Cooperators'

Program is made up of farmers who put in the extra effort to scientifically ask and address their questions (which are often the questions of other farmers, too!). To recognize the efforts of these farmers – and their contributions to farmer-led learning – Practical Farmers of Iowa established the Master Researcher Award in 2013.

The award honors those who have conducted at least 20 on-farm trials and hosted at least five field days with PFI to share the knowledge they have gained. Sharing research results, and sometimes showing research plots, at field days has been fundamental to PFI and the Cooperators' Program over the years. Everyone learns when the successes, failures and challenges are honestly discussed. It's why we frequently hear some version of "I let PFI cooperators struggle with things and figure things out before I try those practices on my own farm," from attendees of PFI field days.

Most recently, PFI honored two farmers -Mark Quee of West Branch and Bruce Carney of Maxwell - with the Master Researcher Award for their extensive contributions to on-farm research and knowledge-sharing over the years. The awards were presented in December, during Practical Farmers' 2019 annual Cooperators' Meeting in Ames, where farmers and collaborators involved with PFI on-farm research gather to share results of projects and discuss ideas for the coming year. Mark and Bruce are the first farmers to earn master researcher status since the inaugural batch in 2013. They join 12 other farms or individuals to have been recognized with the Master Researcher Award since its inception.



Mark Quee

Mark Quee is the farm manager at Scattergood Friends School, a small Quaker boarding school near West Branch, about 15 miles east of Iowa City. The school's farm includes 8 acres of organic gardens and orchards; about 30 acres of pasture used to grass-finish beef and lamb; a small flock of turkeys; a few heritage-breed Guinea hogs; and occasional broiler and laying chicken flocks. Since 2009, when he joined the Cooperators' Program, Mark has conducted

"Weed suppression results were inconclusive – but as often happens, there were unexpected findings."

- MARK QUEE

25 on-farm trials and hosted six field days. Over the years, Mark has researched cover crops extensively, done several vegetable variety trials and conducted projects exploring insect and weed controls, transitioning pastures to vegetables, grazing vegetable plots with sheep and mycorrhizal fungi inoculations.

"Mark's spirit of trying new things and not being satisfied with just doing what has been done is very much appreciated," says Tammy Faux, who farms near Tripoli and introduced Mark at the award ceremony. "One of the things I have learned so much from Mark is how to value collaboration and shared endeavors, so it is no surprise that Mark is so involved with PFI."

"My very first PFI Cooperators' Program research trial was in 2009, when we looked at the weed suppression capacity of tillage radish in an organic vegetable system," Mark says. The trial involved seeding a tillage radish cover crop in late August following beet harvest. Mark planted peas and spinach the following spring and compared weed seed germination where he seeded the tillage radish to plots where he didn't seed tillage radish.

"Weed suppression results were inconclusive – but as often happens, there were unexpected findings. The soil tilth and structure impressed me so much, I thought I had found the next great innovation in food production: letting tillage radish literally do the tillage for us."

Across all of the trials Mark has conducted, he's made sure that vegetable productivity has not been the sole focus. Just as important have been the costs of the practices and the effectiveness of the pest-control practices. Many of his trials

"I found Practical Farmers of Iowa and learned they were a diverse group of people, farmer-led. It didn't matter what you wanted to research. PFI would help set it up and connect you with other interested farmers"

- BRUCE CARNEY



Above: PFI Research & Field Crops Director Stefan Gailans (right) presents Bruce Carney of Maxwell with the Master Researcher Award. **Opposite:** Stefan poses with Mark Quee after presenting Mark with the Master Researcher Award in December.

evaluated different mulching practices like black plastic, paper, straw and residue from an oat cover crop. Mark considered the time spent applying these mulches, along with their effects on weeds and vegetable productivity, when deciding which he should adopt on a broader scale on the farm.

Bruce Carney

Bruce Carney farms with his family at Carney Family Farms on 300 acres south of Maxwell. The family primarily raises grass-fed and -finished cattle, hair sheep, pigs and poultry. They have also begun adding fruit, nut and shade trees and practicing silvopasture with their diversity of livestock. Since 2009, when Bruce joined the Cooperators' Program, he has conducted 20 on-farm trials and hosted seven field days. His research over the years has spanned grazing cover crops, pasture management, monitoring carcass quality in grass-based systems and wildlife monitoring on the farm.

Bruce says he wanted to do on-farm research with PFI to learn more about cattle and pasture. "I want to leave a legacy rooted in perennial agriculture for my children and grandchildren," Bruce says. "I found Practical Farmers of lowa and learned they were a diverse group of people, farmer-led. It didn't matter what you wanted to research. PFI would help set it up and connect you with other interested farmers."

Bruce appreciates that PFI research isn't biased; this is what drew him to on-farm research in the first place. "The research is honest, done by a third party not influenced by companies with products to sell."

Recently, Bruce participated in a four-year study that monitored soil conditions in fields that had no cover crops and fields with cover crops grazed by cattle. Results showed that the fields with grazed cover crops had less soil compaction than fields with no cover crops. This was an eye-opening finding because some farmers express concern that cattle grazing may cause soil compaction in crop fields.

Bruce is quick to point out that this could be a boon for row-crop farmers who have neighbors with livestock. A row-crop farmer would see benefits from cover crops, like weed suppression and less chemical use, and grazing days are a benefit to the grazier, Bruce says. "One thing that could help both in the long run is to have a long-term lease agreement." This project added to a growing body of work by PFI cooperators on grazing cover crops: Results continue to show that grazing cover crops reduces feed costs and these savings help pay for establishing the cover crops.

History

The Cooperators' Program began in 1987. The earliest trials involved farmers looking to save money through more judicious use of fertilizers and pesticides – some were able to eliminate these costly inputs altogether thanks to rigorous research methods. Since then, over 241 farmers have conducted 1,443 research trials on a wide variety of topics in field crops, horticulture, livestock and grazing, wildlife habitat and more. Results from these investigations have helped countless farmers make more informed decisions about their farm operations.

Sharing knowledge at field days is equally vital to PFI's values and our mission of equipping farmers to build resilient farms and communities. Research reports summarizing project findings can be found at: practicalfarmers.org/research.

Learn More

→ Watch Mark Quee's acceptance speech after receiving the Master Researcher Award at practicalfarmers.org/2020/01/cooperators-meeting-keynote-address-mark-quee.

◆ View the full list of Master Researcher Award recipients at practicalfarmers.org/ award-recipients.

Inspired to Create Community

Rick Exner played a key role in PFI's founding story, and its first 20 years

Many PFI members – especially long-time ones – are familiar with the outlines of Practical Farmers' founding story: how in 1985, in the midst of the farm crisis, Dick and Sharon Thompson and Larry Kallem organized a group of farmers eager to work together testing novel solutions to the pressing economic, social and ecological farming challenges of the time.

But the story of PFI's genesis wouldn't be complete without acknowledging the pivotal role played by another leading light of PFI's early years: Rick Exner.

ong before the momentous day when Practical Farmers formally coalesced, Rick was working closely with the Thompsons: keeping beehives on their farm, conducting research, helping at field days and talking with them about the need for an organization like Practical Farmers of Iowa. As the fledgling organization took root, Rick took on several vital supporting roles, from helping Dick solidify PFI's now renowned on-farm research methodology, to joining in on early member recruitment tours around lowa, to co-founding and managing the PFI quarterly newsletter – all initially as part of a core cadre of volunteers working behind the scenes to bolster the nascent organization.

"We were doing some things from the very beginning to try to act like an organization," Rick says. "In 1985 and '86, we still had no staff. So if it involved grunt work, fellow [lowa State University] graduate student Ricky Voland and I were the volunteers who did it – though there were some other students who helped too."

Early Years

Rick was born in New York State, but was just 1 year old when his family moved to Ames so his father, Max, could take up a position as ISU's state extension music specialist. Before relocating, his mother, Eileen, had worked in Upstate New York as an extension home economist for Cornell University. He and his three sisters grew up in Ames, surrounded by music and their parents' deep appreciation for the value of the land-grant mission.

After receiving his bachelor's degree in sociology from Grinnell College, Rick ventured east to Cambridge, Massachusetts, where he worked at mental institutions and for afterschool programs. While there, he encountered food cooperatives for the first

time – and their close-knit, people-centered infrastructure opened his eyes to the powerful link between local food and community.

"At that time, they were all set up as preorders," Rick says. "They were divided geographically, and every Sunday night there would be a potluck, and we'd put our orders in for the food. On Tuesday, a delegation of us would go to the terminal produce market outside Boston to pick up the food, take it back and break it down into individual orders. We had a buyer on the market through the New England Food Co-op Organization, NEFCO.

"We were doing some things from the very beginning to try to act like an organization." - RICK EXNER

"It was a kind of a community function – and through that, I made some of the best friends in my life. Because we were geographically defined then, they were my next-door neighbors too. So through that, I really saw food as a way to community."

Rick became intimately involved with NEFCO and decided to stay in the area, taking on a variety of odd jobs so he could volunteer with the co-op as much as possible. "I was sort of a full-time volunteer," he quips. While there, he and some friends started a small cider venture gathering apple "drops" — surplus fruit — from heirloom varieties on old estates across New Hampsire.

"They were wonderful old varieties that you can hardly find now, which make the most wonderful cider," Rick says. "We had friends in New Hampshire who owned a hydraulic cider press, and we found we could make

some money – and be very competitive price-wise – by collecting those apples for free, pressing them into cider and selling it to the co-ops around Boston."

While he loved working with the co-op, Rick started to think more long-term about his prospects. Invigorated by his newfound commitment to food and community, he realized staking out a career in agriculture could knit those passions together. "It began to dawn on me that if I was going to do something other than drive the truck for the co-op for the rest of my life, I needed to get some knowledge and actually study agriculture," Rick says. "That's when it started making all kinds of sense to come back to Ames, where my parents still were, and take up my education here."

The Path to PFI

Rick returned in 1978 and started taking classes at Iowa State University that fall, initially enrolling in undergraduate courses to catch up on science prerequisites needed to enter an agronomy graduate program. Soon after returning to the area, however, Rick started seeking out area farms "that were doing something different" where he could help out and learn more about agriculture. That's how he discovered Dick and Sharon Thompson. While they didn't need any farm help at that time, Rick soon crossed paths with them again when the ISU Agronomy Club – which was open to all students – invited the Thompsons to give a presentation at one of its meetings.

Rick had started keeping bees and decided to approach the Thompsons about keeping some of his hives on their Boone-area farm. "After the talk, everybody wanted to talk to Dick," Rick recalls, "but I went over to Sharon and said, 'Say, we've got some beehives. Do you think we could put some on your land?'" Sharon and Dick agreed, and as Rick had hoped, the arrangement gave him the chance to interact weekly with the Thompsons. By the time he started his graduate program in 1983, studying under ISU agronomy professor Richard Cruse, he knew the Thompsons well enough to ask about using their farm for his graduate research, which focused on intercropping legumes between rows of corn.



Over the next two years, Rick attended field days the Thompsons hosted and brainstormed ideas with them, leading to serious conversations with Dick about the need for an organization like Practical Farmers of lowa that could help farmers use research to make better decisions. By the time the now-famous biological farming conference took place in 1984 – where Dick asked how many farmers wished to form a group based on sharing information with one another – Rick had been a key behindthe-scenes thinker helping crystallize the vision for an organization like PFI.

"Dick and Larry had been doing a certain amount of strategizing, and Dick and I were doing a fair amount of strategizing," Rick says. "At that biological farming conference, I got up early in the meeting and offered the opinion that, while the program being offered was great, farmers also needed an organization where they could share information farmer-to-farmer.

"Later in the day, Dick got up and said he knew 'a young man' who was willing to help

start an organization. Some people assumed it must be me, but Dick was referring to Larry Kallem. The positive response just confirmed our thinking that there was a need for something like this."

Paving the Way for Farmer–Led Research

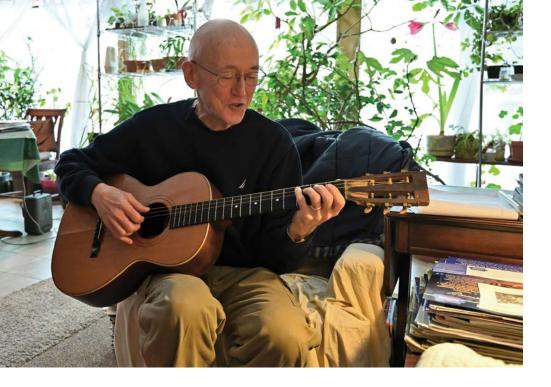
One of Rick's lasting contributions was his role in helping to cement the now renowned ethos and research methodology of the Cooperators' Program, established in 1987. Dick had been working on ways to conduct on-farm research for years – and to empower farmers to lead their own trials. After Rick entered the scene, they brainstormed research design together, but were still learning and adapting – and sometimes they made mistakes.

"I remember one year, Dick had laid out maybe four different treatments for a trial, and just logically divided the whole field up into quarters, doing one practice on each quarter," Rick recalls. "We got the most gosh-awful results – and it finally sank in that we weren't measuring the treatments we put out. We were actually measuring the difference between this corner of the field and that corner. That was a learning experience for both of us."

Soon after, Rick attended a farming systems conference at Kansas State University where he heard a talk by Chuck Francis, professor of agronomy and horticulture at the University of Nebraska-Lincoln. Rick approached him afterwards for advice on the research design dilemma. "I said, 'We've got this problem. We've been trying to do on-farm research and it's just coming out screwy. How can we come up with a design that's practical? That you can basically do from the seat of a tractor, but will also give you a good, reliable statistical outcome?' Chuck just said, oh, a paired comparison. And the scales fell from my eyes, as they say. I came back and told Dick, and he said yeah, with narrow strips."

The revelation led to the powerfully simple – yet statistically robust – version of the randomized complete block design so

(Continued on page $16 \rightarrow$)



"People would drive an hour to get to a field day and say, 'I can talk to you guys but I can't talk to my neighbors when it comes to this kind of farming practice.

Here, I can ask my questions and get some intelligent responses.' I think that's the point where PFI really started becoming a community – and it makes me feel I was doing something right.

- RICK EXNER

(← Continued from page 15)

central to the Cooperators' Program. The approach, Rick says, put farmers in charge by stripping daunting complexity, yielding reliable answers and simplifying the math needed to analyze results. "The beautiful thing about that design is farmers can do the math themselves," Rick says. "We thought it was important that farmers be in charge of the process from beginning to end. By the time Dick decided we needed a Cooperators' Program, we had a good research design people could use."

From Volunteer to PFI Staff

With funds scarce in PFI's early days, the group's core tasks were carried out by a handful of dedicated volunteers. Rick and friend Ricky Voland, a graduate plant pathology student, decided PFI needed a newsletter. They named it "the Practical Farmer" and started publishing it quarterly, mailing the debut issue in spring 1986. Though full-time students, the two managed the entire publication, from writing content and manually cutting and pasting the layouts - which they'd then take to the copy center to print – to collating, addressing, stamping and mailing the finished newsletters. The process was laborious, and run on a shoestring budget.

Rick recalls how his wife, Sue Jarnagin – whom Rick met in the late 1970s in Fargo, North Dakota, thanks to a mutual friend working at the Fargo food co-op, and who then came with him to ISU – had to ask their international women's group to give them \$40 so they could put out an issue of the

newsletter. "It was hand-to-mouth," he says, "but there was nowhere to go but up."

In the late 1980s, funding started trickling in – first from Dick's friendship with Jean Wallace Douglas, of the Wallace Pioneer Hi-Bred family. Then, Jerry DeWitt, at the time working as the ISU Extension sustainable agriculture specialist, included PFI in a water quality funding proposal. By that time, Rick had been working towards his doctoral degree in agronomy at ISU. He and Dick drafted the proposal text, with coaching from Jerry, and the resulting funds enabled PFI to hire its first full-time staff member. When the initial hire left after just a couple of months, Rick stepped into the role as PFI's farming systems coordinator in 1989 – a position he held for the next 20 years.

That funding also helped establish a close collaboration between PFI and ISU that continues today. While a central aim of Practical Farmers was to connect farmers to each other, Rick says the early PFI participants also saw a second important role. "We saw ourselves providing a constituency for scientists who were working on some things that might not have gotten support otherwise."

After PFI

After leaving PFI in 2009, Rick embarked on a variety of projects, from working with the U.S. Census Bureau to obtaining grant funds through the group lowa-Yucatan Partners to develop a water stewardship teaching module for trade schools in Yucatan, Mexico, and traveling there to help conduct the training. Since 2013, Rick has been

involved with AMOS (A Mid-lowa Organizing Strategy), helping build local partnerships and support systems on behalf of immigrants.

Throughout all these endeavors, music has been central to Rick, a guitar player who occasionally performs at Berry Patch Farm, near Nevada, or the Ames Main Street Farmers' Market, singing a motley mix of blues, country, Latin and original compositions. For about 10 years, Rick was also part of the central lowa band The Porch Stompers, a long-running collaboration with PFI members Alice McGary and Nate Kemperman and local banjo legend Merle Hall. When not busy with AMOS or his music, he and Sue keep busy working on renovations to their house and an intensive garden: their city lot holds 19 fruit trees.

When asked about PFI's legacy and his role in PFI's formative years, it all boils down to community for Rick. "Dick and Sharon really embodied a welcoming community, and I think it set the tone in a lot of ways," he says. "People would drive an hour to get to a field day and say, 'I can talk to you guys but I can't talk to my neighbors when it comes to this kind of farming practice. Here, I can ask my questions and get some intelligent responses.' I think that's the point where PFI really started becoming a community – and it makes me feel I was doing something right."

Farming for the Future

Paul Mugge honored with PFI's 2020 Sustainable Agriculture Achievement Award

Paul Mugge, an organic farmer and long-time on-farm research participant from Sutherland, was the recipient of PFI's 2020 Sustainable Agriculture Achievement Award.

he award is given each year by PFI to an individual or couple that has shown exemplary commitment to sustainable agriculture, generously shared their knowledge with others and been influential in efforts to foster vibrant communities, diverse farms and healthy food. The award ceremony took place on Saturday, Jan. 18, during PFI's 2020 annual conference.

Paul Mugge has been a PFI member for more than 30 years. He and his wife, Karen, farm 300 acres of certified organic crops. Their rotation consists of corn, soybeans, small grains and some legumes. The farm has been certified organic since 2001 and features a mature, 17-year-old restored prairie; prairie strips established in 2015; and a beetle bank installed with Xerces Society in 2018. "Paul is a farmer and a scientist who is always working to improve his land," says David Rosmann, a farmer and PFI board member based in Harlan, who presented the award during the conference.

"Paul stands out for his dedication to on-farm research with Practical Farmers of lowa, going back to the beginning years. He's such a humble, kind guy who's never thought 'my farm is better than your farm,' and he has always been open and welcoming to anybody coming to his farm, and to making his land and research available to other farmers to learn from."

In 2013, Paul received Practical Farmers' Master Researcher Award in recognition of his long-term commitment to conducting on-farm research and sharing the results with others. To date, he has conducted 65 on-farm trials – a PFI record that has yet to be bested – and hosted 22 field days on his farm over the years. His most recent field days include two events he hosted last summer exploring his work establishing prairie and beneficial insect habitat, and organic row crop production and



David Rosmann, left, poses with Paul Mugge and his 2020 Sustainable Agriculture Achievement Award during PFI's annual conference in January.

mechanical weed control on his farm. Paul also served on PFI's board of directors from 1990 to 1998, and has been active in leadership and volunteer roles with many other organizations over the years.

In October, Paul was selected as the recipient of the Leopold Center for Sustainable Agriculture's 2019 Spencer Award, which recognizes farmers, researchers and teachers who have contributed significantly to the environmental and economic stability of the lowa farming community. In a letter supporting Paul's Spencer Award nomination, PFI Executive Director Sally Worley said, "Paul has a long-term vision for the farm where profit and stewardship are mutually inclusive Paul's farm is a wonderful example of what is possible on lowa's landscape."

In his acceptance speech at the conference, Paul reflected on the influence of other early members, PFI's progress and the challenges we still have to face, which motivate his decisions on his farm: "Thirty years ago when PFI was young and just getting started, we had maybe 20 members. We had Dick Thompson and Larry Kallem, Ron Rosmann and Tom Frantzen, Vic Madsen and Jeff Olson – and a lot of those guys are here today. Those guys deserve this honor. I have tremendous respect for all of them. They were ahead of their time, visionaries – and we still have those kind of leaders at PFI. I don't think we realized at the time that PFI would grow like this.

"There's a lot left to do. I don't want to be a Debbie Downer, but we've got a hypoxic zone in the Gulf of Mexico the size of New Jersey some years. The Mississippi River still delivers to the Gulf of Mexico a dump-truck load of soil every second, 24/7. We have some of the highest phosphorous levels in our surface waters of anywhere in the world We can do better than that – and I think we well. Having said all of that, this is still the best place in the world to raise kids, and PFI deserves a little bit of credit for that."

» Photos: 2020 ANNUAL CONFERENCE

- **1)** PFI staff and conference attendees applaud Paul Mugge as prepares to accept PFI's 2020 Sustainable Agriculture Achievement Award.
- **2)** Keynote speaker Nicole Masters (left), an agroecologist from New Zealand, signs her book for conference coordinator Kathy Eastman.
- **3)** David Brown, behavioral health state specialist for ISU Extension and Outreach, speaks during his session about stress on the farm.
- **4)** AmeriCorps members Phoebe Eichhorst and Hannah Grosspietsch lead a PFI youth session about bees as pollinators and the important role they play on our planet.
- **5)** Wilbur De La Rosa, of Main Street Project, speaks during his session about integrating poultry into perennial crop systems.
- **6)** The annual potluck is always a well-attended and highly anticipated event even during January blizzards! Our potluck this year moved to CityChurch of Ames-Des Moines, not far from the previous location.





1







- **1)** Two conference-goers brave the ice and snow as they make their way to the warm and welcoming Scheman Building.
- **2)** Lee Tesdell (left) and John Whitaker are deep in conversation as they finish their lunch on Saturday.
- **3)** Bridget Williams (right) converses with friends during a snack break at the conference.
- **4)** Maryann Mathis (left) and Mary Cory laugh and converse during a mid-morning break.
- **5)** Nicole Masters delivers her keynote address to a full house in Benton Auditorium about the Bottom-Line Benefits of Building Resilience.





















- 1) Conference volunteers Patsy and Paul Carlson (left and center) have a chance to chat with other guests during the annual conference potluck.
- 2) Guests peruse the new silent auction special experiences proferred by members, which ranged from breadbaking and wild game cooking classes to a guided birdwatching walk, one-on-one agroforestry session and more.
- **3)** Sarah Foltz Jordan (left), of Xerces Society, shows some insects to Terry Troxel at the society's sponsor booth.
- **4)** Sarah Nizzi (right) takes part in a small-group policy discussion for fruit and vegetable farmers.
- **5)** Conference attendees visit the many sponsor booths in Scheman.
- **6)** A group of farmers from Global Greens in Des Moines go through the lunch line and pile their plates with delicious food.







- **1)** Paul Mugge delivers his acceptance speech after receiving PFI's 2020 Sustainable Agriculture Achievement Award.
- **2)** Scott Koepke (left) and David Rosmann (right) take their turn in the Saturday All-lowa lunch line. The meal is a highlight, featuring locally sourced or crafted items.
- **3)** Eileen Fisher takes notes during Mark Quee and Sarah Foltz Jordan's session on "The How and Why of On-Farm Pollinator Habitat."
- **4)** Faith Gilbert, of New York, talks about the rich tradition of cooperative and collaborative businesses in the food system.
- **5)** Matt Scotton, physical therapist and athletic trainer, teaches attendees about the importance of physical strengthening and improving your health during this fun, interactive session.
- **6)** Jennifer O' Neal and her husband, Adam, discuss how they have scaled up their flower operation and added workshops and events to their farm in Winterset.









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Linking Livestock to Land



For non-operator landowners and tenants alike, adding livestock can be a win-win.



At one time, the vast majority of farms in Iowa included livestock. Today, however, livestock are an afterthought for many current non-operating landowners – those who don't actively farm. But the evidence, both anecdotal and empirical, is building that reintegrating livestock onto the landscape can be a powerful tool to realize the goals of landowners and farming tenants alike.

rlyn Kauffman and his cousins, Andrew Yoder and Mark Yoder, farm and raise livestock in Decatur County. For the past few years, the trio have rented cropland from an out-of-state landowner. But Arlyn and his cousins had a vision for other ways they could use that land: What if they could also graze the property and gain much-needed winter forage for their livestock while improving the soil health of the property's cropped acres? The arrangement would be a win-win, benefitting the farmers while proferring the landowner additional income and improved soil health on the land over time.

Before the vision could become reality, Arlyn, Andrew and Mark had to confront some challenges and work with their landlord to address his concerns. The main obstacle was the landowner's concern that the presence of livestock could endanger one of the primary uses for the property: deer hunting. But by initiating a dialogue with this landowner, Arlyn and his cousins were able to identify a path forward that addressed both parties' concerns

 ${\sf -}$ and will hopefully result in long-term benefits for both tenants and landowner.

It's Not the Cow, It's the How

Livestock, particularly cattle, suffer from a somewhat tarnished reputation. Media coverage is often not kind – sometimes rightly so: When managed improperly, cattle can have serious impacts on the environment. In recent years, however, apprehensions around grazing have dissipated, due in large part to increased awareness and knowledge of proper grazing management. It is not an overstatement to say that management is absolutely critical when using grazing as a tool to manage land.

That said, grazing and livestock management can be complex and difficult to understand. Even the lexicon is dense – you'll often hear rotational grazing, prescribed grazing and adaptive grazing management all used to refer to the practice of keeping livestock on the move and never in one place for too long. Managing the intensity, frequency, duration and timing of grazing events has the potential to provide a plethora of benefits, including improving the aesthetic and value of the land while providing extra forage for livestock.

Start With Your Goals

Whether you're a landowner or tenant, start with your goals for the land to help you decide whether grazing is the right land management tool. For landowners, livestock can provide extra revenue, improve wildlife habitat and boost soil health. With goals in mind, you can design a system that integrates livestock to meet your vision. Keep in mind that while integrating livestock itself might not be your top priority, it might be a priority for your tenant. If that's the case, working together to add livestock could help you both build a stronger long-term relationship.

For Arlyn and his cousins, accessing winter forage and improving soil health were the primary motivations. Their landowner, however, lives in Arkansas and visits his land in south-central lowa to recreate and hunt at different times throughout the year. While providing forage for livestock wasn't a priority, boosting soil health, extra revenue and building a stronger relationship with his tenants were all incentives. "We approached him from a soil health perspective, explaining how grazing can improve the value of his farm," Arlyn says. "But we also had to make the case that it wasn't going to hurt the hunting."

Initially, Arlyn's landowner needed some convincing; he was worried about degrading deer habitat, believing cattle and deer don't mix. "We agreed to graze cows in February and March, then remove them in order for vegetation to fully recover by hunting season the next fall," Arlyn says. "We also agreed to fence out a 15-acre spot that is special to the landowner because it's where deer bed down and browse and he doesn't want cows to ruin it."

"We approached [our landlord] from a soil health perspective, explaining how grazing can improve the value of the farm. But we also had to make the case that it wasn't going to hurt the hunting."

- ARLYN KAUFFMAN

Through open conversation and dialogue, Arlyn was able to come to a compromise with his landowner that resulted in both sides' goals being met – and opening the door to a stronger long-term relationship. Arlyn says his landowner's mind has already changed for the better. "Now it is up to us to keep doing things that reinforce his new opinion and not jeopardize it in any way."

Find A Grazier

For Arlyn's landlord, the transition to having cattle on the land was eased by the fact that Arlyn and his cousins were already renting the cropped acres they hoped to graze. The trio also grazes on rented ground elsewhere and are experienced with managed grazing. Arlyn identified an opportunity to graze cover crops on the cropland portion of the land, as well as the grassy corners, waterways and woods on the property. Because the farmers already had a relationship with their landlord, they felt comfortable approaching him openly about grazing. For many landowners, however, reintegrating livestock onto the landscape is not always so straightforward.

As with Arlyn and his cousins, the simplest way to take advantage of grazing is to work with neighbors or tenants who already have livestock. If this is not an option, ask your local Soil and Water Conservation District office, Natural Resources Conservation Service representative or local Cattlemen's Association chapter for suggestions of graziers who have experience in leasing land and employing managed grazing. You could also take a summer drive around your county to see who is grazing and stop to ask if they are interested. Alternatively, PFI is currently working to develop the Midwest Grazing Exchange, a website to match landowners and row crop farmers with graziers – like a dating app for land and cows – which will go live this summer.

Grazing Leases

At its most basic level, a lease is an agreement for one party to use land owned by another party; in practice, things are more complicated. Like crop leases, grazing leases can vary considerably. For Arlyn and his landowner, an oral agreement for this first year of grazing was sufficient for both parties to feel comfortable with the

(Continued on page $24 \rightarrow$)

arrangement. If the idea of an oral agreement is disquieting to either landlord or tenant, the best practice is always to use a written lease.

Oral or written, grazing leases require you to consider several key points that don't usually come up, or are less common, in a crop lease, such as stocking limitations and timing; liability; use of vehicles or all-terrain vehicles on the property; and landowner rights and reservations. These are just a few points to consider; as always, landowners and tenants should both seek legal advice for questions about what or what not to include in a lease.

Stocking Limitations and Timing: Any grazing agreement, written or oral, should include the number of animals permitted to graze the property in question – as well as when animals are permitted on

the property. Arlyn and his landowner agreed to a high-density stocking rate over a short period of time in late winter.

While this structure worked well for them, it's not the only stocking scenario. Different stocking rates – and the timing of grazing – can have variable effects on the property. These scenarios also benefit cattle in varying ways. Here again, it's vital that landowners and

tenants discuss their respective goals so that each side can work towards solutions that meet both needs.

Liability: Whenever a land situation involves people, animals or other objects moving around on the landscape, liability concerns always come into play. The concerns are handled in many ways in a grazing agreement, from indemnification, "hold harmless" and "breachy" (read: escape artist) livestock clauses to requirements for regular fence and gate maintenance. The end goal is for both sides to feel comfortable with their responsibilities under the lease. This includes ensuring both parties understand and accept the terms of

activities each signatory to the agreement must perform, as well as who will be responsible in the event of a lawsuit. "This farm is not along a highway and there is very little traffic," Arlyn says. "So a verbal agreement was sufficient because liability was not a concerning factor for either party. If it were, we would have gone with a written lease."

Use of vehicles or ATVs: With a cropping lease, it is assumed that the tenant will be operating machinery in the course of agricultural production. With a grazing agreement, that assumption is not always valid. Both landowners and tenants should consider the degree to which all-terrain and other vehicles will be allowed on the property. For a variety of reasons, these vehicles can be vital to many livestock management and transportation strategies, so it's

best if graziers and landowners address this issue up front rather than be surprised down the road.

Landowner rights and reservations:

Without any qualifications or exceptions, a lease agreement for a property assumes the tenant has exclusive possession of the property being leased. This means that unless specified, the landowner cannot legally use the property for the duration of

the lease agreement. Most agricultural leases, however, include reservations for the landowner to enter the property to inspect the premises, sometimes with or without notice. Landowners who wish to continue using the property for recreation – such as hunting – should specifically reserve that right in any agreement.

Economics

"This farm is not along a highway and there is

very little traffic. So a verbal agreement was

sufficient because liability was not a

concerning factor for either party. If it were,

we would have gone with a written lease."

- ARLYN KAUFFMAN

The economics of every lease differ, but by talking to each other, landowners and tenants can come to an agreement that is financially viable – or even profitable – for both sides. In exchange for grazing rights, Arlyn and his cousins agreed to pay for and plant

What are the Benefits of Managed Grazing for Landowners?

W Grazing stimulates plants to release root exudates, which increase soil biological activity, contributing to improved soil health

W Improved soil health provides resilience to floods and drought

W Manage unwanted vegetation with reduced chemicals, fuel and labor

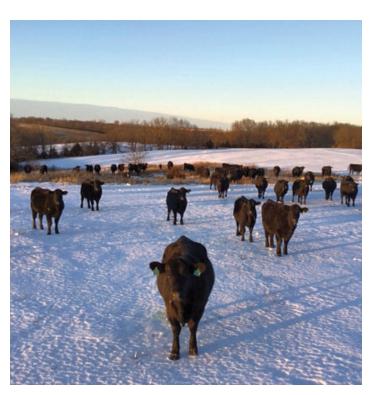
W Mimics nature, which can stimulate beneficial native vegetation

Alters grasslands to provide a variety of nesting, brood-rearing, cover, and foraging habitat for wildlife

W Helps to keep carbon in the soil, which is crucial for climate change mitigation

W Qualification for agriculture tax exemption

May add an alternative revenue stream





Above: When negotiating their grazing agreement, Arlyn, Mark and Andrew showed their landlord how their cows on their home farm know to respect the electric wire. **Opposite:** Cows stand in snow on land grazed by Arlyn, Mark and Andrew.

cover crops on the property. The landowner receives the long-term benefits of soil health while the farmers recieve the short-term benefits from grazing.

Since Arlyn, Mark and Andrew have access to this land for grazing in February and March, they have the potential to save three round bales of hay per day during those months. Presuming they graze for 20 days, this means they save 60 bales of hay – which, with hay valued at \$75 per bale, equates to a savings of \$4,500. Thus, in addition to the benefits for the land and cattle, both parties financially benefit from the arrangement.

Make it Work for You

Agreements, either oral arrangements or written leases, can be incredibly flexible. Despite this, many landowners and tenants end up agreeing to boilerplate stipulations that don't work well for either side, or don't meet specific needs, because they're hesitant to start the conversation. Opening a line of dialogue can be difficult, especially when it can seem like landowner and tenant speak different languages. But a willingness to communicate openly usually results in a better agreement that can lead to a healthier long-term relationship.

For Arlyn and his landowner, a few key points had to be negotiated before finalizing their agreement so they could ensure both sides' needs were being met. The landowner's top priority was preserving the quality of hunting and the wellbeing of the deer herd on the property. Arlyn and his landowner were able to agree on stock density and timing, abating the landowner's concerns about deer-cattle conflict while simultaneously allowing Arlyn and his cousins to meet

their goal of providing stockpiled and cover crop forage during the winter – a critical link in their year-round forage chain.

Another sticking point was the use of single-strand electrified wire to contain the cattle. Arlyn addressed this concern by taking the landowner to see the cows on their home farm. The landowner was able to witness the well-trained cows respecting the wire, which eased liability concerns and ultimately helped him feel comfortable agreeing to the use of single-strand wire to keep cattle in.

Communication is important, and Arlyn believes that keeping his landowner apprised of the situation on the farm is critical. He regularly communicates with his landlord, texting him when they aerially seed cover crops on the cropped acres and when the cover crops emerge. Arlyn also plans to take before, after and during pictures of the cattle grazing the property. By keeping the landowner engaged and up-to-date, he hopes to further cement the relationship so that he and his cousins can continue grazing the property. This communication builds on the relationship he's already established with his landlord, ensuring a productive and profitable partnership into the future.

Learn More

Benefits of Grazing for Landowners" fact sheet: **practicalfarmers.org/ programs/landowners**

◆ Watch for the Midwest Grazing Exchange website, coming soon! Similarly, Minnesota, Nebraska and South Dakota each have grazing exchange websites.

A Farm Transfer in Progress

For the Hjertaas family, dialogue and shared values are guiding succession plans

Blain and Naomi Hjertaas have been farming near Redvers, Canada, for 46 years on farmland that has been farmed by Blain's family since 1915.

bout 12 years ago, the couple was pondering the next step for their farm. Their three kids had all gone off to college and then to professions off-farm. "We thought that maybe a few more years and then we'll sell the farm and go and put our feet up at the lake and be done," Blain says. Before acting on this thought, however, their oldest son said he'd like to try farming. "That put things into a different perspective," Blain says. "We said, 'Sure, let's do that. Let's give it a whirl and see what happens."

Blain spoke about his farm transfer journey at PFI's annual conference in January, which was themed Reclaiming Resilience. "Part of resilience is planning for that next generation," Blain says, "whether it's our own families or somebody that's going to intern and maybe eventually have ownership. If I just had a sale and sold it, the book closes on the 105 years of knowledge my family has accumulated about our farmland. I don't think that augers well for society." Blain's experience offers potential insight for others working on farm transfer.

Be Profitable

Being profitable, Blain argues, is vital if families are to be successful in succession planning – or in business more generally. He agrees with Henry Ford's quote: "Whether you think you can, or you think you can't you're right." In Blain's view, all farmers have the potential to turn a profit – but he says they have to be willing to delegate some of the tasks they enjoy doing. "We're farmers because we like to work with our hands. We're good at feeding cows, fixing fence, seeding, combining, hauling grain, growing vegetables," Blain says. "We really like doing that kind of stuff. But those are what I call in-jobs. There's only one job on my farm that I can't hire out, and that's the thinking."

While a lot of farmers don't relish the business aspect of farming, Blain says it's critical for farmers to analyze farm profit. "Maybe it's an hour every morning for five days a week. Maybe it's three hours two



Above: Blain and Naomi Hjertaas with their four grandchildren. **Opposite:** Blain moves cattle on his farm near Redvers, Canada.

mornings a week. You need to teach yourself habits to work on the business." While Blain says he counts on financial experts for advice, he stresses that "you can ask them what they think about your ideas, but they can't dream them up for you."

Start Early

Blain advises, "Don't wait until you're 94 with one foot in the grave before you start. My son and daughter-in-law have been farming with us now for 12 years, and we have no formal plan in place. We still don't, to this very day, and that's probably a mistake. We should have pushed that a little bit harder."

Ensure Alignment of Values

Soil health is paramount to Blain and Naomi, a value that influences their succession planning. "If my son said he was going to be a big-time chemical user, and soil health didn't mean anything to him, we wouldn't get along very well and succession wouldn't work," Blain says. He and Naomi let their returning son and his wife know that if they wished to come back to the farm, it was important their beliefs and land ethic aligned. As big proponents of Holistic Management, they asked their son and daughter-in-law to

take Holistic Management training. "So they did," Blain says, "and they bought into it well, which made it work really well for our goals to align."

Sharing values doesn't mean farm production won't change. When Blain and Naomi's son and daughter-in-law came back to the farm, Blain was operating a cow-calf operation and the whole farm was in pasture. The son added poultry, but didn't enjoy direct marketing. "Our daughter-in-law was a bit intimidated by cows, so they thought they'd try sheep," Blain says. Blain's son and his wife have scaled up their sheep operation and currently are running 400 ewes. While enterprises have changed, the focus on soil health is aligned for both generations.

Communication Is Important

When the oldest son and his wife shared their desire to come back to farm, Blain and Naomi scheduled a family retreat off-farm. Blain emphasizes the off-farm aspect. If you meet on the farm, he says, "all of a sudden you look out, a cow is out. So guess what I'm going to do? I'm going to go out and chase the damn cow in, and the whole meeting stops for a while. It's important you

go where you aren't thinking about cows." Blain and Naomi hired a facilitator for the family retreat to ensure a neutral third party was guiding the discussion. "I don't think it works for me as the dad to facilitate with the kids," he says. "We all have to be equal." The facilitator led conversations about who was interested in coming back to farm, to make sure the other children had a chance to express interest alongside their brother. They concluded they weren't interested in returning, and this clear communication enabled transfer to continue.

Communication allowed Blain and his returning son to ensure their goals aligned. For both, things work better if they give each other a little distance on the farm. That approach works, however, because they discussed it together first. Some days they don't talk. His son focuses on sheep, Blain on cows. "Our goals are very similar. We believe in the same things on the land," Blain says. "But day-to-day operations, it's better if I let him do his thing and he lets me do my thing. There's nothing wrong with that, that's just the way we are. Every person is different. But you need to recognize what your style is and how you can make it work. You need to communicate that."

Equal Is Not Equitable

In the last few years, Blain and Naomi hired an expert to help plan financial succession. The expert created a plan with complete liquidation, and projected living expenses until Blain and Naomi are 94. This gave them a starting point with their assets and retirement needs. "A lot of people have the idea that if they have three kids, each one gets a third," Blain says. "That's equal, but that may not be equitable. What will happen in the end is that our oldest son and daughterin-law will end up owning a \$1.5 million operation for about 40 to 45% of its value, plus all of the years of sweat equity they have put in. My other son and daughter will receive the retirement home plus any other assets we still have when we pass on."

"Part of resilience is planning for that next generation, whether it's our own families or somebody that's going to intern and maybe eventually have ownership." - BLAIN HJERTAAS

Blain's farming career, she has a good government pension, which has let them set aside about \$300,000 in investments not involved in agriculture. "We can use this for retirement," Blain says, "and it makes it much easier to do a succession plan."

Over the past 12 years, Blain's oldest son and daughter-in-law have grown their net worth while using family land and facilities. Blain and Naomi recently purchased an off-farm lake home to retire to. "We're still going to have roughly \$75,000 a year in annual income," Blain says. "I'm not giving them the cows, but I'm going to let them

use our cows to give us annual payments on calves." For tax reasons, Blain wants to own the cows for the next few years, but he will no longer handle daily management. "They will manage the cows," he says, "and if they get 30 calves a year, they will pay us those 30 calves a year, plus an annual payment for the rest of the farm."

While Blain's farming son and daughter-inlaw will need to borrow some money, he believes this is reasonable and fair. "One of the biggest wrecks I've seen is when people have everything given to them," Blain says. "They don't appreciate it, and in 10 years it's gone." Is this equal? "No," Blain says. "If you look at the money, the oldest son and his wife get more in the long run because they're buying an asset at a lot less than full cost. But they've put in sweat equity."

Every Situation Is Different

While Blain generously shared his family's succession experience for others to learn from, he stressed that his experience is just one way to go about farm transfer. "Don't assume this is the right way," he says. "I just share it as an example of how we have done it, and I believe it will work. There's as much creativity as you have in your brains as to how you can do it."

Learn More

◆ Watch Blain's full talk, which includes sheep production information, at practicalfarmers.org/annual-conference/materials.



The Savings Incentive Program Class of 2021

Join us in getting to know the Savings Incentive Program Class of 2021!

The Savings Incentive Program is a two-year program that pairs beginning and aspiring farmers with experienced farmer mentors. It provides targeted learning and peer networking opportunities, and offers business planning support and guidance. After participants successfully complete the program, Practical Farmers of Iowa matches their savings dollar for dollar, up to \$2,400, to use toward the purchase of a farm asset.

For information on the program and to learn more about the farmers, visit our website at **practicalfarmers.org/savings-incentive-program.**



Sam Bennett, Galva

Why do you want to farm?

I think farming is in my blood. I was raised on a farm, I'm the sixth generation of Bennetts to farm in Iowa and I really enjoy growing crops! I worked off the farm for a while, but working on the farm every day gives me sense of pride – I feel like this is where I'm meant to be. I've always been the one in our operation that has some different ideas of how to diversify or how to do better with the resources we have, so I've decided to venture into transitioning part of the farm to an organic system.



Mark Gingerich, Iowa City, The Berry Basket Farm

Why do you want to farm?

Being involved with agriculture is a family value. Land stewardship is a priority for our generationally owned land.



Anna Hankins & Shae Pesek, Coggon, Over the Moon Farm & Flowers

Why do you want to farm?

We love growing things – particuarly plants, animals and community. We are both committed to life in this rural community and believe there is so much potential here. Both of us feel best when we are caring for livestock, tending to our fields and thinking about what we could always be doing better. The potential to care for the land and the people around us is a huge motivating factor for growing our farm business.

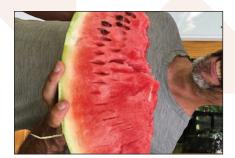




Why do you want to farm?

I grew up working for farmers during high school and was a member of FFA as well. My father retired from sales with our local John Deere implement. My wife grew up on a farm, was a 4-H member and was an ambassador for Pioneer in Europe during high school.

We both worked for Pioneer during high school and college. In 2016, I left my corporate job to be a stay-at-home dad, coach high school baseball in Van Meter and start a farm business.



John Hogeland & Beth Hoffman, Lovilia, Whippoorwill Creek Farm LLC

Why do you want to farm?

It has been my dream for the last 20 years to return to my family's farm and to run it. I lived in San Francisco from the 1990s where, before this past summer, I was involved in introducing sustainable farming into grocery stores and restaurants, which I found inspiring. I understand what consumers are looking for, at least on the West Coast, and have learned a lot about sustainable agriculture. I am ready to put that into action here on our farm.



Peter & Simonia Kundwa, Des Moines

Why do you want to farm?

I come from a long line of farmers. My parents, grandparents, great-great-grandparents and so on all farmed. In Africa, I raised rabbits, goats, pork, chickens and grew vegetables. I went to high school for agriculture as well, where I learned more modern methods. When I arrived in the United States in New York, I grew an acre there and farmed for three years. When you are farmers, you and your family and community all eat fresh, healthy food. I can also support others who need help with food access.



Alfred Matiyabo, Coralville, AFRICANDO FARM

Why do you want to farm?

Farming has always been my passion. Born and raised in The Democratic Republic of Congo (DRC), where my parents owned and operated our 123-acre family farm, farming became embedded in me. I want to farm because I like and enjoy it and I like the fact that I can provide food to my family and community. Being a food producer brings joy to my heart and fulfills my long-time desire to impact and change other people's lives.



Meredith Nunnikhoven, Oskaloosa, Barnswallow Flowers & Produce

Why do you want to farm?

I have an off-farm career managing independent filmmaking for TV and independent movies on-location. However, this is not a passion and it keeps me away from the farm for long periods of time. When not on-location with filmmaking, I give much of my personal life to helping my parents farm. I ultimately want to farm to allow for further economic opportunity not only for myself, but for other Mahaska County residents in a very economically depressed area of Iowa.

There is much joy and success through providing employment, giving internship opportunities through William Penn University and Central College, giving people the choice to purchase locally grown product, raising produce that's chemical-free and collaborating with our community on a very transparent level to help preserve our small family farm.

(Continued on page $30 \rightarrow$)



Zachariah Ritland, Hubbard, Richland Family Farms

Why do you want to farm?

I want to farm because I have a passion for the land, I come from a long line of farmers, I love watching things grow and I think farming will be a great way to build a life.



Douglas Rooney & Alfonso Valenzuela-Gumucio,

Galva, Gleann Daire Farm

Why do you want to farm?

Our desire to farm comes from something very primal. Humans have largely become urban creatures who are deeply lost in a haze of technology and entertainment. After living in that environment for most of our adult lives, we have found a profound desire to reconnect with our most basic relationship: our relationship with the land and the natural world (well, sort of natural, as farms are hardly natural).

We seek a lifestyle that connects us to the land, the weather and the challenges and opportunities of living with bugs, birds and beasts. We also feel strongly that local food is important, and we want to be producing local food.



Corbin Scholz, Iowa City, Rainbow Roots Farm

Why do you want to farm?

I am passionate about taking care of the soil, water and air while producing healthy food for my community.



Jaron & Liz Wilson, Paullina, RedHead Farm

Why do you want to farm?

We want to farm because it gives us joy seeing creation at work. The excitement of having a crop rotation work or a piece of equipment do its job just right is satisfying. We really enjoy the lifestyle farming provides, as it gives our family the freedom to work together and have our kids be a part of what we do. It is also fulfilling being able to be our own bosses.



Oscar Zebedee & Sindiyehebura Emeranse, Des Moines

Why do you want to farm?

I want to farm because I love to farm. I grew up farming in Africa, and love it because it gives me exercise, supports my family by providing them healthy, chemical-free food and provides financial support. It also supports the Burundian community by providing them with food they want and need.

Review of: "The Whole Okra: A Seed to Stem Celebration"

There are few things better than having a good book to enjoy on a cold winter day. Along with thumbing through the seed catalogs that catch my interest at the beginning of the year, I have been reading "The Whole Okra: A Seed to Stem Celebration" by Chris Smith, who I found to be an engaging writer, fellow gardener, okra lover and culinary explorer.

hris Smith is originally from England. That seems an unlikely beginning for an okra enthusiast but he has obviously blossomed with this book. He now lives in North Carolina and works with Sow Truth Seed in Asheville, North Carolina, and is the executive director of The Utopian Seed Project. He also serves on the boards of The People's Seed and Slow Food Asheville.

"The Whole Okra" explores the whole plant and all its possibilities. Chris not only talks about eating the okra pod but also okra's wide-ranging – and sometimes surprising – uses: in cosmetics; as a thickener and emollient; as a tasty green; and as fiber for paper and cordage; as a coffee substitute; and to make tofu and tempeh. He also describes how the okra seeds can be used for oil and flour, and the pods can be used as a holiday decoration for your Christmas tree. As he writes about all of these uses – and more – he paints a portrait of a tough, widely adapted plant that could use much more of our attention. As we look for resilient and sustainable crops to address our changing climate, okra may just be worth some serious consideration.

Okra is classified as Abelmoschus esculentus. The genus name, deriving from Arabic and meaning "father of musk," refers to the scent of the seeds. Esculentus means "succulent or full of food." Okra is a member of the mallow malvaceae family, which includes cotton, cocoa, balsa wood and hibiscus. This opens up a world of possibilities when you think of the many useful characteristics possessed by this family of plants. Even if you don't grow okra to eat, you can't deny that the hibiscus-like flower that comes to bloom, dies and starts to set a pod each day is beautiful to look at.

The author of this book does a fine job of addressing what he calls the "S" word – the slime factor. Chris argues that the okra's reputation as a distained and slimy vegetable is extremely unjust. Okra is enjoyed in many cultures around the world. And no matter where you are, it seems everyone has an opinion about okra.





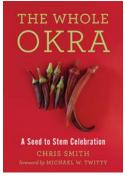
Left: Lonna Nachtigal and Joe Lynch hold onions harvested on their namesake farm, Onion Creek Farm, near Ames. **Right:** Okra plants growing at Onion Creek Farm.

Here in the United States, there seems to be a great north-south divide. We either love it or hate it.

I've been growing and selling okra for many years at the Ames Main Street Farmers' Market, and I've heard all sorts of opinions about this vegetable. For some reason, okra brings out passions and opinions that one doesn't find, say, with a carrot, potato or eggplant. Chris Smith has a fine sense of humor and he loves stories. At horticultural gatherings and trade shows, he often goes around with a sign that says "Talk to me about okra!" and gets all manner of culinary, garden, scientific and historical information as a result. "The Whole Okra" is a great gathering of facts and fun stuff.

Recipes in this book include everything from okra fries to Limpin' Susan to bhindi masala. Also included are recipes for okra pickles, okra seed pancakes and breads, okra greens, kimchi, raw okra salad and okra marshmallow delights. (Remember, okra is a member of the mallow family.) I can't wait for okra season to begin.

Lonna Nachtigal grows food with her husband, Joe Lynch, at Onion Creek Farm near Ames. She talks about food, farming and many other things every week with her co-host Donna Prizgintas on the "DonnaLonna Kitchen" radio show, which airs on community radio KHOI-FM 89.1, or khoifm.org.



Author: Chris Smith 272 pages

Published: June 10, 2019 Synopsis: "Chris Smith's first encounter with okra was of the worst kind: slimy fried okra at a greasy-spoon diner. Despite that dismal introduction, Smith developed a fascination with okra, and as he researched the plant and began to experiment with it in his own kitchen, he discovered an amazing range of delicious ways to cook and eat it, along with ingenious and surprising ways to process the plant from tip-to-tail." pods, leaves, flowers, seeds, and stalks.

STAY CONNECTED!

Email Discussion Lists

We might be unable to gather in person right now, but PFI's email discussion lists are an excellent way to stay connected with other members of the PFI community. Whether you have farming questions, equipment or livestock to sell, perspectives to share on relevant topics or need some ideas or encouragement, these email lists make it easy to stay in touch.

We recently restructured the lists to better match your needs and our expectations. We now have five discussion lists you can join:

• Announcements (formerly General)

Perspectives
(formerly Policy, with some topics
from General too)

· Field Crops

· Horticulture

Livestock

Learn more about the discussion list categories and rules at **practicalfarmers.org/e-mail-discussion-groups**. To join any of the lists, contact Debra Boekholder at (515) 232-5661 or debra@practicalfarmers.org.

Meet Our Next Gen Coordinator



Celize Christy – a familiar name to many of you from her work as PFI's swine and poultry coordinator – is our new next generation coordinator. She officially started her new role at the end of March. A native of Dallas, Texas, Celize obtained her bachelor's degree from Iowa State University in 2016, majoring in animal science and global resource systems with a minor in Spanish. She earned her master's degree in rural sociology and international agriculutral development from Penn State University in 2018, and has been with PFI since June 2018. Learn more about Celize, and read her work, at practicalfarmers.org/staff. ■

Join Our Team – We're Hiring!

We are seeking a **strategic initiatives coordinator** who will:

- help farmers effectively promote cover crops and small grains to their peers
- conduct cover crop consultations with cost-share program participants and respond to farmer cover crop questions
- 3). coordinate field work and data collection
- 4). monitor grant deliverable progress
- 5). attend cover crop and small grains events in lowa and the Midwest
- 6). write articles, blogs and other outreach on cover crops

The strategic initiatives team works creatively to build collaborative connections between the private and public sectors that accomplish the goals of our farmer members on the broader lowa and Midwestern landscape.

Application materials are due by April 26. Visit practicalfarmers.org/employment for full details. ■

Apply for Cover Crop Cost-Share



Do you sell soybeans to the Archer Daniels Midland (ADM) Des Moines supply chain or corn directly to Cargill at Eddyville, Iowa? If so, you might be eligible for cost-share to help make cover crops work on your farm. Determine your eligibility by completing the application at practicalfarmers.org/covercrop-cost-share-programs, and we'll let you know if you qualify.

Questions? Contact Chris Wilbeck at chris@ practicalfarmers.org or (515) 232-5661. ■

Get Farm Experience Through Labor4Learning

Several jobs are open in Iowa offering paid farm training

Are you looking to get paid, on-the-job training with experienced farmers in lowa? Apply to one of several paid jobs now available through our Labor4Learning program. We created this program to help connect beginning farmers seeking employment with experienced PFI farmers who offer additional training in farm management and production skills.

These trainer farms are located across the state and represent a wide range of enterprises and production practices, including row crops, small grains, livestock, fruits, vegetables and more. The farms also vary greatly in their production practices.



Hannah Breckbill operates Humble Hands Harvest near Decorah, where she raises certified organic vegetables, rotationally grazes sheep and is adding perennial crops and pastured pork. She is one of the 2020 trainer farms seeking a farm employee.

Through Labor4Learning, you will be paid at least minimum wage and gain other benefits, including:

- learning farm business development from an experienced PFI farmer
- paid time off to attend a PFI event during the term of employment
- a discount to our annual conference
- opportunities to connect with other PFI trainees
- a free PFI membership

To see the list of job openings and how to apply, visit practicalfarmers.org/labor4learning. ■

Meet Our New and Re-Elected Board Members

Two new members join board, and three farmers re-elected

During our business meeting in January, held during our annual conference, PFI members voted to elect or re-elect five members to our 12-person board of directors.



Carmen Black operates Sundog Farm and Local Harvest CSA near Solon. She farms with her sister, Maja, raising vegetables for 200 families and grazing a small flock of

sheep. Carmen grew up near Solon, and returned to lowa to farm after living out of state for a few years. She worked for Susan Jutz, founder of Local Harvest CSA, and purchased her farm (formerly known as ZJ Farm) and CSA business in 2016. "I'm excited to join the PFI board because I love the culture of curiosity fostered by PFI," Carmen says. "I look forward to the opportunity to get to know more PFI members from throughout the state."



Kristine Lang is an extension scientist for the Rodale Institute Midwest Organic Center in Marion, which provides resources, technical support and localized

research for farmers looking to implement or expand organic operations in the

Midwest. Kristine recently earned her doctorate in horticulture and sustainable agriculture from lowa State University. She credits her PFI membership with improving her research, enhancing her professional and personal growth and helping her form important friendships. "I'm excited to serve on the Practical Farmers board because I know PFI members drive on-farm innovation and strengthen their local communities," Kristine says.

With their election, Carmen began her first term on Practical Farmers' board as a farmer at-large director and Kristine began her first term as a friend-of-farmer at-large director. The other board members on the docket were all re-elected to their current positions on the board.



Ann Franzenburg was re-elected to her third term as a farmer director for District 3 (Northeast Iowa). She and her husband Eric are lifetime

PFI members who have owned and operated Pheasant Run Farm near Van Horne since 1994. Together, they run a diversified operation that includes conventional row crops; cut flowers; and certified organic fruit, vegetables and medicinal herbs.



Wendy Johnson was re-elected to her third term as a representative for District 2 (North Central lowa). She also serves as board president. Wendy and her husband,

Johnny Rafkin, own and operate Jóia Food Farm, a diverse organic grain and livestock farm near Charles City that includes pastures, organic grains, eggs, poultry, lamb and pork. Wendy also helps manage her family's conventional corn and soybean farm.



Gayle Olson was re-elected to her second term as a representative for District 5 (Southeast lowa). She and her husband, Jeff, are lifetime members of PFI near Winfield. Their

operation includes conventional and organic acres, and they grow a variety of row crops, small grains, alfalfa and beef cattle. Gayle also serves as the assistant to the director for lowa's Center for Agricultural Safety and Health (I-CASH).

Practical Farmers board members serve in many capacities, from ensuring PFI is fiscally sound and our programs remain effective and farmer-focused, to providing leadership, advice and direction to staff.

Welcome, New Members!

DISTRICT 1 - NORTHWEST

- Triple "A" Seeds, Kevin Patrick Carroll
- Jerry Sobotka Laurens
- Donna Vaselaar Alton

DISTRICT 2 - NORTH CENTRAL

- Steve Anderson Beaman
- Jo Baumann Iowa Falls
- Mervin Beachy St Ansgar
- Shannon Belcher Mason City
- Robin Collins Nevada
- Shawn Fellers Melbourne
- Monica Halverson Belmond
- Mark Hayes Rhodes
- Nicholas Helland Huxley
- Roger and Mary Knutson Hubbard
- Joseph Lekowski Ames
- · Cala McGregor Nashua
- Jessica Nelson Ames
- Iowa Agricultural Mitigation, Inc., Kim Perlstein Ames
- Blake Randolph Reinbeck
- Kathryn Standing Ames

DISTRICT 3 - NORTHEAST

- Alec Amundson Osage
- Mark Glawe Garber
- Kristine Kimball Cedar Falls
- Rodale Institute Midwest Organic Center, Kristine Lang – Marion
- Marty Lenss Cedar Rapids*
- Benji Nichols Decorah
- Joseph Sperfslage Coggon

DISTRICT 4 - SOUTHWEST

- Marti Anderson Des Moines
- Nathan Bowen Hastings
- $\bullet \ {\sf Gary} \ {\sf Christensen-Sully}$
- Nathan Christenson Granger
- Brian Clark Pleasantville
- James Copeland West Des Moines
- Renee DeVore Des Moines
- Carol Fassbinder-Orth Glenwood
- Jerry Fetters Seymour
- Michael Finarty Knoxville
- Cory Gamble Winterset
- Terra Hall Missouri Valley
- Harland and Heather Haugen Johnston
- Martha and John Jessen Des Moines
- Alex Kerrigan Ankeny
- Ross Langmaid Newton
- Dylan Lewis Audubon
- Lori Long Indianola
- Brian Mewhirter Atlantic
- Ethan Nielsen Avoca

- Andy Offenburger Chariton
- Patrick and Karri Rose Norwalk
- Levi Rosol Des Moines
- Louis Sajovec Norwalk
- Ryan Sheridan West Des Moines
- Glenn Sonntag Atlantic
- James and Lois Steinberger Newton
- Brendon Terpstra Pella
- Jason Tetrick Waukee
- Ben Ullem Des Moines
- Curtis Van Kooten Pella
- Amanda Van Steenwyk Peru
- Lawrence Van Zee Sully
- Steven Wainwright Bedford
- Kyle Walker Indianola
- Kerrie White Adel
- Jeremy Zellmer Atlantic

DISTRICT 5 - SOUTHEAST

- Jim and Sara Anderson Fairfield
- Charles Deam Martelle
- Fritz Engel Brighton
- Paul and Rita Hart Wheatland
- Mark Heckman West Liberty
- Natalie Hempy Solon
- Tom Jackson Rose Hill
- Joel Johnson Swisher
- Laura and Jared Jones Wilton
- Wendell Jones Crawfordsville
- Joseph Klingelhutz Iowa City
- Tim and Genna Knutson Wapello
- Alyssa Kuehl Davenport
- Carly Nichols Iowa City
- Katharine Nicholson Iowa City
- Kirsten Novak Oxford
- Brooke Paulsen Anamosa
- Rodney Reck Ottumwa
- Diaan Roos Muscatine
- Kurt Van Nice Blue Grass
- Tammy Watts Danville
- Ann Werner Walcott*
- Brent Willimack Lost Nation

DISTRICT 6 - OUT OF STATE

- Brad Berry Pleasantville, OH
- Aaron Blout Prairie City, IL
- Sandy Bonney Lewistown, IL
- Carol Bouska Minneapolis, MN
- Jon Boylen Mt Sterling, IL
- Joe Bruketta Table Grove, IL
- Curt Carrillon Carlyle, IL
- Luke Clark Chandlerville, IL
- Ryan Corrie Rushville, IL
- Joy Coyne Barneveld, WI
 Tracy Doonan Reynolds, IL
- Ron Edwards Dexter, MO



- Lynn Fahrmeier Wellington, MO
- Peter Fleming Minooka, IL
- Laine Forrest Camden, IL
- Carla Gornall Omaha, NE
- Rodney Graham Hunt, NY
- Aidan Groves Atwater, IL
- Stephen Hanna Cozad, NE
 Jake Hendrickx New York Mills, MN
- Todd Hodgson Kilbourne, IL
- Becky Hood Kewanee, IL
- Kathleen Hunt Seattle, WA
- Jim Ifft Fairbury, IL
- Shelbi and Alan Jentz Madison, WI
- Katie Kreuser Lincoln, NE
- Brian Lehman Vermont, IL
- Bailey Lutz Spring Grove, MN
- Shirley Nagg Rochester, NY
- Chris Norton Burlington, PA
- Ryan Palmer Omaha, NE
- Joe Pattengill Sikeston, MO
- David Peterson Burlington, WI
- William Ponder Scott City, MO
- Justin Raikes Lincoln, NE
- Doug Rylander LaSalle, IL
- Nicole Saville Martell, NE
- Ed Schmidt Sacramento, CA
- Landon, Brent and Jenny Sparling Granville Summit, PA
- Michael Steeke Perham, MN
- Todd Steiner Tremont, IL
- Lawrence Stoskopf Salina, KS
- Robert Vohland Canton, IL
- George Wagner Cordova, TN
- Robyn Weber Denver, CO
- Steve Welsh Sciota, IL
- Ken Westrich Scott City, MO
- Alan Wilson Leonardville, KS
- Bruce Yingling Mount Sterling, IL
- Nereyda Zambrano Wilber, NE

DISTRICT 7 - INTERNATIONAL

• Jean-François Messier – Saint-Hyacinthe, Québec, Canada

* Indicates lifetime member of Practical Farmers of Iowa



GROW YOUR FARM WITH PRACTICAL FARMERS. JOIN OR RENEW TODAY!

Want to join or renew online? Visit practical farmers.org/join-or-renew.

MEMBER INFORMATION				
Contact Name(s)*:				
Farm or Organization Name:				
Address:				
City:	State: ZIP:	County:		
Phone 1:	Phone 2	2:		
	Email 2:			
* For Farm or Household membership, please list names				
JOIN OR RENEW				
1. THIS ANNUAL MEMBERSHIP IS A:	2. I AM JOINING AT THE LEVEL	OF:		
☐ New Membership ☐ Renewal	☐ Student – \$20☐ Individual – \$50	☐ Organization – \$110 ☐ Lifetime Member* – \$1,000		
	Farm or Household – \$60	* See details at http://bit.ly/PFI-lifetime		
3. I AM JOINING OR RENEWING AS:	4. HOW DID YOU HEAR ABOUT I	PFI?		
An Aspiring Farmer				
A Farmer or Grower				
Non-Farmer				
EMAIL DISCUSSION GROUP SIGN-UP				
When you join our email discussion groups, yo Sign up for as many groups as you'd like (and		ity and exchange ideas from anywhere, at any time. address above)!		
Cover Crops Field Crops	General Horticulture	Livestock Policy		
SUSTAIN PRACTICAL FARMERS WITH A	AN ADDITIONAL DONATIO	ри		
For the sake of the long-term health and vita beyond your membership fee. Practical Farmers of		a, we ask you to consider making a donation above and gift is tax deductible to the extent allowed by law.		
I would like to make a one-time, tax-deductib	ole donation to PFI in the amou	nt of:		
\$1,000 \tag{500} \$5500	\$100 \$50] \$		
Or, make a recurring monthly or quarterly dor	nation. This will be automatically charg	ged to your credit card on the first day of each month or quarter.		
Yes, I would like to give \$	per month OR pe	er quarter		
PAYMENT				
Additional Donation		\$ per year for year(s) = \$ = \$		
☐ Check or money order is enclosed (Please make) ☐ Credit card (Visa, MasterCard or Discover only)	payable to "Practical Farmers of Iowa."))		
Name on card	Number			
	Please automatically charge this credit card annually for membership			
Office Use Only: Check # Check date Total	l amountNotes	Spring 2020 • the Practical Farmer • 3		

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