A quarterly publication of Practical Farmers of Iowa

the

Vol. 31, No. 3 | Summer 2015



L farmer Strengthening Farms and Communities

On the cover



A big crowd came to learn about sheep production from the Dials, of Three Sisters Farm near Williams.

(Photo courtesy of Todd Schuett, of Creative Technology Corp.)

FIELD CROPS: Striving for Diversity with Cover Crops

0

0

HORTICULTURE: Does a Focus on Less = **Big Opportunity?**

8

LIVESTOCK:

Members Share More of the Bird Flu Story

Photos

14

→ Q&A with Larry Kallem on PFI's 30th

Field Day

In this issue

OTHER FEATURES:

20

16

4

Illi features

4 FIELD CROPS :: STRIVING FOR DIVERSITY WITH COVER CROPS

Members share their efforts to venture beyond cereal rye by trying new cover crop species.

6 FARM TRANSFER :: LEGACY LETTER; LIFE INSURANCE & YOUR TRANSFER STRATEGY

Read the farm legacy letter of Marilyn and Leon Isakson. Then read how life insurance can affect your farm transfer plans.

8 HORTICULTURE :: DOES A FOCUS ON LESS = BIG OPPORTUNITY?

Some producers are finding success by focusing on fewer crops. Read two PFI members' stories.

10 NEXT GENERATION :: SHARING STORIES ON FINDAFARMER IS KEY TO SUCCESS

FindAFarmer.net helps connect landowners with land seekers. But the tool's secret strength? Letting users share their vision and values.

12 LIVESTOCK :: MEMBER SHARE MORE OF THE BIRD FLU STORY

Hear from several PFI poultry producers about how their flocks have remained healthy, and what was missing from mainstream debate on the disease.

14 SPECIAL: FIELD DAY PHOTOS :: SPRING THRU MID-SUMMER

Field days offer a snapshot of the diverse farmers in our membership. See a glimpse of the breadth of knowledge and topics shared so far.

16 ENERGY :: RENEWABLE ENERGY ON ROW CROP FARMS

Read how two PFI row crop farmers are using next-generation renewable energy technology to significantly cut their operating costs.

18 INT'L YEAR OF SOILS :: U.N. CAMPAIGN SPARKS LOCAL CONVERSATION

The Food and Agriculture Organization declared 2015 to be the International Year of Soils. This inspired a lengthy member debate on soil concepts.

20 SPECIAL: CELEBRATING 30 YEARS:: Q&A WITH LARRY KALLEM

As Practical Farmers celebrates this special milestone, co-founder Larry recalls our past and muses on the challenges yet to come.

24 SMALL GRAINS :: PROS AND PITFALLS OF SMALL GRAINS IN IOWA

Wade Dooley weighs in on why he grows small grains – and the challenges farmers here face.

Il departments

- 3 EXECUTIVE DIRECTOR'S NOTE
- 22 POLICY: EQIP: Sharing the Costs of Conservation
- 23 BOOK REVIEW "The Last Farmer: An American Memoir" - By Teresa Opheim
- 23 PFI NEWS
- 26 WELCOME NEW MEMBERS
- 26 CALENDAR :: AUG. - OCT.
- **27** JOIN PFI

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

DISTRICT 1 (NORTHWEST)

Dan Wilson – President 4375 Pierce Ave. Paullina, IA 51046 (712) 448-3870 the7wilsons@gmail.com

DISTRICT 2 (NORTH CENTRAL)

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

DISTRICT 3 (NORTHEAST)

Ann Franzenburg 6925 19th Ave. Van Horne, IA 52346 (515) 928-7690 eafran@netins.net

DISTRICT 4 (SOUTHWEST)

Mark Peterson – Vice-President 2311 N Ave. Stanton, IA 51573 (712) 370-4004

markpete@myfmtc.com

DISTRICT 5 (SOUTHEAST)

Ann Cromwell 3303 240th St. Williamsburg, IA 52361 (319) 668-8248 anniowa@speedconnect.com

AT-LARGE FARMERS

Tyler Franzenburg 6915 15th Ave. Keystone, IA 52249 (319) 721-2176 tfranzenburg@hotmail.com Vic Madsen 2186 Goldfinch Ave. Audubon, IA 50025 (712) 563-3044 vcmadsen@iowatelecom.net

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

David Rosmann

1038 St. 35th Ave. Omaha, NE 68105 (612) 219-7396 davidrosmann@hotmail.com

Kurt Van Hulzen 2397 Wadsley Ave. Sac City, IA 50583 kurtvh@netllc.wb.net

AT-LARGE FRIENDS of FARMERS

Kathy Eckhouse 400 Hakes Dr. Des Moines, IA 50211 (515) 981-1625 kathy@laguercia.us

Gail Hickenbottom – Treasurer 810 Browns Woods Dr. West Des Moines, IA 50265 (515) 256-7876

CO-FOUNDERS

 Larry Kallem
 Sharon Thompson

 12303 NW 158th Ave.
 Boone, IA

 Madrid, IA 50156
 (515) 795-2303

PFI STAFF

For general information and staff connections, call (515) 232-5661. Staff extensions are listed in parentheses.

All email addresses are @practicalfarmers.org

Erica Andorf (303) Office Manager erica@

Sarah Carlson (305) Midwest Cover Crop Research Coordinator sarah@

Steve Carlson (308) Beginning Farmer and Program Associate steve@

Meghan Filbert (309) Livestock Coordinator meghan@

Stefan Gailans (314) Research Scientist and Cooperators' Program Manager stefan@

Suzi Howk (301) Finance and Benefits Manager

Tamsyn Jones (311) Communications Specialist tamsyn@

Liz Kolbe (313) Horticulture Coordinator liz@

Nick Ohde (306) Research and Program Assistant nick@ Teresa Opheim (302) Executive Director teresa@

Julie Wheelock (304) Beginning Farmer Manager julie@

Sally Worley (310) Operations Director sally@

Lauren Zastrow (312) Membership and Event Assistant lauren@



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

Newsletter Editor: Tamsyn Jones

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

PRINTED WITH

SOY INK

EOPOLD CENTER



Executive Director Note

Lifetime Member

This is the finest nonprofit organization I have ever known. I thought that before working here, and I feel that even more strongly nine-and-a-half years later. And serving as the executive director has been the most meaningful work I have ever done.

So why am I transitioning out of the leadership position?

This place is running pretty darn well with minimal day-to-day guidance on my part. I believe periodic leadership change is a good idea. In the executive director role, I think I have given the organization what I can, and I am ready for a new challenge.

What would I like to leave behind as a legacy?

- A focus on the farmer and implementing members' priorities.
- A focus on productivity. I challenge you to find another organization that does so much with its resources.



Dobby, owned by Liz Garst and Darwin Pierce, rides the wagon at the Whiterock Conservancy field day in June. Dobby has been an expensive dog, Liz reports: He has eaten both Darwin's hearing aid and Liz's strand of pearls. He's also been known to steal grills from the conservancy's nearby campground.



- An organization that works hard to measure its effectiveness.
- Solid finances and diverse funding.
- Meaningful work and good working conditions for the staff.

It is comforting to know that, with the strong leadership of the PFI board of directors, I will be leaving the organization in such strong shape.

What will I do next? Actually, I am not sure. I may stay on with PFI in some capacity, I may need to move on. I am just giving Practical Farmers some time to prepare for the transition.

I am absolutely certain Practical Farmers will thrive without my leadership. It will grow and in different ways. And that's a good thing.

Rich and I became lifetime members of Practical Farmers last year, so no matter what I do next, I will be in touch. And as a member, I will feel free to give my input, just like a good ole, regular PFI member.

I have learned so much from you!

Affectionately,

– Teresa Opheim Lifetime member, Practical Farmers of Iowa

Note from the Transition Committee Chair

Teresa will leave a legacy of being member-focused; on organizational effectiveness, solid finances and meaningful work. And I would add one more: effective leadership.

Having served on the Practical Farmers board of directors for nine of the nine-and-ahalf years of Teresa's tenure, I have witnessed the hard work and effective leadership Teresa has brought to our organization. We have experienced tremendous growth in membership, annual budget and financial stability! And all the while, the focus has been on you, the PFI membership. What do **you** want from your organization?

Teresa's leadership as executive director will be missed, this is true. However, I believe in the strength of the members and staff. Our Transition Committee feels that this transition to a new executive director provides an opportunity to nurture the next stage of growth and maturity of the organization. Practical Farmers is in a healthy place:

- Our membership has grown to more than 2,800 members;
- Practical Farmers' staff is well balanced, energetic and eager to help beginning as well as seasoned PFI farmers build their own operations and share the results of their learning with other farmers;
- We have more than 400 members serving as leaders of PFI activities and events;
- We have powerful values, mission, vision statements and a strong strategic plan to guide our work;
- Our annual budget has grown to almost \$1.5 million annually; and
- We have been able to build a reserve fund through the generosity of PFI members and strategic decision-making on the part of the Practical Farmers staff and board.

Congratulations, Teresa! And **thank you** for a job well done!

Tim Landgraf Chair, Transition Committee (515) 851-1690 pfitransitiontim@gmail.com

Striving for Diversity with Cover Crops: Members Share Their Efforts

Practical Farmers members have led the way in researching and adopting cover crops in the state of Iowa. Understanding that our predominant cropping system is leaky and prone to erosion, Jon Bakehouse, who farms near Hastings in Mills County, explains that "fall, winter and spring 'weeds' have been trying to tell us for years to quit leaving our soil uncovered." Most in Practical Farmers agree, as evidenced by the number of past and ongoing on-farm research trials on cover crops in our Cooperators' Program. Since 1989, more than 100 farmers have conducted nearly 50 research projects on cover crops.

ot surprisingly, most of these on-farm research trials have involved cereal rye, a grass species. This is because cereal rye is among the most - if not the most - winter-hardy annual cover crop currently available to farmers. Most recent research from our Cooperators' Program has shown that a cereal rye cover crop does not adversely affect corn and soybean yields, and that it can scavenge nitrate from the soil during the early spring and late fall, when that nitrate might otherwise leach into rivers and streams. Thanks to these attributes, cereal rye has proven itself and been successfully added to more than 3,000 farms in Iowa.

Heeding the lessons learned from soil microbial ecologists Sarah Hargreaves and Jill Clapperton at our 2015 annual conference – that a diverse array of crops, including cover crops, can feed the "underground livestock herd" of soil microbes that thrive in healthy soil – many farmers have now begun to wonder what other cover crop species might be viable. With diversity in mind, most are curious about non-grass cover crop species.

These include legumes like hairy vetch, crimson clover and Austrian winter peas; or brassicas like oilseed radish, rapeseed, canola, forage collards and brown mustard. Oilseed radish, marketed as Tillage Radish or Nitro Radish, has gotten a lot of attention as an alternative or companion to cereal rye due to its success and popularity in the Mid-Atlantic region. But judging by some conversations this past spring on our cover crops email discussion list, rapeseed and by Stefan Gailans

brown mustard appear to be of particular interest among members here in Iowa.

(By the way, our cover crops email discussion list is a great place to ask questions of and learn from other farmers in our network! Contact Erica Andorf at erica@ practicalfarmers.org to be added to the list, and join the conversation today.)

Cereal Rye is Dan∂y, But What Else Works Well in Iowa?

Dick Sloan kicked things off in April on the cover crops email discussion list by noting that he had been trying rapeseed for a few years on his farm near Rowley in Buchanan County, and finally got it to overwinter when seeded in July. He was so impressed that he added, "I'm going to replace radish with them in the cover mix I plant after wheat and rye harvest." Jon Bakehouse chimed in, saying "rapeseed seems to establish almost without fail, especially after summer small grain harvest, has a decent shot at overwintering, and the cost per pound of seed sure beats radish."

A little bit of rapeseed, seeded at 10 pounds per acre or less, goes a long way when one considers the seed size relative to radish: 175,000 seeds per pound for rapeseed,



▲ March-seeded oats-rapeseed-mustard mix into which Steve McGrew planted corn in early May.



▲ Cereal rye, rapeseed and some hairy vetch growing in a plot as part of the Cover Crop Variety Trial in November 2014.

Field Crops

compared with 25,000 seeds per pound for radish. And as Jon hinted, rapeseed is generally one-third the cost of radish. Another benefit of rapeseed is its potential to overwinter like cereal rye or winter wheat. Wade Dooley seeded rapeseed and oats last year after his soybeans had begun to mature and turn yellow – later in the summer than Dick or Jon. Wade farms near Albion in Marshall County, and commented that while planting corn in late April, he had observed a "smattering" of rapeseed that had overwintered.

Piggy-backing on this discussion list conversation, Jacob Bolson wondered about using mustard as a cover crop on his farm near Hubbard, in Hardin County. Unlike rapeseed, but similar to oilseed radish, mustard will not survive the winter. Steve McGrew, who farms at McGrew Brothers Farm near Emerson in southwestern Iowa, immediately replied with details on what he recently tried: In a twist on what is typically done with cover crops in Iowa, he seeded a mix of oats, rapeseed and mustard in mid-March before terminating and planting corn into

the residue in early May. Steve has tried diligently to find a broadleaf that will attain enough growth prior to corn (for better soil coverage), and said he was pleased that the springseeded cover crop mix achieved 6 inches of aboveground growth in that 40-day period. "I wanted mainly broadleaves in front of corn," Steve explained. "These came up pretty well in the spring."



Continuing the Search for More Cover Crops Through Research

For a few years now, farmers in Practical Farmers' Cooperators' Program have been evaluating several cover crop species in small plots across Iowa. In the 2013-2014 and 2014-2015 iterations of the Cover Crop Variety Trial, both rapeseed and brown mustard showed the ability to provide as much ground cover in the fall as cereal rye when broadcast-seeded in late summer into corn or soybeans. The rapeseed in these trials occasionally overwintered, but only when it was in a mix with cereal rye.



Steve McGrew shows guests a soil pit on his farm, and discusses soil health during his June 22 field day.

Graduate students Tim Sklenar and Seth Appelgate, working with Andy Lenssen in the Agronomy Department at Iowa State University, are evaluating camelina as an additional cover crop option in corn-soybean systems. Camelina is an oilseed crop in the brassica family typically grown in Canada and Europe. In test plots near Ames, Atlantic and Sutherland, the researchers have observed

> camelina to consistently overwinter when drilled in the fall following soybean harvest. They also note that the protein level and relative feed value of the camelina vegetation exceeds cereal rye, making it a potentially superior option for grazing livestock. While camelina has not produced as much biomass and ground cover in the fall and spring as cereal rye in early trials, Tim, Seth and Andy think camelina is a promising option for farmers

in Iowa that's worthy of further study.

Will Diverse Cover Crops Become the Norm in Iowa?

It will take more work and ingenuity before diverse cover crops appear on more farms in Iowa. Farmers are currently accommodating more cover crops by either growing small grains that are harvested in mid-summer, or by using shorter-season corn or soybeans. But Practical Farmers is a curious and probing group. Using the latest research results from the Cooperators' Program and university research, members have been finding ways to turn research into practice on their farms. Given this ongoing curiosity and determination to find solutions to onfarm challenges, Practical Farmers of Iowa members are poised to remain leaders on the cover crops front. ■

Read More Learn more about the cover crop studies

Learn more about the cover crop studies mentioned in this article, view data and see other cover-crop focused resources:

• **"Cover Crop Variety Trial 2013-2014"** http://practicalfarmers.org/farmerknowledge/research-reports/2015/covercrop-variety-trial-2013-2014/

 "Cover Crop Variety Trial 2014-2015" http://practicalfarmers.org/farmerknowledge/research-reports/2015/covercrop-variety-trial-2014-2015/

"Effect of Seeding Date on Cover Crop Performance"

http://practicalfarmers.org/farmerknowledge/research-reports/2015/effect-ofseeding-date-on-cover-crop-performance/

• "Winter Cereal Rye Cover Crop Effect on Cash Crop Yield: Year 6"

http://practicalfarmers.org/farmer-knowledge/ research-reports/2015/winter-cereal-rye-cover-crop-effect-on-cash-crop-yield-year-6/

◎ "Side-dressing Corn following a Winter Rye Cover Crop"

http://practicalfarmers.org/farmer-knowledge/research-reports/2014/side-dressingcorn-following-a-winter-rye-cover-crop/

⊙ "Cover Crop Business Directory"

http://practicalfarmers.org/wp-content/ uploads/2015/05/PFI-Cover-Crop-Business-Directory-20151.pdf

Farm Legacy Letter

by Leon and Marilyn Isakson

March 28, 2015

To: Rhonda and Lon

We have now lived on our home farm for 48 years. We purchased the 40+ acre home in 1967. We rented an additional 80 acres for 39 years, paying rent to three different generations, before making use of a lot of our savings to purchase it in 2006. We then invested in tiling it, and what a difference that has made! Good crops in wet and dry years!

We have 10 black angus cows and a black angus bull. Your dad raises the calves until they are ready to be butchered. He has a long list of customers who want beef raised without growth hormones and antibiotics. We raise mostly hay on this farm to feed the cows and calves. On our other farm, we raise corn and soybeans and a small amount of hay.

In 1979, we built a pond in our pasture and planted a two-acre forest preserve in the northeast corner of the farm. We planted hickory and oak trees. By now they are very tall, and the turkeys and deer enjoy the acorns they produce.



Marilyn and Levn Isakson

The sound of the tractors and other machinery working in the fields is a good one. Also the songs of the many birds are fun to listen to when I am on my walks. When the cows have their babies they make a special sound, kind of a lowing sound.

Some major events in our lives on this farm have been the time my cousins all brought their campers and we had a reunion here. We often have friends over during the summer and sit down at our pond around a campfire. It is a whole different world down there! The blue heron sometimes flies up in the willow tree near us, and we can sometimes see the deer and other wild animals. The fish jump sometimes, and other times the pond is real quiet.

Leon is a believer in crop rotation and building the soil. It is important to us that our farm continues to be managed in this way. His cattle are always well-fed and bedded. We say he has contented cows. We do spray for weed control and plant RoundUp Ready beans and corn.

Our machinery is all kept in good working order. If Leon can't fix it, he knows someone who can.

Thirty years from now, we want people to remember the tidiness of our farm, that it's been in our family for a lot of years, and all the fun we've had working and playing together on it. Summers were filled with happy grandchildren learning about the garden and having fun in the wide open spaces. We treasure those days.

Our farm goal is to provide land for our farming heirs while providing compensation to the ones who do not choose to farm. We want our family to continue to enjoy times together. This goal is important to us because we have worked hard to make this place one that will provide food and fun for years to come.

We leave you with this message: We love all of you very much and want you to enjoy life as much as we have.

Dad and Mom (Leon and Marilyn Isakson, Charles City, Iowa)

A postscript: Son, Lon, and his wife, Kim, have expressed interest in living on the farm when Marilyn and Leon are ready to move into town. So Marilyn and Leon looked into life insurance, so that Lon could potentially inherit the farm, and daughter Rhonda the proceeds from the life insurance. However, Marilyn reports: "We have found out that it is not wise to wait until you are old to buy life insurance: It costs an arm and a leg! So we are just going to make sure Rhonda gets money off the top of our savings. That way Lon can use the machinery and everything else in the outside buildings. We haven't had the opportunity to sit down with everyone present yet. Still some details to be worked out."

Farm Transfer

Life Insurance and Your Farm Transfer Strategy

by Teresa Opheim

Can you be too old or too sick to purchase life insurance?

"Life insurance becomes more expensive as a person gets older or as their health deteriorates," says Doug Follman, of Town & Country Insurance in Webster City. "Some companies will not insure a new customer if they are over the age of 85 when they apply for coverage. Many companies will also limit the plan options that an older person can purchase. However, there are still many life insurance options available to people as they get older."

C ompanies have realized that many older people have not adequately planned for their future. These companies want a portion of this business market, so many of them have simplified their underwriting process. Health conditions that prevented consumers from purchasing life insurance in the past may no longer be an issue. Since people in the United States are living longer than the previous generations, life insurance companies have reduced the costs of their policies.

"As with all the items that we could or should have bought when we were younger, life insurance is more expensive than it was when we were in our 20s," Doug says. "That does not mean it should not be considered when you are planning for your future."

Tom and Irene Frantzen, and many other PFI members, have chosen to include life insurance in their farm transfer plans. "Without a plan, if our son wanted to take over Frantzen Farm Feeds, he'd have to go in debt in order to buy out his sisters," Tom and Irene say. "We decided to appraise the value of the business and then we, through the business, purchased a whole life insurance policy on Irene for that dollar figure. The beneficiaries are our two daughters.



Margaret Smith, with husband Doug Alert (to her right), at their field day. "Insurance is a gamble," she says. "You are gambling that you will die before an equal investment elsewhere would show equal or greater returns to the insurance premium."

"If Tom passes away tonight, our son inherits half of the business and he becomes a manager, and Irene still has half. If Irene passes away tonight, our son inherits her half of the business. Each of our daughters then gets half of Irene's whole life insurance policy. In effect, the asset value of the business has been shared by the children and the business continues on." Their son shares in the risks and rewards of the feed business, and he ends up with a business which may be worth a lot or a little.

Margaret Smith of Ash Grove Farm near Hampton offers these considerations:

"I know someone who is paying \$66,000 each year for life insurance on their dad. Wow! What could you do with \$66,000 each year to build the farm business? I wonder if investing in 40 acres that would be a farm asset – but could later be sold for either nursing home costs (another important issue), or to even up an estate – would be a better investment. If the land tract needed to be used for nursing home expenses, the succeeding farming child, depending on their stage of business growth, could buy that on contract, eventually moving it out of the parent's estate. "As an alternative to life insurance on parents to help farming heirs buy out siblings at the time of their death, perhaps parents could transfer the land purchased gradually – say, by transfer of shares as compensation for labor and management – to the farming child and move that out of their estate, making it easier for the farming heir to buy out siblings' shares at the time of their parents' death. Transferred shares are immediately moved out of the estate. A land contract, until fully paid, remains as part of the estate.

"My thoughts about investing in real estate rather than insurance works if land is inflating. Not such a rosy scenario right now when land prices are going down.

"Insurance, of course, is a gamble, and nobody knows death like life insurance companies. The company gambles that you will live a long time and they will make a profit. You are gambling that you will die before an equal investment elsewhere would show equal or greater returns to the insurance premium."

Does a Focus on Less = Big Opportunity?

Some producers find commercial success in specializing

by Liz Kolbe

"One acre of watermelon is as much work as 1,000 acres of corn. But that 1 acre nets as much as 100 acres of corn," says Wade Dooley. It isn't a perfect labor trade-off, but the implications for financial returns to land are significant. Here is a glimpse at how two producers are focusing on growing a limited number of crops on a larger scale.

W ade raises cattle, corn and beans, rye and winter wheat for seed, and does custom haying in central Iowa. He learned to grow melons while working for a melon breeding program in Florida. When he moved back to Iowa, he quickly realized there was an opportunity to grow melons at a mid-sized scale for grocery stores – no one else was doing it. This year he has 4 acres of produce: 2 acres of watermelon and 2 acres of winter squash.

Many fruit and vegetable farmers, especially beginning farmers, emphasize a diversity of crops on their farm in order to market to a variety of outlets, such as Community Supported Agriculture (CSA), farmers markets and some restaurant sales.



▲ Wade Dooley with some of his Butterkin squash

There are myriad reasons for this choice, ranging from limited land and capital, to lifestyle and community goals, to risk abatement through crop diversity. But that model isn't for everyone.

Available Land Considerations

"I didn't want to manage 40 different crops on 4 acres," Wade says. "Melons take a lot of space. If you're already restricted in area, melons don't make a lot of sense. I had the land, so it made sense."

Wade grows a variety of watermelon called Crimson Sweet, and averages 10-12 pounds per fruit. He uses the following setup to plant his watermelon crop: biodegradable plastic mulch, which he puts down with a mulch layer; drip tape underneath; and chopped rye straw or corn stalk mulch between, which he spreads using a feed wagon, followed by a quick walk-through to evenly distribute. The machinery, most of which he already had for other farm enterprises, makes the job much quicker - a few hours of work instead of a few days. He prefers mulching, which he's done for three years, to any of the herbicides available for melons.

Wade plants the watermelon plot following soybeans, discing in the biodegradable plastic and cutting in the straw much at the end of the season. Otherwise, "it can be pretty messy," he says. "There's a lot of carbon in there to deal with." He says that planting watermelon after corn isn't an option: The stalk residue left on the soil, combined with no-till, tears up the plastic mulch as it's laid down.

Winter squash came as a surprise market to Wade after muskmelon didn't work out. "I tried muskmelon but always just ended up with a field of rotten husks. Pumpkins and squash are easy – you don't even need to weed them once they get started." Through other field crop farmers with a pumpkin patch, Wade learned that winter squash would sell. "Most people I know eat one winter squash a year," he says. "Turns out restaurants use a lot of them." Wade grows Butterkin – a beige squash shaped like a flattened pumpkin that has a bright orange meat. "It's the best cooking squash I've ever had, and it's an easy sell [to restaurants] once they try one. The meat color, quality and consistency are much better than a butternut."

Despite the market opportunity, Wade says that selling to restaurants is not without its frustrations. "A restaurant can only take a couple hundred pounds at a time," he says. "Ideally, I'd have a processor who could take a lot at once and then not need any next month." This vexing dimension of marketing produce to restaurants is shared by other growers, but Wade also admits his marketing skills are "decidedly lacking" and he much prefers growing things to selling them.

Despite good commercial returns, Wade isn't sure of the future of speciality crops on his farm, as he continues to diversity into small grains (*see story on pg. 24*). "I'm stretched too thin," he explains. "It's profitable per acre, but as my other farm enterprises expand, I just don't have the time." He is, however, curious about planting watermelon and squash into standing rye, and rolling them down in early June as a mulch. That would better integrate those crops with his other enterprises (he already grows rye for seed), and would save him the cost of the biodegradable plastic mulch.

⁴⁴ I didn't want to manage 40 different crops on 4 acres. Melons take a lot of space. If you're already restricted in area, melons don't make a lot of sense. I had the space, so it made sense. ⁹⁷

– WADE DOOLEY

Horticulture



▲ View of Wade Dooley's watermelon and squash field, showing his mulching setup.

Personality Considerations

Wade isn't the only farmer hunting a larger market for a smaller number of crops. After several years trying his hands at CSA, Marty Lucas is strictly in the green bean business. "CSA was a nightmare that we decided to get out of," Marty says. "It was so management-intensive – you have to be extremely dedicated to do it right, and I didn't have the personality for it."

Two years ago, the Lucas family started looking at selling green beans wholesale; they aren't looking back. Last year, they bought a \$50,000 single-row green bean harvester, the OxBow VH100. After this season ends, they plan to sell it and purchase something larger.

"This year we have 50 acres of certified organic green beans, which we have stagger-planted to harvest once a week for 12 weeks," Marty says. "This provides a somewhat stable supply to customers throughout the season."

Marty planted 50 acres in 2014 as well; it was enough to pay for the harvester, he explains. He compares the CSA to wholesale this way: "The green beans are about 10 percent of the work of a CSA and much, much more profitable." He averages about \$6,000 per acre in revenue, and nets \$3,000 to \$4,000 per acre after costs are factored in. "And I have sold every single box, except those I give away," he adds. That the green beans are certified organic adds to the marketability, but he says that the mere fact they're local is an advantage. Not only is "local" popular, but the fresher beans have less shrinkage in the store – everything is delivered within 36 hours of harvest.

Looking back, Marty's only regret is that he didn't buy a larger trailer to haul the

Marty Lucas harvesting green beans in July



"I'd rather do one thing really well than three things halfway. I felt that with the CSA we were overdiversified and couldn't train people fast enough to make it work."

- MARTY LUCAS

beans. He also suggests looking for used equipment; he bought his VH100 new from OxBow, but has had great luck working with Sil Meier, an independent dealer based in Topeka. "Sil was part of the engineering team that built the harvester, and now he owns his own dealership," Marty says. "He works with larger produce operations, but always has a lot of smaller and midsized equipment around. He was great for equipment advice and basic coaching."

Looking forward, Marty hopes to plant 300 acres of green beans next year, and to rotate with organic corn and alfalfa, oats or mixed pasture. The Lucases are also using tillage radish in the fall, which seems to help with compaction caused by the single-row harvester.

"I'd rather do one thing really well than three things half-way," Marty says. "I felt that with the CSA we were over-diversified and couldn't train people fast enough to make it work. If we diversify now, we'll go toward

> something like winter wheat that will use equipment we already have. Now that we have the equipment, we want to use it as much as we can."

As the local fruit and vegetable industry in Iowa continues to mature, farmers with different capital and market strategies will find ways to collaborate and work around each other in niches – an era of "coopetition," perhaps – making local foods more available, affordable and profitable for everyone. ■



▲ Marty Lucas

FindAFarmer.net: Sharing Stories Leads to Land-Matching Success

by Steve Carlson

It's easy to realize the potential for a land-matching tool like FindAFarmer. net: We're in the midst of a major land transfer in lowa and the Midwest as farmers age and look to retire, and we continually hear from our expanding beginning farmer network that land access is a major issue needing to be addressed.

What's not so easy is evaluating FindAFarmer's effectiveness. After users create an account and start communicating with landowners or land seekers, we're no longer involved in the process. Unless someone reports back to us about their experience, we just have to hope for the best. With the recent improvements to FindAFarmer.net, we thought it was a perfect time to check on this behind-the-scenes aspect, and hear from some land seekers and landowners who have made successful connections about what made their matches work.

Their stories reveal one of the keys to successfully using FindAFarmer.net: sharing your values and story. Users say that the ability to articulate your vision, values and what you're looking for in a farm or farmer is one of the main strengths of FindAFarmer – and what sets it apart from other real estate websites. (▶ Read more profiles on the next page of FindAFarmer users who are sharing their visions in an effort to make the perfect match).

"I wanted to find someone who saw it as a family farm," says David Mitschelen about

44 I started a conversation with the seller and explained our dreams and how we wanted to farm. [The sellers] came back to us because they liked our vision. ??

- RORY VAN WYK



Rory Van Wyk with his wife, Lynette, and daughters.

his connection with – and ultimate land sale to – land seekers Rory and Lynette Van Wyk. David moved with his family to the 40-acre farm near Winterset in 1962, when he was just a boy. When his parents could no longer manage the farm on their own, he purchased it from them in 2007. He planned to retire back to the farm with his wife, but they decided it was too far from their children and grandchildren in the Cedar Rapids area, so he listed the farm on FindAFarmer.

David received a number of inquiries – both through FindAFarmer and from neighbors – but was impressed with Rory's interest in sustainable agriculture and his vision for the land. "He looked at the farm the same way I was looking at it, with the possibilities of doing the same type of things I had dreamed of. In a way, he was living out my dream."

"I started a conversation with the seller and explained our dreams and how we wanted to farm," Rory says. "They received a few other offers but came back to us because they liked our vision."

Similar to the Mitschelens, landowner Mary Kimsey was intent on finding someone who shared her values and would farm the land as her father did. "The main thing for me was how much in alignment our principals were," Mary says. "Sure, I wanted someone competent, but my primary focus was finding someone who would take care of the land the way we wanted."

Mary's father first purchased the hilly farm in western Iowa to demonstrate some terracing concepts he had in mind. At one time, he had people coming from all over the country to see his innovative practices. With this in mind, Mary sought – and found – a tenant farmer through FindAFarmer who is now implementing new drainage concepts on the farm. "My dad would have been so happy to know people are still coming to the farm to see innovative practices that not only improve our farm, but demonstrate for other farmers and help improve their practices."

Success stories like this make us, at Practical Farmers, very happy as well! They also reveal a key point: Whether you're a land seeker or landowner, sharing your story and vision for the future is a big part of making a successful land match on FindAFarmer.net – and beyond.

Have you made a connection through FindAFarmer.net? Do you need help setting up your profile? Contact Steve Carlson at steve@practicalfarmers.org or (515) 232-5661.

WANTED: Shared Goals and Vision for the Future

FindAFarmer users open up to seek compatible land matches

by Julie Wheelock



LAND SEEKER: Tyler Youngers

Desired Land Location: O'Brien County preferred, but would consider opportunities near Indianola

Enterprises of Interest: Diversified livestock and crops

Bio: Tyler, his wife Brittney, and their 8-month-old

daughter, Josie, currently live in Indianola where Tyler works as an instructional technology consultant for Heartland AEA. Growing up on his family's Century Farm in O'Brien County, Tyler gained experience with corn, soybeans and swine production. Farming fulltime is a future goal of his. Tyler wants to work with a landowner who is excited about networking, and interested in ag technology and creating diversity on the land with livestock and crops.

"I see everything as a learning experience and am willing to share my experience to be a leader in the field of sustainability."

Contact: findafarmer.net/landseekers/tjyoungers

3. LANDOWNER: Sandra Beringer



Land Location: Clarke County

Bio: Sandra has about 20 acres, a portion of which are classified as highly erodible land. The land is currently being used for horse pasture and hay production, but Sandra is ready to rent to someone who is interested in small livestock grazing or horticulture production.

"I would like sustainable farming practices on the land, but would trust the farmer's best judgment of how to do that."

Contact: findafarmer.net/landowners/sbaringer



> Read more FindAFarmer profiles on the blog at practicalfarmers.org/blog, or at findafarmer.net

2. LANDOWNER: Chuck Schott



Land Location: Boone County

Next Generation

Bio: Chuck Schott's farmland has been in his family for 130 years, but he and his siblings are ready to transition the land to the next generation. The portion of the property that's for sale includes 28 acres of wetlands, 30 acres of permanent pasture and 95 acres tillable land.

"We hope someone can appreciate the diversity

of this land and will use the wetlands, pasture and cropland as we intended them. Someone will be able to make a living from this farm."

Contact: findafarmer.net/landowners/chuck



LAND SEEKER: Jeremy Rohwer



Desired Land Location: O'Brien County

Enterprises of Interest: Row crops and sheep

Bio: Jeremy currently farms about 80 acres that are in soybean and pasture production, but he wants

to expand his farm business to include more crop ground, additional pasture for his sheep herd and possibly niche hog production. Jeremy has an offfarm job as a surgical equipment service and sales representative. While he enjoys his job, he would like to eventually farm full-time. Jeremy and his wife, Amy, have two children: 8-year-old Bensen, and Morgan, age 2.5 years.

"I believe in antibiotic-free and minimal or no tillage. I'm open to landowners who want to be an extension of their operation so I can learn from them as a mentor."

Contact: jfindafarmer.net/landseekers/jarohwer



Members Share More of the Bird Flu Story *Small-scale, diverse production leads to resiliency*

Since April 2015, more than 33 million chickens and turkeys in Iowa have died from highly pathogenic avian influenza (bird flu). Governor Terry Branstad declared a state of emergency and asked for disaster relief from President Obama (this request was denied). Industry losses exceed a billion dollars, job losses are adding up and the disposal of euthanized birds has been problematic, to say the least. This is the worst disease outbreak in modern U.S. agriculture – but so far, for poultry producers in Practical Farmers of Iowa, it's business as usual (or even better than usual). How have these farmers remained resilient in the face of tremendous disease pressure?

Healthy Conditions = Healthy Birds

N ot a single poultry producer in our membership has reported avian influenza infection – even in flocks within quarantine zones (6 miles from an infected flock). I asked several Practical Farmers members to speculate on why their farms haven't been infected by bird flu, and here's what they had to say:

"Healthy birds are a result of raising chickens in a natural environment, without isolated confinement, antibiotics and growth hormones," says David Carbaugh, of Noble Pastures in Red Oak. "If birds are well-fed and have good immune systems, they're going to be able to fight this." "It's related to looking at how nature works," adds Richard Freedman, of Urbandale. Tim Daley, of Daley's Shamrock Acres in New Hartford, finds that giving birds fresh air, ample square footage per bird, and non-GMO or organic grains help immensely. Tim says his "ladies are healthy, happy and roaming around eating bugs" - a stark contrast to the current scene in much of Iowa.

These practices take advantage of natural barriers to disease transmission, as outlined by The American Pastured Poultry Producers Association:

- **Sunlight** is sanitizing and helps to kill the virus
- Foraging on vegetation and insects promotes natural feeding behaviors and contributes to a diverse, healthy diet
- **Pasture rotation** keeps the flock's living space fresh and clean

• Lower stocking rates result in lower stress levels, which promote optimal immune function

These natural barriers are rarely discussed amid the conventional focus on biosecurity issues, but they are validated by PFI members' experiences. Some birds raised by PFI producers are also heritage breeds, which are genetically better equipped to prosper in outdoor environments.

In response to the outbreak, many members have stepped up biosecurity on their farms, but they have continued to manage flocks as they normally do. "One precaution we have taken is not inviting people over to look at the chickens as much as we would have in the past," says Connie Tjelmeland, of Tj Family Farm in McCallsburg. "Otherwise, we are treating the birds much as we used to do – clean water, housing with dry bedding, adequate nutrition, fresh air, by Meghan Filbert

pasture and sunshine, and room to spread out." Leora Laughery, of Cricket's Gardens in Guthrie Center, tries to wash her hands and boots when she leaves her laying house, and she keeps bleach on hand for disinfection.

It's important to note, however, that even though PFI farmers' flocks have so far have been unaffected, healthy conditions may not be enough to prevent birds from contracting this highly pathogenic strain of bird flu. Six backyard flocks in Iowa have been infected, according to the Iowa Department of Agriculture and Land Stewardship.

Egg Demand Increasing

While affected commercial producers await confirmation that their barns are virus-free before repopulating with birds, Practical Farmers poultry producers are noticing an increase in sales. Many farmers have reported their market demand for freerange, local eggs has greatly increased, and they have been able to charge more for eggs and chicken.

"We have doubled our egg sales at the farmers market," says Tom Wilson, of Remnant Hills Farm in Nevada. "Customers have told us they would normally buy eggs at the grocery store, but for the first time they are sourcing from the farmers market. One customer told me that if he is going



Patti Edwardson looks at Ryan and Janice Marquardt's broilers in Van Meter.



Tom Wilson, of Remnant Hills Farm in Nevada, collects eggs from his laying flock.

to pay \$3 for a dozen eggs at the store, he might as well spend a dollar or two more for better-quality eggs."

Laura Krouse, of Abbe Hills Farm in Mount Vernon, has had total strangers call her to find out egg prices and availability. Jay Jung, of Charles City, says, "I have actually been gaining new customers as people are pickier about where their chicken is coming from." This welcome upswing in demand has some Practical Farmers members increasing the size of their layer and broiler flocks.

Lessons from the Bird Flu

While there is still debate over how the virus spread and the best biosecurity protocols, one thing is certain: The outbreak is a chance to examine the current model of poultry production. Several producers expressed frustration that public discourse on the oubreak has focused so narrowly.

Stacy Hartmann, of Small Potatoes Farm in Minburn, challenges the messages coming from state and local government, industry and the media:

"Be skeptical, ask questions, think critically. Don't simply accept information as it's doled out. The true cause of this disaster is confinement agriculture and that has not been made clear. The better alternatives to CAFO (concentrated animal feeding operation) meat and eggs - and the opportunities to purchase them from these alternative sources within the state - have not been highlighted. Also unclear are the public costs of the CAFO system related to the outbreak, including the social, environmental and animal welfare costs. The

public needs to know the high costs of our nation's cheap food supply."

Patti Edwardson, of Churdan, says: "What I find most discouraging and angering is that we, the public and the taxpayers, are given such little information. There has been no dialectic or serious discussion of how we as a society should proceed after this disaster."

"This outbreak has exposed, yet again, a major weakness in the structure of our large-scale, consolidated food system," says John Wesselius, of The Cornucopia in Sioux Center. "I hope that our leaders, as they look for answers, will consider the vulnerabilities of the state of our food system, and will support the infrastructure to encourage more resiliency in how we raise and distribute food."

Diversity and Resiliency

John believes that close reflection on the severity of the outbreak, and its relationship to the bigger food system, will reveal the vital importance of diversity in the system: "Plant and animal diversity creates more resilience. An increase in biologically-diverse farms – and a decrease in the number of corporate farms that control the majority of our food – would help to spread risk over a wider population. Wealth would be spread more evenly; rural communities would strengthen; focus would shift from just efficiency and profit to quality; and increased diversity on our landscape would result in a healthier ecosystem now and for future generations."

Tony Thompson, of New Family Farm in Elkhart, agrees, and adds that this diversity is key to ensuring another outbreak of



this scale doesn't happen again: "Instead of a small number of very large industrial facilities, empower hundreds of small farmers to produce eggs, like we used to do. While some would argue this would not be efficient, 'efficiency' depends on what you are trying to optimize. Given this major burp in industrial egg production, it should be clear to all that optimizing at broader levels and aiming for resiliency will lead to higher efficiency - not to mention better egg quality, more family farms and generally better quality of life for all Iowans."

Remain Vigilant

Fortunately, because the flu virus does not thrive in warm temperatures, summer has led to a lull in new infections. This does not mean the virus isn't present in the environment, and scientists are predicting a potential resurgence of the disease this fall. Now is not the time to become complacent; keep practicing proper management and biosecurity. According to the USDA Animal and Plant Health Inspection Service (www.aphis.usda.gov), the clinical signs to look for in your flock include:

- Sudden increase in bird deaths
- Sneezing, gasping for air, coughing, and / or runny nose
- Watery and green diarrhea
- Lack of energy and poor appetite
- Drop in egg production or soft- or thin-shelled, misshapen eggs
- Swelling around the eyes, neck and head
- Purple discoloration of the wattles, combs and legs
- Tremors, drooping wings, circling, twisting of the head and neck or lack of movement

If your flock exhibits any of these symptoms, you are encouraged to report to the IDALS State Veterinarian at (515) 281-5321 or (515) 281-5305. (Also note that birds with a low-pathogenic strain of the virus may not show signs).

Know Your Farmer

Stacy offers a call to action: "Let's challenge the resiliency of the industrial food system. Follow up your discernment with action. Source your eggs and meat from farmers whose practices are socially responsible, humane and transparent."

Field Day Photos















 Tom Wahl (left) exchanges information with Jake Wheeler at Bruce Carney's June field day.
 The sheep on Ortrude Dial's farm seem as curious about the field day crowd as attendees are about them. (Photo courtesy of Todd Schuett, Creative Technology Corp.)

3). Carmen Maxwell prepares to plant a baby milkweed on Frederick Martens' land during his field day.

4). Guests enjoy a nice view of Paul Willis' wetland during his summer solstice field day.

> **5).** Theo Gunther (left) and Jon Bakehouse look at living roots in a soil pit at Steve McGrew's field day.

6). Amy Miller (left) converses with Liz Garst at Whiterock Conservancy.

7). Guests enjoy networking during George Schaefer's field day.

8). Dennis McLaughlin helps prepare a hole for a fence post while host Ryan Marquardt (back right) answers a question during the high-tensile fence-building workshop.

9). Mr. Finches (left) and Boogie, Morgan Hoenig's cats, join field day guests for snacks (out of the rain).





Field Day Photos











1). Terry Becker (left), of T&B Grain Services, LLC, explains the automation system at David Ausberger's (right) field day.

2). Ben Barron checks out the oats growing at Margaret Smith and Doug Alert's farm.

3). Morgan Hoenig (pink shirt) shows guests her high tunnel.

4). Two young field day attendees look at goats grazing during Chad Steenhoek and Aaron Steele's field day.

5). Dave Lubben (left) chats with Doug Darrow at the latter's field day.

6). Don Wirth explores a compost pile at Chad and Aaron's field day.



7). Lucena Morse chats with Edward Burna of Paradigm Gardens at Danelle Myer's field day.8). Guests view cover crops interseeded with

standing corn at the field day hosted by JonKiel, Kirk Den Herder and Denny Vande Brake.9). Clark Porter (left) converses with Fred Abels

at the field day hosted by Jack and Marion Boyer.









Renewable Energy on Row Crop Farms

Next-generation technologies help significantly cut costs

When many people think of renewable energy, small-scale, off-the-grid technology is what comes to mind. This portrait might have captured those who first adopted this technology: Their farms and houses had low electricity needs, and a small turbine or solar array provided energy independence. But renewable technology has been changing rapidly; prices, especially for solar panels, have dropped significantly in the last five years. Steve McGrew and David Ausberger recently hosted Practical Farmers field days on their farms showcasing the renewable energy technology that has cut their electricity costs to almost nothing.

S teve and his brothers have been farming near Emerson in southwest Iowa since 1979. Over the last 35 years, they have continuously added conservation practices, starting with no-till, terraces, waterways, buffers and filters. Now they are finding creative ways to integrate cover crops into their operation. Installing a wind turbine on their farm is another step toward conservation.

"It's fascinating," Steve says about the wind turbine. "I've always been interested in alternative energy. It's just really scientifically interesting." At a field day on June 22, Steve spoke to an audience of around 100 people about the family's turbine. In 2012, they installed a 65-kilowatt-capacity WindMatic 15S, originally built in 1981. The wind turbine had originally been used on a commercial wind farm in California, during the first renewable energy boom in the 1980s. The McGrews purchased the turbine from Talk, Inc, a "remanufacturer" based in Minnesota that buys old turbines and refurbishes them by rebuilding the generator, gearbox and other parts. Since installing the turbine, Steve says they are generating more than 100,000 kilowatthours per year - which equates to a value of about \$10,000.

Time is Ripe for Renewables

Steve says he had been looking at producing energy on the farm for a long time. When renewable energy tax credits became available a few years ago, obtaining the technology became more financially feasible. A 30 percent federal tax credit is currently available, as well as a state tax credit worth 60 percent of the federal credit. This means that for a \$10,000 installation, you can get \$4,800 of tax credits to help offset the installation costs. In addition, the USDA Rural Energy for America Program (REAP) offers grants to pay for 25 percent of the cost.



by Nick Ohde

These are competitive grants, but Randy Skeie of EcoWisePower, who has worked with grant writers on the installation of numerous solar and wind systems, says that if you pay \$0.12 per kW or more for electricity, you have a good shot at winning a grant. These tax credits, however, are set to expire at the end of 2016.

"You can get a project done if you start thinking about it soon enough and have all your ducks in row, but timing is everything," says David Ausberger, who showed attendees the 5.94 kW solar panel array installed on the roof of his new shop at the field day he hosted on June 25. David, who farms near Jefferson, says he has missed out on opportunities to offset costs in the past and was ready to go this time, with a plan in place. "If you've got any kind of interest in renewable energy, the time to act is now."

Renewable Energy is Gooð Business

Since installing the system, David says the solar panels have produced all the energy used in his farm shop and grain bins. As a result, he only pays the monthly connection fee. "It's kind of a nice deal to know that it's only going to cost \$21.41 a month to run the power here." He

Steve McGrew (far right) poses with his brothers near their wind turbine. The control box attached to the McGrews' turbine.



Energy





A David Ausberger addresses guests at his field day.

A The solar panels on David's farm shop produce all the energy used by his shop and grain bins.

says solar just makes good sense: "I'm a businessman. If it's good for me, then I'm happy. The fact that it's good for the environment is a plus."

The in-floor heat in David's shop is similar to a geothermal system, the lighting is largely LED and fluorescent, and he quips that he has as much insulation as he could pack in. "I really built it to be energyconscious. Energy costs are only going to increase throughout my lifetime. By installing renewable energy technology, we turn that variable cost into a fixed cost."

Solar and Wind are Just the Beginning

Once Steve and David installed wind and solar on their farms, they began thinking about how they could convert more of their operations that were powered by other energy sources to electric. David says the opportunities are many, "if you put your thinking cap on."

For example, Steve recently installed an energy-efficient grain bin on his farm and no longer uses all the energy he produces. Seeking to power more of his operation from electricity, he purchased a 1991 Chevy S-10 that runs on 20 golf cart batteries. "It's only got a range of about 35 miles," he says, "but it's kind of fun."

Steve sees another opportunity to expand renewable technology to a less obvious facet of his farm: the nitrogen fertilizer used on his crops. Farm components directly powered by electric, gas and diesel are what many farmers first think of when considering how renewable energy technology could help them. But nitrogen fertilizer is actually one of the most heavily used energy sources on the farm. For the past 60 years, fertilizer has been made using the Haber-Bosch process – which converts atmospheric nitrogen to ammonia through a reaction with hydrogen. Natural gas, a fossil fuel, has usually supplied the hydrogen source. But electricity can also be used to supply the needed hydrogen by splitting a water molecule (a process called electrolysis). What this means is that nitrogen fertilizer can be produced by electricity – and therefore powered by renewable sources like wind or solar.

"Anhydrous ammonia is incredibly energyintensive," Steve says. He did a little math, and figures that seven wind turbines the size of his could produce enough electricity to make all the ammonia needed to fertilize all his family's acres. "That's kind of fun to think about," he says, adding that cover crops can contribute to the energy savings. By helping to build organic matter, the cover crop might help to increase Steve's crop yield for every pound of fertilizer he applies.

Net Metering is Crucial to Renewable Energy Success

N et metering allows people who produce their own energy to receive full retail credit for the excess energy they produce. Public utilities, such as Mid American and Alliant, are required to offer net metering to people who have 500-kW or smaller installations. Rural electric cooperatives (RECs), however, are only required to credit energy producers at the wholesale rate.

Randy Skeie, of EcoWisePower, says that makes a big difference: "Let's say a farmer produces 1,000 kilowatt-hours (kWhs) of energy during a month, but only uses 800 kWhs of that himself. He has net excess generation (NEG) of 200 kWhs."

With a rural electric cooperative, Randy explains that 200 kWh is typically credited at the wholesale rate of approximately \$0.03 per kWh, whereas the retail rate is around \$0.11 per kWh. That can add up to thousands of dollars a year. For a farm with large electricity needs at very specific times of the year – such as a farm with grain bins – receiving full retail credit is essential for paying off the investment in a reasonable timeframe.

Each REC makes its own decision about its policy on net metering, and Randy encourages members of RECs who support net metering to talk to their boards of directors: "You need to make your feelings known."

Global Campaign Sparks Local Conversation

Members debate soil concepts in response to U.N. declaration

The Food and Agriculture Organization of the United Nations (FAO) designated 2015 as the "International Year of Soils," in an effort to increase global awareness about the "profound importance" of soil and the role it plays in food security, ecosystems and the quality of human life. This spurred a conversation about soil between Practical Farmers members on our cover crops discussion list – precisely the sort of local engagement FAO hopes this designation will inspire.



Jon Bakehouse, Hastings

I was browsing through FAO's website. They declared 2015 "The Year of Soil" and list some key points, one of which is "soil is a non-renewable resource."

Am I alone in thinking this damages the validity of all of their declarations? Haven't Gabe Brown, Dave Brandt, Neil Dennis and a host of others already shown you can, in fact, regenerate and renew soil? Isn't that what PFI and its members have been driving toward for years? produced by plants and animals and mixed with the underlying parent material. Soils generally have 1 to 5 percent organic matter, and the rest is mineral material.

Francis Thicke

When you add organic materials like plant residues and manure to soils, about two-thirds of that organic material will decompose during the year it is added to the soil. When someone says they have added an inch of topsoil to their land by mob grazing (for example), that inch of material is organic material that will mostly decompose over the course of a year or two (a fraction will be turned into humus, which is resistant to decay), so it will not create an inch of new topsoil.

Jon Bakehouse

Even if a fraction of "manmade" humus results from an inch of organic material, that is still regeneration. Furthermore, if we take production agriculture out of the equation (or just erosion), I would argue that a part of soil's natural state is, in fact, renewal. On what would FAO base their claim that soils are non-renewable?

Jon Bakehouse



Brian Nowalk



Francis Thicke

Francis Thicke, Fairfield

Yes, soils can be regenerated, but not all soils can be indefinitely renewed if they are continually eroded. A lot depends on the parent material below the surface soil. If the parent material is bedrock, the limit is obvious.

Likewise, if the soil has a silt loam loess cap that was deposited after the last glaciation, you might find that once the silt loam cap is eroded away, you will be down to a dense, high clay subsoil that does not regenerate nearly as well as the silt loam parent material did – as we already see happening in some of southeast Iowa's soils.

Muriel Strand, Sacramento, CA

I suppose that weathered rock and rock dust form so slowly as to be quasi-nonrenewable. Biological decay and composting is far faster. But is there some minimum rock or mineral content for compost's effectiveness in gardens?

Soils normally form from the parent mineral material beneath the topsoil, as organic matter is

Why an "International Year of Soils"?

The United Nations has declared 2015 to be the International Year of Soils. Why spotlight soils for an entire year? The soil, while recognized as a vital resource by many, is often undervalued on a global scale. Yet this natural resource plays a critical role in food security, climate adaptability, ecosystem functioning, poverty levels and human life. According to the FAO, 25 percent of agricultural soil is highly degraded. David Montgomery, author of "Dirt: The Erosion of Civilizations," estimates conventional agriculture practices are resulting in erosion rates that are one to two orders of magnitude greater than soil regeneration rates.

What does this mean? It means we are losing soil much faster than we can replace it. But there is hope: Even though a quarter of all agricultural land is highly degraded, 10 percent is improving due to good management. PFI farmers and other responsible stewards of the land show degraded soils do not have to be an inevitable result of agriculture. The International Year of Soils is an effort to showcase soil management success stories – but also to call attention to the fact that soil is a fragile and finite resource.

For the past several months, I have been working with the FAO to create a "Soil Stories" Blog. It is a platform for farmers, scientists and citizens to share their enthusiasm and respect for soil. We have received posts from all over the world, from a soil microbiologist who works in the Arctic, to the lead scientist for NASA's soil moisture satellite. Practical Farmers' own John Gilbert will be featured in an upcoming post! I strongly encourage each of you to check out the blog – and, even better, to contribute your own soil story. http://www.fao.org/soils-2015/blog/en/

Catherine DeLong delong.catherine@gmail.com PFI Member and Founder of International Year of Soils Blog

Brian Nowak-Thompson, Mt. Vernon

It seems you are trying to use "regeneration" and "renewal" interchangeably, which is confusing because it assumes that soil scientists and farmers have the same perspective about soils. I think Francis has the right idea of soil being nonrenewable: Once the mineral materials that are soil-sized are gone, you aren't going to make enough to replace it in our lifetime. The organic stuff you can conjure on a yearly basis, and while it plays an important function, it can't supply everything to a plant.

Drake Larsen, Aylmer, Ontario

Gabe [Brown] and David [Brandt] increase their soil organic matter; this is awesome and desperately needed in most ag soils. But organic matter is only one component. Sand, silt and clay are the primary others, along with things like iron-oxide, carbonate, gypsum, etc. These are born of the parent material as Francis described.

Humans haven't yet harnessed the art of building soil, in large part because of the long time scales. At best, it's barely measurable in a human generation. Consider a typical Iowa soil: 5 tons per acre is about the thickness of a dime, and that soil would take about 40 years to create under ideal conditions. And it takes longer in most other climates.

Gabe and others also work to drive biological activity deeper into the soil profile. This is also a central tenet of Keyline Design. When folks talk about measurable increases in topsoil in short time spans, this is what they are doing. They aren't "adding to the top" so much as "adding to the bottom" by facilitating biological activity into the B horizon (and by definition, transforming it into A horizon). Maybe it's "new topsoil," but it's not "young soil" in the pedologic sense; in fact it's the opposite, it's bringing life back into older soils.

FAO may be splitting hairs, because primary succession and soil-building are happening thanks to ecology. But I also just heard that new oil is likely being produced in the earth's core every day. Neither is happening at rates anywhere near the rate of consumption and loss. And truth be known, we probably surpassed peak soil long before peak oil was even a topic of conversation.

Jon Bakehouse

Thanks to all who have contributed to my understanding of soil. How about this: "Humans are eroding soil faster than it is being renewed."

This puts the onus directly on us. We can then decide whether to prevent erosion, recharge our existing soil or, ideally, both. The danger is, of course, to shrug our shoulders and do nothing, which saying "soils are a nonrenewable resource" leaves a lot of room for; it is a passive phrase fraught with misunderstanding and, most damagingly, no real call to action.

Drake Larsen

The first step will be truth in talking about our soils. FAO seems more interested in truth than IDALS. I lament that "soil as non-renewable" is far closer to the truth than Iowa's current modus operandi that 5 tons lost per year is tolerable. Moreover, considering our state's average annual soil loss, we have only achieved this "tolerable" level once in the last 30 years!

Millions of Iowa acres lose 10-plus tons per acre or more. In 2014, the worst Iowa township, Silver Creek Township in Pottawatamie County, lost an average of over 50 tons per acre!! (Iowa daily erosion project data); 50 tons, just imagine that. Under ideal conditions, that's 200 years worth of prairie soil creation. We hear all too often from our elected ag leaders that "soil erosion has decreased 28 percent since 1982," which is true only if the data is cherry-picked to capture the 1985 CRP program. This same Natural Resources Inventory data shows that Iowa erosion has been increasing since the mid-1990s. So we might not need the hyperbole of "nonrenewable," but certainly we need

something new to kick-start the efforts to save our soils.

Francis Thicke

Yes, we are eroding soil faster, much faster, than it is being renewed. Under a wide range of conditions, research has found that soils regenerate at a rate of about 0.5 ton per acre per year. The average erosion rate for corn and soybean production in the Midwest is 5.7 tons per acre per year (water and wind erosion). So, we are eroding soil 10 times faster than we are building it. That doesn't account for the more extreme erosion of recent years due to the increasing severity of rainfall events. In during the flood of 2008, 10 percent of Iowa's cropland lost 20 tons per acre in just that one event - and we have had a number of severe rainfallerosion events since.

However, I believe we can build soil faster than 0.5 ton per acre with intensive-grazing systems (it would be interesting to see some longterm research on that). As Drake pointed out, that builds soil to deeper depths, just as the prairie plant-bison relationship contributed to building the deep, rich soils of the prairie.

Steve McGrew, Emerson

I understand that this only counts sheet erosion. The gulley erosion is in addition.

Jeff Klinge, Farmersburg

Most studies are in regard to soil loss. Eroded soil that builds up above a buffer (for example) is not considered lost, but is still very difficult and expensive to deal with.

This discussion occurred on Practical Farmers' cover crops email discussion list. We have eight members-only email discussion groups where other excellent conversations take place, including: general; horticulture; livestock; policy; landowners; food and garden; and solar. If you are a member and would like to join the conversation, email Erica Andorf at erica@practicalfarmers.org. If you are not a member, join today to participate in our discussion lists!



Jeff Klinge



Drake Larsen



Steve McGrew

"Soils can be regenerated, but not all soils can be indefinitely renewed if they are continually eroded."

– FRANCIS THICKE

30 Years Strong: Q&A with Larry Kallem on PFI's Past and Future

by Tamsyn Jones

2015 marks 30 years since Dick and Sharon Thompson and Larry Kallem founded Practical Farmers of Iowa. It is a special milestone in an individual's life – a sign of maturity, and a time for reflecting on events past and the journey yet to take. This "birthday" is no less special for PFI, as we celebrate 30 years of farmer-led work to strengthen farms and communities, and the spirit of inquiry and openness that defines our members today. To mark the occasion, Larry Kallem recalls our beginnings and muses on the challenges yet to come.

How did you know Dick Thompson?

At the time, I worked as the director for education for the Iowa Institute for Cooperatives. A part of my job was to notice ideas and trends in agriculture, and bring them to the attention of farmers and their businesses – the cooperatives of the state. I used to call them "windmill experiences," because as a kid, I liked to climb to the top of the windmill to look out over the countryside – which horrified my parents.

I'd been reading about agricultural production techniques that were lower-cost and more ecologically sound than the practices we had been seeing around us for several decades. In the early fall of 1984, I noticed an announcement for a field day on Dick and Sharon's farm that seemed to offer some insight on this. So I went there for my work and rode the flat rack around the farm.

What was it about Dick and Sharon's field day that impressed you and made you think their approach was worth promoting?

I was very impressed by the scientific methods Dick used in conducting his trials, and by the lack of any product promotion.

Agriculture at that time was undergoing some very painful adjustments. What we were doing wasn't working anymore, and farmers had a great need for ideas to survive. I thought what Dick was doing was one of them: that is to say, what we now call sustainable, low-input, practical kinds of approaches to farming that aren't based on testimonials or sales brochures.

As I saw it, he was unaffected by advertising, or by what his neighbors were doing. Rather, he adopted production practices and combinations of enterprises based on trying ideas on his own farm using scientifically sound methods and economic analysis.

Soon after this, you, Dick and Sharon founded Practical Farmers. How did that come about?

The results of Dick's trials were very encouraging, and I believed would surprise and interest other people. I asked Dick and a couple of other people to do a panel discussion that November,



during the educational part of the Iowa Institute for Cooperatives' annual meeting.

The discussion was very well received, and later that day, I asked if he'd consider forming a new organization with me based on the philosophy and practices that he and Sharon spoke about. He said he was going to be on the program for a biological farming conference at Iowa State University the next day, and would ask the audience if they would be interested in such an organization. I couldn't attend myself, but Dick told me afterwards that a whole lot of hands went up.

That fascinates me - that you proposed the idea the day before Dick was to speak at that conference. It seems almost like the stars were aligned.

That's an important thing to keep in mind: Timing is everything. We were at the start of a farm crisis. Farmers had to cut expenses to stay in business, so this was a teachable moment – and we had something to tell them that would help them survive, not just for the next six months, but over the long-term.

In 1998, PFI had about 500 members; now we're close to 3,000 – and our members and focus are much more diverse. Was this evolution something you ever anticipated?

Sure. It's controlled evolution. Keep in mind the base of where we started, and what fits within the parameters that were set: a focus on practical approaches, on-farm research, staying away from politics. If you have the right parameters, they will serve you well for the long-term.

It sounds like on-farm replicated research in those early days was much more forward-thinking than it would seem to us now, and that Dick, Sharon and PFI were ahead of the curve.

That's very true. We do what we do for a reason in PFI – and we know why we do it. That's one of the reasons Dick and Sharon impressed me when I went to their field days. I saw the way he did things, how he analyzed. He placed emphasis on the lowest input and machinery costs consistent with maximizing net profit and building the productivity of the land. It's a long-range, holistic way of thinking that recognizes the relationships among all the things a person does on the farm, and their impact.

PFI was born amid the Farm Crisis and its economic fall-out – but from the start you, Dick and Sharon were also concerned with land stewardship and the health of people. What was going on at the time that made you worry about those things?

Conservation, of course, was not a new thing. That goes back to the Dust Bowl days – and we learned a lot from it, but we forgot those lessons at our peril. By [the mid-1980s] we were worried in the ag community about how we were doing things. We had the suspicion we weren't being good to ourselves, and there were concerns about the effects of all the chemicals. We didn't necessarily know from a scientific background what was happening, but we had suspicions – and we had people's stories.

My own father-in-law died of bladder cancer, and he always expected it was the chemicals he used. He would fill his tank of 2,4-D with water from the well, and it would sometimes spill over and run on the ground above where his well was – things of this sort, which, looking back years later, he knew weren't good. So there was concern about what we were doing to the land and to ourselves.

Where do you see Practical Farmers' role 30 years from now? Where do you want to see us go?

One of the key things that seems almost part of the DNA of PFI is an entrepreneurial spirit, where people are intelligently and creatively looking to better themselves and their community. A kind of personal initiative is important. That has to be a basic value for us to do well in the future, and as long as it's part of PFI, I think we'll be relevant.

What are some of the challenges you see on the horizon that farmers and PFI will have to face?

Climate change is a big one. I think that how we position ourselves as individual farm operations is important, and it worries me

From Idea to Reality: Gaining Members and Support by Larry Kallem

We wanted to build our core around people who shared common values and goals. I suggested we set up a series of meetings around the state for the early summer of 1985, to introduce the idea to farmers and to sign up some members. Dick and Sharon had a friend in Boone, Mike Herman, who had a motor home we used to ride together to the meetings. Mike also became a member of the steering committee. We discussed topics to include on the program: on-farm research, machinery, production costs and farming profits. The tour was conducted, and we signed up about 300 members.

It was also important to me that other farm organizations knew who we were and what we were doing, so we didn't scare or anger them. We set up meetings with these farm groups so they could meet some of our people, and know that their own people might like to get involved in some of the things we were doing – and that we could work together, which we did. We've gotten along well. **FI** has the only meeting, for the most part, where you'll see young people – kids, instead of all grey hair. And they're well educated people who have wonderful value systems. How could you ask for a better group of people? That is the future. **99**

that not enough farmers have figured out yet how they're being affected. It's not a political consideration in my mind at all. We don't have to use the words "climate change."

What do we do about it? What are some of the things we can do to moderate it and ease it? Well, the things we're doing – and have been doing since the very beginning: learning more all the time, fine-tuning things, thinking of what we can add to our mix of enterprises and research. It's the implementation and methodology that PFI is working on.

Practical Farmers is unique in its ability to draw together such a diverse group of farmers and perspectives – while working toward our vision and guiding principles. Do you see there being a point where it will be hard to sustain that sense of openness? Could we get too big?

That's a really good question, and we want to keep asking ourselves that all the time. The board of directors needs to keep asking itself that question and evaluating how we're positioning ourselves in that regard.

We need to keep a balance of people who have somewhat different views – and it's bigger than political views. I mean people who are broad, long-range thinkers. As long as we have a board of directors with that balance in it, we'll be fine. Also, I think there's a growing hunger in society for cooperation, for doing things that benefit us all, and a growing disgust for extreme views and actions. I think that "compromise" and "cooperation" will become virtues again.

I get the board packets every meeting – and I love that. I like to know what's going on, and I seldom see the need to respond. I'm pleased to no end with how Practical Farmers is being managed.

Looking back over 30 years, do you have any particular stand-out memories, or anything you're especially proud of that PFI has achieved?

I don't recall any specific experience. It's just been woven with all kinds of pleasant observations about what's going on. PFI has the only farm meeting, for the most part, where you'll see young people – kids, instead of all grey hair. And they're well educated people who have wonderful value systems. How could you ask for a better group of people? That is the future.

I find a sense of reward every time I see these people and talk to them, and when I read what's going on in the organization, its progress, financial stability and growth. I couldn't ask for something better to leave behind in my dust. It's so gratifying.

Environmental Quality Incentives Program: Sharing the Costs of Conservation Practices

by Steve Carlson

The Environmental Quality Incentives Program (EQIP) is a competitive program through the Natural Resources Conservation Service (NRCS) that provides financial and technical assistance to farmers through contracts intended to help them plan and implement a wide range of conservation practices, such as improving soil, water, plant, animal, air and other resources on agricultural land.

When Sara Hanson moved to her family's century farm in Wesley in 2008, she had the experience, land and vision to start her own organic farm business. But wanting to convert a conventional row crop farm into a certified organic vegetable farm isn't easy – or cheap.

A trip to her Natural Resources Conservation Service office helped. Sara met with a field agent to discuss her needs and brainstorm options. "They have a really knowledgeable staff," she says. "They were very helpful, excited and interested in what I wanted to do." With the help of NRCS, Sara evaluated her options, developed a conservation plan (required for any NRCS funding) and completed an application for the Organic Initiative program within EQIP. The conservation plan decreed that Sara would transition three conventional field crop acres to organic by planting alfalfa with a 30-foot prairie buffer on three sides. After her organic transition plan was in place, Sara was able to cost-share help through EQIP for expenses such as the cost of alfalfa seed and a grain drill rental.

In addition to helping with her organic transition, Sara was able to use the Seasonal High Tunnel Initiative System for Crops to help cost-share the expense of installing a high tunnel. Unfortunately, the high tunnel built with these funds suffered severe wind damage in 2014 and will be replaced at the end of this summer. Fortunately, Sara had not yet reached the maximum EQIP funding limit, and is eligible for additional cost-share funds to install the replacement. "Without EQIP, I would not have had the funds to move forward with the high tunnels," Sara says. "I had hoped to add one to my operation at some point, and the Environmental Quality Incentives Program helped me do it much sooner."

Learn About High Tunnels and EQIP at Two September Events

For those interested in learning more about high tunnel construction, Sara will host a two-day workshop Sept. 3-4 at her farm, Prairie Sky Farm, near Wesley.The hands-on event runs from 8 a.m. to 6 p.m. and will be led by Adam Montri, hoophouse outreach specialist at Michigan State University. Attendees will learn about the process of designing and building a high tunnel, and then help erect a 72-by-30-foot high tunnel, from post-pounding to finishing touches. The event is free for PFI members, or \$40 for non-members.

Sara will also host a free field day and potluck on Sept. 3, from 6-8:30 p.m., after first-day workshop activities come to a close. The field day – "High Tunnel Drop-In Build and Farm Tour" – will provide an overview of the high tunnel planning and building process. Both the field day and potuck are open to anyone, and are good opportunities to learn more about high





tunnels and how to secure EQIP funding for their construction.

Those curious to learn more about EQIP will have another chance at a field day hosted by farmer Wendy Johnson, on Sept. 12, near Charles City. Wendy operates a diversified farm that includes corn, soybeans, hay, sheep, hogs and chickens. She has transitioned 27 acres into organic row crop production, and will discuss the Conservation Action Plan (CAP) she developed for her farm, with help from NRCS. EQIP funding covered the cost of producing the conservation plan, but Wendy fears she may have missed out on more funding because of recent changes to the Organic Initiative program and miscommunication with NRCS staff.

"I recommend that farmers start the process early," Wendy says, "and be in really good communication with your NRCS district conservationist."

Applications for EQIP funding are accepted anytime, though there are periodic batching dates when the applications on file are ranked and selected (usually in October). To apply for EQIP funding, stop by your county NRCS office, or call to have NRCS staff visit your farm and evaluate your conservation options. NRCS staff will determine your eligibility, walk you through the application process and help develop an EQIP plan of operations.

"The main thing," says Paul Miller, district conservationist in Polk County, "is just to get the field agent out to the farm to discuss the best options for that particular land, and to get a plan drawn up."

Book Review / PFI News

Review of "The Last Farmer: An American Memoir"

This book is a love story for a farm and the farmer who spent his life working that farm – and then let it go. The Last Farmer is written by Howard Kohn, grandson of a farm couple who first worked 120 acres halfway up the Lake Huron coast of Michigan. Fred Kohn, the author's father, grew up on the farm and then labored hard on it for 50-plus years.

red Kohn reminds me of many PFI members. His farm is highly diverse, including corn and navy bean enterprises. He has a powerful work ethic (rarely relaxing) and is skeptical of government influence (including subsidies). He was not interested in acquiring more land when he could. Howard reports that "if my father had been at all predatory, grabbing land when neighbors died, he might have had a fighting chance, but, on his 120 acres, he was in a state of having a total disregard for bettering himself, so it seemed to me. He represented the great romanticized myth of the American farmer, trying to survive on his terms no matter what."

Fred and his wife, Clara, had six children, none of whom chose to farm. Howard, the author, was the black sheep, leaving home as soon as he could, turning his back on "all that breathed of dirt and sweat" for a life as a roaming reporter. Later, however, his parents and the farm are a strong pull on him.

As his parents age, Howard thinks often about the farm's future and even considers coming back to work the land. But he realizes his farming dreams were "childlike impulses at a time when adult decisions had to be made."

Then, suddenly, as age begins to take its physical toll, Fred Kohn announces he is going to sell the farm, keeping just the house and surrounding gardens and buildings. Fred makes a short list of prospective buyers, declaring he's "not going to sell it to somebody who can't take care of the acres he's already got, somebody who's out freezing his buttons off trying to combine corn a week before Christmas." Fred closes the deal with two neighbors, fellow parishioners, lifelong farmers and of German pioneer stock – men compatible with Fred.



by Teresa Opheim

"I thought he would hang on until the bitter end," a neighbor tells Howard. Later, Fred reports he is glad to be done with farming; he didn't like what farming has become anyway. The only real satisfaction in being a farmer comes from the magical-seeming power you have to define yourself and your work, Howard reports, and Fred kept "reading that farmers aren't supposed to be farmers anymore – they're supposed to be businessmen. If I'd wanted to be a businessman, I would have gotten a job with [nearby] Dow Chemical Company."

The story ends as Fred – the farmer who rarely left the farm he worked – became the grandfather who traveled widely visiting family. Howard does a lot of pondering about his father's legacy, and decides that legacy is not about land. "Character is all that any of us have at the end, the sole property that is ours My father loved his farm, but he understood better than I the ironies implicit in passing a farm in your own image. The land mocks the farmer by outlasting him and outlasting his family, no matter the number of successive generations."

The one thing of permanence that a farmer can bequeath is a life of respect and virtue, says Howard. "My father had to work to understand this. It was not given. It was an achievement, like any work."

(Thank you to PFI member Jerry DePew for telling me I needed to read this book, which was originally published in 1988 but is still available.)

Digest Option on Discussion Lists

Practical Farmers has eight email discussion groups (see the bottom of pg. 19 for the list) where members can ask questions and share their knowledge on a wide range of topics. Some people are deterred, however, by the prospect of too much email.

If you're one of those people, there is a solution! Sign up for the digest option, and you'll get discussion without the clutter. Instead of getting an email for each reply in a thread, you'll receive just one email a day containing all the messages exchanged that day for the lists you have signed up for.

To sign up for the digest feature – or to join any of the email discussion lists we offer – email info@practicalfarmers.org.

Make Sure "Practical News" isn't in Spam!

Unless you've opted out of receiving "Practical News," PFI's weekly email newsletter, you should be getting it every Friday afternoon in your inbox. If you're not, your email program might be flagging it as spam and sending it straight to your spam folder.

Don't miss out on learning about upcoming events, new blog posts, video features, members in the news and more. Make sure to mark Practical Farmers of Iowa as a safe sender! For questions about "Practical News," contact Erica Andorf at erica@practicalfarmers.org.

Apply to the Savings Incentive Program

Applications are now open for the next Savings Incentive Program (SIP) class! The two-year program helps beginning and aspiring farmers be successful with their farm start-ups by helping enrollees draft a business plan, save money, learn from experienced farm mentors – and more! **Applications will be accepted until October 9, 2015.** Those enrolled will start in January, and be part of the SIP Class of 2018. Get an application at practicalfarmers.org, or by calling (515) 232-5661.

Pros and Pitfalls of Small Grains in Iowa

Wade Dooley weighs in on why he grows them, and the challenges

by Nick Ohde

Wade Dooley, of Glenwood Century Farm near Albion, has thought a lot about the past, present and future of small grains in Iowa. Wade grows small grains – along with row crops, livestock, watermelon and winter squash, among other crops. During our conversation, he shared some of his thoughts on small grains production in Iowa – as well as advice for younger farmers considering them.

Why do you want to grow small grains?

Small grains benefit my operation by spreading my workload for planting and harvest; giving me income in the off season; cutting my crop expenses, as small grains don't cost as much to grow; opening a wider window to allow better use of cover crops for soil building; and better use of the land – 10 months with something growing, rather than five months with corn.

2. What are some of the issues you run into when trying to market small grains?

If I wanted to sell oats, whom do I call? If I want to sell corn, on the other hand, I have three different phone numbers in my phone right now of people within 10 miles who I can call, and I would have corn sold five minutes from now. But with oats, I'd have to call the end user of my product – Grain Millers or General Mills – to get prices. There's nothing in between.

There are feed mills in the area, and the feed mills will take some things, but their capacity is much smaller. They're not going to take six semi-loads of oats. You're not going to pull out a hundred acres of oats and expect to be able to get rid of it all in 15 minutes. Everybody has a certain capacity, and many of the animal feed mills don't use a lot of small grains unless they're specialized – and then they've already got a contract, because they know



Wade Dooley (left) leads people on a tour of his farm – including his small grains plot – during a field day he hosted last year.

their demand, which is generally pretty stable. So they lock in their supply.

3. You mainly grow small grains for cover crop seed. What are some things to consider?

When you buy it uncleaned, or "bin run," that opens the door to several things. One, you have to control the weed seeds. Whoever's growing it, you want to know what his field looks like before he combines it. If there are a lot of weeds, you're buying his weeds. That's bad. Second, you want to know how much trash is in it. How clean did he get the grain sample in the combine itself? If you get too many stems and pieces in there, you're buying a lot of fluff and not a lot of seed, and you can only run it through so many pieces of equipment. I've gotten dirty seed before that I tried to run through my grain drill, and it plugged continuously. If you're buying or selling dirty seed, just know that it needs to be broadcast, not drilled or flown on.

4. a

To increase your grain quality and test weight so they met the standard to sell to General Mills or Grain Millers, what would you have to do?

I'd have to either use resistant oat varieties or fungicides at the right time to prevent vomitoxin. I'd rather rely on cultural practices that would let me avoid needing to use fungicides. So, for example, I wouldn't follow corn with oats, because *Fusarium*, which causes vomitoxin, is shared between the two.

I'd make sure my fertility is up to snuff for the oats. Rather than putting them on the worst ground I have, I'd treat them like I do my corn and soybeans: I'd make sure the seed is accurately placed, the fertilizer is at the rate it should be, and the soil has been treated the way it should be. Treat small grains like a true cash crop, rather than a "catch" crop.

I would also have to have a high-capacity seed cleaner. My seed cleaners have the capacity to do 20 to 40 bushels per hour. At that rate, it would take a whole day to clean

Small Grains

The ability to diversify your operation is key. You look at the old boys who made small grains work for 60 years, and they didn't grow one crop.The more diversified your operation, the more able you are to ride through the rough trends by subsidizing your operation one place or another.



A stand of oats begins to mature on Margaret Smith and Doug Alert's farm.

a semi-load of oats. I would need something with the capacity to do 120 bushels an hour or better. All these things cost.

5.

So when Iowa produced a lot of oats, how did farmers used to clean their grain?

You didn't have semis running oats 60 or 70 years ago. You'd bring your oats into the granary and spend all winter cleaning them. My great-uncle did that all his life. Every winter, he would clean all his oats, and then he'd clean all his soybeans by running them through a little clipper mill. That's what everybody did – but that was the 1950s and '60s. You were actually farming profitably on 80 acres; 160 acres was a big farm. If you got much bigger, you weren't probably doing oats. Again, you needed to sit there with that fanning mill with a 20 or 40 bushel an hour capacity. It was that scale then.

6. What has changed?

There's a huge knowledge gap now. My thought process isn't even at a 10-acre scale, let alone 20 acres. And 20 acres of oats is a lot of oats you have to store somewhere, which is the other problem. Everybody has bins set up for corn and beans. Well, the slats in a corn bin are too big for oats. The only bin I have is a multipurpose bin from the early '80s. We're still talking 30-year-old equipment.

7. Why do you grow small grains, then, if it is such a challenge?

The ability to diversify an operation is key. You look at the old boys who made small grains work for 60 years, and they didn't grow one crop. In general, they had various enterprises that all flowed one into another. Any one could have been its own operation, never tied into anything else, but tying enterprises together is how you ride out hard times. Right now, for example, it's a bad time to be a row crop farmer, but a great time to be a cattleman.

The more diversified your operation, the more able you are to ride through rough trends by subsidizing your operation one place or another. I want to spread out my income streams. It's like an investment strategy with stocks: Diversify your portfolio for long-term, not immediate, success. That's what I'm trying to do.

8. Do you have advice for young farmers on convincing bankers to fund alternative crops?

The more information you have, the more power you have with the banker. If you have your stuff together, the banker's going to figure out really fast that you know what you're talking about. And if you know what you're talking about, the banker is more willing to accept your numbers. The banker just says, 'Well, your numbers are more accurate than mine are, so we'll just run with those.'

What's better, though, is if you have multiple sets of numbers – case studies, basically, so they can average the numbers. That's what the bank numbers are: an average of the numbers they have available. They have a massive amount of data on corn and soybeans in central Iowa, for example, so they know what the average should be. They also have allowable parameters, and if you're below a certain number you're a really high risk.

It's the small grains that haven't been done for so long. Banks don't have the averages anymore. If you pull the numbers from Kansas and Nebraska, they're not going to accept those, because it's a completely different climate – not just in weather, but because the infrastructure is there. The marketing is there. We don't have either in Iowa. ■

New Members & Calendar

Welcome, New Members!

District 1-Northwest

- Iowa Lakes Community College, Bill Lapczenski, Emmetsburg
- Organic Crop Improvement Association-Chapter 1 of Iowa, Wilma Miles, Arthur
- Sydney Schwanz, Vail
- Rachel and Pete Thompson, Linn Grove
- Dennis Vande Brake, Maurice

District 2-North Central

- Max Malloy, Boone
- Clay and Amy Miller, Ames

District 3-Northeast

- Clayton County SWCD, Gina Parker, Elkader
- Ashley Sherrets, Buchanan County Extension, Independence
- Karl Steichen, Dubuque
- Giles Teslow, Decorah

District 4–Southwest

- Ash Bruxvoort, Altoona
- Doug Davenport, Creston

- Catherine Engstrom, Johnston
- Nancy and Michael Forrest, Winterset
- James Galloway, Creston
- Stephen Hitt, Clarinda
- Dottie Johnson, Milo
- Barry Mateer, Osceola
- Steve and Carmen Maxwell, Saint Charles
- Mike Schmitt, West Des Moines
- Kraig and Jennifer Van Kooten, Harvey
- Mikael Weaver, Dallas Center

District 5-Southeast

- Beautiful Land Products, Michael Thompson, West Branch
- John Cox, Iowa City
- Louis Dondanville, Fairfield
- Brent and Deborah Donohoe, West Branch
- Rick and Willa Drake, Muscatine
- Steve Gunderson, Fairfield
- Daniel Harvey, Fairfield

- Becky Jaeger, Fairfield
- Donald Lewis, Washington
- Bill and Julie Ohde, Columbus Junction

District 6–Out of State

- Daniel Badtke, Viroqua, WI
- Dave Campbell, Maple Park, IL
- Steve Einhaus, San Rafael, CA
- Corey Everts, Cashton, WI
- Darrell and Chris Mohr, Omaha, NE
- Caroline van Schaik, La Crescent, MN
- Cassi Wattenburger, Kennewick, WA

UPCOMING EVENTS ~ AUGUST | SEPTEMBER | OCTOBER

August – October– PFI Field Days | Throughout Iowa

Summer is progressing, but field day season isn't over yet! Practical Farmers of lowa has a slew of field days still to come. Learn about small grains; propagating native trees and shrubs; cover crop mixes; fruit and vegetable production; contract and pasture-based livestock production; and more! Visit practicalfarmers.org, or call (515) 232-5661 to request a field day guide.

Various Dates – "Map of My Kingdom" Play Performances

Commissioned by PFI and written by playwright Mary Swander, the play explores stories of how farmers and landowners have approached their land transitions. For more, visit www.maryswander.com

Aug. 15 – Minnesota Garlic Festival | Ashby, MN

This fun-filled, family-friendly – and fragrant! – festival features an array of foods, chefs, music, artisans, games – and lots of GARLIC – all in support of a healthy environment, sustainable farms and vital rural communities in Minnesota. For more, visit: www.sfa-mn.org/garlicfest

Aug. 16 – Multi-Species Livestock Farming Field Day | Land Stewardship Project – Farm Beginnings Program | Mondovi, WI

Land Stewardship Project's Farm Beginnings Program works to get more successful farmers on the land and organize for a system in which family farmers can flourish. Join Stephanie and Andy Schneider at Together Farms for this livestock field day. For more, contact Dori Eder at (612) 578-4497 or dori@ landstewardshipproject.org

Aug. 19 – FarmStarts – Beginning Farmers Explore Production, Business and Marketing | Bloomfield, IA

This program is designed to help beginning farmers learn more about organic dairy and organic grain production. Open to conventional and organic producers, workshops cover grain marketing, farm structure and budgeting, fertility, weed control, certification rules, and more. For more, visit: www.nfo.org/FarmStarts/index.html

Aug. 20 – Food Waste Compost Training | Cedar Falls, IA

Join the Iowa Waste Reduction Center and learn the fundamentals and key variables of the composting process, as well as how to use food waste in your operations. For more visit: http://iwrc.uni.edu/compost

Aug. 28-30 – Seeð Savers Exchange Summer Seeð Saving School | Decorah, IA This workshop will teach about the seed industry and the tradition of sharing seed. Learn technical skills like hand-pollination and seed processing, as well as the biological and ecological concepts of seed saving. For more, visit: http://blog.seedsavers.org/events/summer-seed-saving-school

Sept. 11-13 – Wisconsin Wool and Sheep Festival | Jefferson, WI

This is THE festival in the Midwest for all things sheep-and wool-related. For more, visit: www.wisconsinsheepandwoolfestival.com

Sept. 16-18 – 2015 Grassfed Exchange Conference | Mt. Pleasant, MI

Join your grass-fed peers to learn about regenerative grassland agriculture, and exchange information on grass-fed genetics and production. The conference this year features one day of pasture walk tours and two days of presentations .For more, visit: www.grassfedexchange.com/conference

Sept. 17-19– Aquaponics Master Class | Montello, WI

Organized by Nelson and Pade, Inc., this is a comprehensive course covering all aspects of aquaponics and controlled environment agriculture. For more, visit: http://aquaponics.com/calendar/?i=69

Sept. 19– Fall Farm Cruise | Nevada, Maxwell and Elkhart, IA

Enjoy a self-guided tour of four diverse farms. See pasture-raised livestock, learn about fruit and vegetable production; enjoy hay rack rides through an orchard; and learn more about local food systems. Several farms will offer crafts and food items, including pick-your-own apples. Enjoy a demonstration of wool spinning by Marilyn Andersen of Two Cedars Weaving. For more, visit: www.farmcruise.com

Oct. 4– Farm Crawl 2015 | PFI farms in the Knoxville and Lacona, IA areas

At least seven independent family farms, in a small pocket of south-central lowa, welcome you to tour their farms. Enjoy the lowa countryside as you drive yourself from farm to farm. Meet the farmers, see their operations, visit the animals, sample the goodies, listen to live music, learn something new about agriculture and enjoy delicious food. For more, visit: www.farmcrawl.com

For more events, visit practicalfarmers.org

Grow your farm with Practical Farmers. Join today!

ual membership is a:	
New membership	My interest in joining PFI is primarily as a: Tesearc
Renewal	Farmer/grower
ing at the level of: research	Non-farmer – (You will have the opportunity
] Student – \$20] Individual – \$50 friend	to expand upon this when you receive your membership information form.)
Individual – \$50	How did you hear about Practical Farmers of Iowa?
Farm or Household – \$60	
Organization (including businesses, agencies, not-for-profit groups – \$110	mendship
Lifetime Member—\$1,000 Wers	
\$1,000 \$500 \$250 \$100 \$50 \$ JOIN OUR GIFT OF THE MONTH CLUB The Gift of the Month Club is an easy way to support Practical Farmers of Iowa! Send in your pledge with your credit card information, and we will automatically deduct your donation the first of each month. YES! I would like to give per month to PFI, to be automatically charged to my credit card the first of the month. (\$10 per month minimum) Practical Farmers of Iowa is a 501(c) 3 organization. Your gift is tax deductible to the extent allowed by law.	
YES! I would like to give per month to PFI, to be autoper month minimum) Practical Farmers of Iowa is a 501(c) 3 organization. Your g	itical Farmers of Iowa! Send in your pledge with your credit card from the first of each month. In provide the steed to the first of the month. (\$10 gift is tax deductible to the extent allowed by law.
Information, and we will automatically deduct your donati YES! I would like to give per month to PFI, to be auto per month minimum) Practical Farmers of Iowa is a 501(c) 3 organization. Your g Individual, Farm or Organization Name*:	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 pift is tax deductible to the extent allowed by law. Thank you!
Individual, Farm or Organization Name*:	trical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 gift is tax deductible to the extent allowed by law. Thank you! friendship
Individual, Farm or Organization Name*: Mailing Address:	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 pift is tax deductible to the extent allowed by law. Thank you! friendship research
Individual, Farm or Organization Name*: Mailing Address: City, State, ZIP:	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 gift is tax deductible to the extent allowed by law. Thank you! friendship research
Individual, Farm or Organization Name*: Mailing Address: Street: City, State, ZIP: Primary Phone (with area code):	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 gift is tax deductible to the extent allowed by law. Thank you! Opportunity friendship research
Individual, Farm or Organization Name*: Mailing Address: City, State, ZIP: Primary Phone (with area code):	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 gift is tax deductible to the extent allowed by law. Thank you! friendship research
Individual, Farm or Organization Name*: Mailing Address: City, State, ZIP: City, State, ZIP: Mailen Address (with area code): City Phone (with area code): Email:	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 gift is tax deductible to the extent allowed by law. Thank you! friendship research answers
Individual, Farm or Organization Name*: Street: City, State, ZIP: City, State, Phone (with area code): Primary Phone (with area code): Mailing Address Address: Street: City, State, ZIP: Primary Phone (with area code): Alternate Phone (with area code): Email: Mailing Address Address: City, State, ZIP: Alternate Phone (with area code): Email: Mailing Address	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 pift is tax deductible to the extent allowed by law. Thank you! Thank you! Stewardship ames of persons included. For Organization membership,
Individual, Farm or Organization Name*: Street: City, State, ZIP: Primary Phone (with area code): Alternate Phone (with area code): Email: * For Farm/Household membership, please list na please list one or two contact persons.	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 gift is tax deductible to the extent allowed by law. Thank you! Thank you! These arch answers ames of persons included. For Organization membership, NETS Stewardship
Information, and we will automatically deduct your donati YES! I would like to give per month to PFI, to be autoper month minimum) Practical Farmers of Iowa is a 501(c) 3 organization. Your g Individual, Farm or Organization Name*: Mailing Address: Street:	tical Farmers of Iowa! Send in your pledge with your credit card ion the first of each month. omatically charged to my credit card the first of the month. (\$10 pift is tax deductible to the extent allowed by law. Thank you! Thank you! Interned ship research Interned ship ames of persons included. For Organization membership, Mers Stewardship donation

Join PFI





Practical Farmers of Iowa

600 Fifth Street, Suite 100 Ames, IA 50010-6071



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



Healthy Food

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

Vibrant Communities

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

Visit Us on Social Media



- www.facebook.com/practicalfarmers
- twitter.com/practicalfarmer



www.linkedin.com/company/practicalfarmers-of-iowa