

If we look back in recent history, lowa's rural landscape was one with more people: families and children, farmers and townsfolk, people of diverse ages fueling rural economies. Rural residents have been moving to metro areas where there are more opportunities to make a living, meet friends and build community. Rural schools are consolidating, businesses are closing and our once thriving rural communities are losing their vibrancy.

This trend is not inevitable. Practical Farmers of lowa has a different vision for the future.

ONE OF REVIVAL.

To us, REVIVAL means repopulating rural communities with farmers. This conference will strategize how to create markets and infrastructure for small grains and cover crop industries. We'll talk about how to bring fruit, vegetable and livestock farms – and the resulting jobs and healthy food – back to our small communities.

To us, REVIVAL means regenerating lowa soils by putting living roots in the ground year-round, by diversifying crop rotations and by re-introducing livestock to the landscape.

The well-being of our rural communities depends on healthy soil.

To us, **REYIVAL** means rejuvenating our creeks and rivers, and bringing clean water back to lowa. We will talk about ways that all lowans can have clean water.

To us, REVIVAL means opportunities for the next generation. Our conference will abound with education for beginning farmers to learn the skills they need to succeed, and for families to learn how to put strategies in place to help their farm succession plans match their values and goals.

Be part of the 30-plus-year tradition of information-sharing and join our REVIVAL!

Hear farmers delve into the science behind soil health, and learn how to grow and market a multitude of crops, access land and capital, pass on the farm to the next generation and more.



THURSDAY, JANUARY 18

NOON - 1 P.M. Short course registration

1 - 6:30 P.M. Short courses

FRIDAY, JANUARY 19

8 - 11:30 A.M Short courses continue

11 A.M. Conference registration opens

Exhibit Hall opens

12:30 P.M. Silent Auction opens

12:30 – 2 p.m. Session I Friday Workshops

2 - 3 P.M. 1-hour networking break in Exhibit Hall

Support our sponsors!

3 - 4:30 P.M. Session II Friday Workshops 4:45 P.M. Practical Farmers Update

5:15 P.M. Sustainable Agriculture Achievement

Award Presentation

5:30 - 6:30 P.M. Keynote Address

7 – 11 p.m. PFI Potluck, CPMI Event Center

2321 North Loop Dr., Ames

SATURDAY, JANUARY 20

7:30 – 8:30 A.M. Registration and Breakfast

7:30 A.M. Exhibit Hall opens

8:30 – 9:40 a.m. Session I Saturday Workshops 10 – 11:10 a.m. Session II Saturday Workshops

11:30 -12:30 р.м. Lunch

1 - 2:10 P.M. Session III Saturday Workshops
2:30 - 3:40 P.M. Session IV Saturday Workshops
4 - 5:10 P.M. Session V Saturday Workshops

4:45 P.M. FRIDAY

PRACTICAL FARMERS' YEAR IN REVIEW

Get a summary of our work in 2017 and hear plans for 2018 and beyond. We just completed our strategic plan for 2018 – 2020 and look forward to sharing our mission, vision and priorities for the coming years. Board elections will also take place; please come and vote!

7 P.M. FRIDAY | MEET OLD FRIENDS AND NEW!

POTLUCK

Please bring a side dish and beverages to share. Practical Farmers will provide a main dish, water and tableware.

Potluck Party Hosts: Ty and Bobbie Gustafson of Story City Locker, and Donna Prizgintas and Lonna Nachtigal of the DonnaLonna Kitchen show.

You may drop food off at Scheman when you arrive for the conference, and we will transport it for you! We can keep food hot or cold.

7:30 A.M. SATURDAY

BREAKFAST

Show up early to Scheman for free hot food, coffee and tea, and get to know people from all over the Midwest.



WANTED: SILENT AUCTION DONATIONS

Please consider donating quality gifts to this long-standing silent auction. Proceeds provide Practical Farmers with funds to be member-directed. Examples of popular silent auction gifts include books, seeds or plant stock, gift baskets and handmade items.

CERTIFIED CROP ADVISORS

CEUs will be offered this year! See brochure for details.



Jan. 18 9 a.m. – 5 p.m. ISU Alumni Center, Ames

IOWA FORAGE AND GRASSLAND COUNCIL CONFERENCE (IFGC)

HELD IN CONJUNCTION WITH PRACTICAL FARMERS' CONFERENCE. For full schedule and to register, visit www.iowaforage.org or call (800) 383-1682.

Kathy Voth and Rachel Gilker from "On Pasture" will headline the event. They will discuss the facts and myths of grazing research, and the long-term benefits of a well-managed grazing system. Doug Peterson, regional soil health specialist for Iowa and Missouri with Natural Resources Conservation Service, will present on grazing and soil health. **Dr. John Grabber**, research agronomist from USDA-ARS in Wisconsin, will speak on interseeding alfalfa into corn.

KEYNOTE | FRIDAY 5:30 P.M.

AN ENGLISH SHEPHERD'S VISION TO

REVIVE RURAL AMERICA

James Rebanks will talk about his farming life, as recounted in his New York Times bestselling memoir "The Shepherd's Life." James is a passionate advocate for heritage breeds of sheep, cattle and crops, and farming in the tried-and-tested older ways that have roots in his landscape dating back 4,000 to 5,000 years. He shepherds in the mountains in the north of England.

He lives and works on the farm his father and grandfather farmed before him, in a landscape his family has worked for over six centuries.

The farm is largely permanent pasture and hay meadows, on which he specializes in raising high-value breeding stock: native Herdwick and Swaledale sheep, and a British cattle breed called Blue Greys.

James will share what it's like to farm using old ways in the modern world, both the challenges and opportunities. He'll discuss how traditional ways provide many of the answers we need for a farming future in which antibiotics, wormers, pesticides, herbicides and oil may all be reduced in effectiveness or are in scarce supply.

James is a bestselling author, published in 20 countries.

He has written for newspapers and magazines including The New York Times, and he shares details of farm life daily with 100,000 Twitter followers (@herdyshepherd1)—perhaps, the most-followed farming account in the world.

"The future we have been sold doesn't work;
Applying the principles of the factory floor to the natural world
just doesn't work. Farming is more than a business. Food is more
than a commodity. Land is more than a mineral resource."

- JAMES REBANKS



SOILS: CULTIVATING A DEEPER UNDERSTANDING

CCAs: 7.5 CEU credits approved.

Whatever the crop or livestock raised, farmers across the spectrum depend on soil. This short course begins with the basics and then digs deeper into the science. We'll explore the living communities below our feet and what these "worlds below" mean for farmers. You'll receive a workbook to follow the presentations, to take notes and to cultivate plans for improving the soil on your own farm. Whether you grow corn, wheat, vegetables or cows, there will be plenty to take home from this course.

The Soils of Iowa

Learn about the geography of Iowa's soils and the soil properties that control root growth, crop yield and field health.

Dr. Lee Burras is a professor of agronomy at Iowa State University (ISU). He is interested in soil formation and soil productivity. Much of his recent work has examined the changes in soil profiles resulting from long-term agriculture in Iowa.

How Microbes Influence Plant Growth & Productivity

This session will cover diverse ways in which microbes help plants, including helping them acquire nutrients and defend against pathogens, pests and environmental stresses. The session will also provide perspectives on strategies for capturing microbial benefits, including the growing field of microbial products for agriculture and how knowledge of agricultural microbiomes may lead to management approaches and plant genotypes that optimize these microbial benefits.

Dr. Gwyn Beattie is professor of bacteriology at ISU. Her teaching and research is focused on the genomics and ecology of plant-associated bacteria, with current projects focusing on the influence of microbial communities on plant water use efficiency and the factors enabling bacterial pathogens to use light and environmental stress signals to colonize leaves.

Alternative Strategies for Building Soil Health & Enhancing Ecosystems

This presentation will explore the environmental impacts of alternative and conventional grain, vegetable and bioenergy cropping systems, including effects on soil organic matter, soil biological activity, nutrient retention, carbon sequestration, water quality and soil health. Topics will span a wide range of agricultural management options, such as reduced tillage, extended rotations, cover crops, compost and manure application, organic management and perennial plantings.

Dr. Cindy Cambardella is a soil scientist with USDA-Agriculture Research Service (ARS) at the National Laboratory for Agriculture and the Environment in Ames, and associate professor of soil science at ISU. Her research interests include understanding how changes in land use and agricultural management impact soil health through effects on carbon accumulation and partitioning in soil; nitrogen-use efficiency; soil microbial activity and metabolic function; and the formation and stabilization of soil aggregates.

Soil-Test Biological Activity – A Tool for Soil Health Assessment

In this session, you'll learn about the scientific basis for using soil-test biological activity as part of soil health assessment – a tool that attempts to quantify some of the physical, chemical and biological characteristics of soil. Indicator values should reflect the role played by agricultural management practices and strategies. A standard set of indicators can create a robust soil health assessment, especially when including a simple approach to soil biological assessment. Alan will discuss biological soil quality testing methods, as well as some of the current research on soil ecology and management.



Dr. Alan Franzluebbers is a research ecologist with USDA-ARS in Raleigh, North Carolina, and professor at North Carolina State University. Recent areas of research are in multi-species cover cropping, agroforestry, integrated crop-livestock systems, nitrogen management and conservation-tillage cropping.

12:30 - 2 P.M.

Session 1

Farming the Sun: The Ecology of Chemical Energy

Whether grass, legume, deciduous or coniferous, almost all plants grow the same way. Thus, a firm grasp of the basic biochemistry behind plant growth is essential to the success of the forage, the animal and the farmer. This two-part series offers an in-depth – yet simplified – understanding of energy cycling and photosynthetic plant growth. This session will focus on the importance of gas exchange, soil and water quality, and vital symbiotic relationships with microflora in the environment.



Mark Bader is the owner and president of Free Choice Enterprises, Ltd., a family-owned and operated business that has catered to the needs of the livestock industry in the U.S. and internationally for over 60 years. His holistic approach to livestock nutrition focuses on natural supplementation of

established feed programs that allow the animal to decide what it needs to thrive. Mark was raised farming cattle, and he and his wife, Janna, currently raise beef on their farm in Potosi, Wisconsin.

Doudlah Farms Organics: Why & How We Transitioned to Organic

Regenerate your soils using value-added organic production. Learn how Doudlah Farms transitioned to organic by using cover crops while aligning with today's consumer demands. Soils Health = Plant Health = Human Health. Learn how!



Mark Doudlah raises corn, soybeans and wheat on Doudlah Farms, a certified organic farm near Cooksville, Wisconsin. He is currently the fourth generation to farm his family's land. Mark and his wife, Lucy, have an organic cropping system on 1,750 acres using cover crops. He has integrated 15-inch row spacing in all crops with

controlled traffic tram lanes. He was also an early adopter of one-pass no-till and minimum-tillage systems.

Risk and Conflict in Family Farm Businesses

Why do we avoid communications in family businesses? How can we create an atmosphere where communication can happen, even when the stakes are high? Business coach Rena will help families address these issues. She will discuss the reasons why conflict occurs in family businesses and offer strategies to minimize conflict. In a follow-up session in Session II, Rena will help you talk about succession planning, including challenges, and how to prepare for the discussion, clarify expectations and deal with disagreements.

Rena Striegel, of Transition Point Business Advisors, is an internationally recognized business coach and consultant with more than 20 years of experience working directly with farmers to identify and implement strategies that create growth and profitability. Rena grew up on a dairy and hog farm in What Cheer.

Dan and Lorna Wilson of Paulina, farm with two sons, one daughter and two daughters-in-law. They are previous winners of Practical Farmers of Iowa's Sustainable Agriculture Achievement Award.

An Economic Evaluation of Cover Crops in Midwestern Agriculture

CCAs: 1.5 CEU credits approved.

In 2017, Alejandro, along with a team of researchers from ISU and Practical Farmers of Iowa, collected over 800 responses to a Midwest cover crop economics survey. He will report the results of this research, including partial budgets created from cover crop scenarios, and share an economic evaluation of the social benefits of cover crops associated with reducing soil erosion and keeping nutrients in place.

Alejandro Plastina is an assistant professor and extension economist at ISU. His area of specialization is agricultural production and technology, with an emphasis on farm business and financial management.

Managing a Young & Growing Orchard

Returning to the farm in 2012, Emma and Marcus have expanded the orchard from the initial planting in 2003, focusing on medium-density production for farmers markets, CSA and institutional buyers. They will share their orchard management schedule and practices, orchard improvements, and successes and mistakes they've made as beginning orchardists.



Emma and Marcus Johnson own and operate Buffalo Ridge Orchard in Central City, with Emma's parents, Mary and Vernon Zahradnik. The 80-acre farm has 5 acres of diversified vegetables and 13 acres of orchard, including 3,600 apple trees consisting of 50 new and classic varieties.

Non-Traditional Methods of Accessing Capital

Capital can be essential when establishing or expanding your farming operation, but figuring out where to seek capital can be difficult. Three farmers will share their experiences with accessing capital by non-traditional methods such as crowd-source funding and CSA member investments.



Rick Hartmann runs Small Potatoes Farm, a certified organic vegetable farm near Minburn, with his wife, Stacy. From 2004 until 2017, they raised vegetables, primarily marketed through a successful CSA in the Ames-Des Moines corridor. Rick also works as an inspector for various accredited organic certifying agencies.



Melissa Dunham and her husband, Andrew, operate Grinnell Heritage Farm in Grinnell. Together they raise 25 acres of certified organic vegetables, herbs and fruit.

Jordan Clasen operates Grade A Gardens on 10 acres of rented certified organic land. Jordan

markets his vegetables, eggs and specialty crops through a CSA and the Downtown Farmers' Market in Des Moines.

Ecology & Management of lowa's Common Vegetable Insect Pests

Donald will examine the ecology of common vegetable pests to better understand how pests develop into populations that cause unacceptable losses, and why populations can vary from year to year and place to place. While much of insect ecology is out of our control, Donald will discuss IPM tactics that can help solve pest problems while preserving the ecosystem.

Donald Lewis is a professor and extension entomologist with ISU. He is responsible for outreach education on insect pest management in fruits, vegetables, turfgrass, trees and shrubs, and households.



3 — 4:30 P.M. Session 2

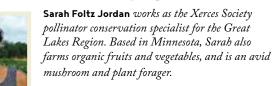
Solar-Powered Livestock: From Plants to Animals

While all biological components in feeds and forages can theoretically be converted to caloric energy, not all are actually usable by the animal. Both plant and animal metabolic requirements must be met before growth and production can occur. Mark will discuss how biochemical, microbial and mineral-nutrient interactions in livestock relate to the consumption of feeds and forages within the surrounding environment, and to feed efficiency. He will also discuss sustainable practices to overcome imbalances; optimize dietary intake to improve nutritional balance and health; and maximize performance and output.

Mark Bader is the owner and president of Free Choice Enterprises, Ltd., a family-owned and-operated business that has catered to the needs of the livestock industry in the U.S. and internationally for over 60 years. His holistic approach to livestock nutrition focuses on natural supplementation of established feed programs that allows the animal to decide what it needs to thrive. Mark was raised farming cattle, and he and his wife, Janna, currently raise beef on their farm in Potosi, Wisconsin.

Using Habitat to Increase Beneficial Insects on Fruit & Vegetable Farms

Providing on-farm habitat for pollinators and predatory insects can take a variety of forms. Sarah and Dave have installed prairie plantings and other habitat around the Midwest; they will share specific examples and best practices, and will answer questions about beetle banks, prairie, field borders and flowering strips.



Dave Williams works for Xerces Society as a pollinator conservation planner based in Iowa. Dave brings more than two decades of experience in prairie restoration for an array of landscapes, including public parks, rights-of-way, and farm and private lands.

Carbonomics

CCAs: 1.5 CEU credits approved.

Carbonomics is a unique approach to looking at the big picture of soil health by comparing the economy of a country to the economy of the soil. This session will explore the relationship between plants, soil and biology – and how they are interconnected. We will look at supply, demand, currency, capital, energy, resources, infrastructure and defense. The role of carbon in this system, and how it functions as currency, will be explored.



Keith Berns combines 20 years of no-till farming with 10 years of teaching about agriculture and computers. In addition to no-tilling 2,500 acres of irrigated and dryland corn, soybeans, rye, triticale, peas, sunflowers and buckwheat in south-central Nebraska, he also co-owns and operates Green

Cover Seed, one of the major cover crop seed providers and educators in the U.S. Through Green Cover Seed, Keith has experimented with over 100 different cover crop types and hundreds of mixes planted into various situations and has learned a great deal about cover crop growth, nitrogen fixation, moisture usage and use of cover crops by grazers. Keith also developed the SmartMix Calculator, a widely used cover crop selection tool.

Traditional Methods of Accessing Capital

Capital can be essential when establishing or expanding your farming operation, but figuring out where to seek capital can be difficult. Three farmers will share their experiences with accessing capital by traditional methods such as bank loans, EQIP funding and much more.



Chad Hensley and his wife, Katie, raise cut flowers on 1.5 acres. They specialize in heirloom, openpollinated and specialty crops. In 2016 they added beef cattle to their farm located near Lamoni.



Jenny Quiner started Dogpatch Urban Gardens in the fall of 2015 with the help of her husband, Eric. They farm a small-scale market garden growing produce naturally with organic principles and sustainable methods on a quarter-acre within the Des Moines city limits.



Rory Van Wyk grew up on a small, diverse livestock farm. He and his wife, Lynette, are working to teach daughters, Annika and Emma, to be good stewards of their 40 acres.

Developing Relationships to Implement Conservation on Rented Cropland

The four speakers in this session represent landowner-tenant relationships where the landowner and tenant together implemented conservation practices on the rented ground. They have added in-field and edge-of-field conservation practices such as cover crops, no-till, terraces, a waterway, a bio-reactor, prairie strips and a saturated buffer. Both pairs will review how they started conversations about these practices, and the legal and financial arrangements they agreed upon to put these practices in place.

Lee Tesdell farms near Slater on a Century Farm that has been in his family since 1884. On a small scale, he raises cross-bred sheep and layer hens. Lee participates in the Conservation Reserve Program, Regional Conservation Partnership Program and the Environmental Quality Incentives Program. He rents his crop ground to Mike Helland.

Mike Helland operates a Heritage Farm in Huxley that has been in his family since 1861. He has no-tilled beans for 23 years, one-tills his corn and integrates livestock on the farm. Last year he raised 500 acres of cereal rye for pasture and hay for cattle.

Gary Guthrie, "The Carrot King," has farmed fresh vegetables at Growing Harmony Farm near Nevada for more than 20 years. A lifetime member of Practical Farmers of Iowa, he has been active in hosting conservation– and production–focused field days. Gary works with his tenant, Danny Harrison, to care for his rented farmland.

Danny Harrison started farming in 1976 on his family operation near Nevada. He raises corn, hard red winter wheat and soybeans. Danny has years of experience in no-till production and started using cover crops about five years ago. He rents land from his neighbor, Gary Guthrie.

Alternative Models & the Future of CSAs

Many diversified vegetable farmers rely on CSAs for a stable market and early-season cash flow. But with more options to find local food, will CSAs survive? Three farmers will share their CSA models and experiences, discuss their views of trends and markets in Iowa, and answer audience questions.



Laura Krouse manages 72 acres near Mt. Vernon where she grows vegetables, oats, hay and cover crops, and also operates Abbe Hills Farm CSA.



Danelle Myer is the fifth generation to farm her family's land near Logan. At One Farm, Danelle raises vegetables for farmers markets, pop-up farm stands, online ordering, and restaurants and wholesale in Omaha and Des Moines.



Jordan Scheibel raises vegetables at Middle Way Farm in Grinnell. He sells through a traditional and a customizable CSA, at farmers markets and through Iowa Food Cooperative, and limited wholesale markets.



Erik Sessions operates Patchwork Green Farm in Decorah, where he raises vegetables. He uses a market CSA, and also sells at farmers markets, to restaurants and through Oneota Co-op.

How to Talk to Your Family About Succession Planning

Why do we avoid communications in family businesses? How can we create an atmosphere where communication can happen, even when the stakes are high? As a follow-up to her First Session, Rena Striegel will help you talk about succession planning, including challenges, and how to prepare, clarify expectations and deal with disagreements.



Rena Striegel, of Transition Point Business Advisors, is an internationally recognized business coach and consultant with more than 20 years of experience working directly with farmers to identify and implement strategies that create growth and profitability. Rena grew up on a dairy and hog farm in What Cheer.

Dan and Lorna Wilson, of Paulina, farm with two sons, one daughter and two daughters-in-law. They are previous winners of the Practical Farmers of Iowa's Sustainable Agriculture Achievement Award.



SATURDAY 8:30 - 9:40 A.M. Session I

The Shepherd's Life: Soil, Sheep Dogs & Social Media

James will discuss his passion for healthy soil and diverse pastures, while detailing the practical management of his sheep flock: making traditional hay and keeping livestock well-fed through long, wet and cool winters. He'll speak about border collies and how critical they are to his "dog and stick" farming. You'll learn how James manages lameness, parasites and the extent to which he relies upon chemical "shop-bought" solutions. Economics and social media will be a part of the discussion.

James Rebanks is a shepherd in the mountains of northern England. He lives and works on the farm his family has worked for over six centuries. He farms native Herdwick and Swaledale sheep, and the British cattle breed called Blue Greys. His farm's acres are in permanent pasture and hay meadows, and he specializes in raising high-value breeding stock.

Soil Health and Grazing - Can They Coexist?

CCAs: 1.0 CEU credits approved.

Cattle grazing has a reputation of being hard on soil and water resources. But livestock that are managed based on available forage resources can have many benefits for agricultural production and environmental quality. In fact, farm resources can be used more efficiently when crops and livestock are combined on the landscape. This presentation explores the impacts of livestock on crop production, soil resource indicators and soil health.



Alan Franzluebbers is a research ecologist with USDA-ARS in Raleigh, North Carolina, and professor at North Carolina State University. Recent areas of research are in multi-species cover cropping, agroforestry, integrated crop-livestock systems, nitrogen management and conservation-tillage cropping.

Organic No-till: Soil Health & Regeneration vs. Short-Term Returns & Weeds

In partnership with Iowa Organic Association

What are the critical focal points for seasoned no-tillers transitioning to organic production? What about the focus for long-time organic producers looking to reduce tillage? These are open-ended questions that Jack will address when describing how his crop production system has evolved over the years.



Jack Erisman transitioned 2,000 acres into organic production "cold turkey" in 1990. While some might question this method, these are now certified organic acres of food-grade corn, soy and edible beans, as well as oats and seed rye. The farm, near Pana and Assumption, Illinois, has permanent and rotational pastures for 100-plus brood cows

and forage-finished beef in a closed herd. Companion seeding, no-till systems and building soil are the practices driving the experiments.

Field Preparation, Cultivation & Fertility

In this session Michael will cover the principles of field prep, cultivation and fertility, and how these principles relate to various scales of vegetable production. He'll discuss hacks, tools and techniques for farms of all sizes to speed up farm processes.



Michael Kilpatrick and his brother, Philip, started Kilpatrick Family Farm in Middle Granville, New York, in 2005. They grew the farm to over 500 acres, with 15 acres in field vegetable production rotated on 50 tillable acres; 100 acres of pasture for layers, broilers and turkeys; and 350 acres

of woodlot. Products were sold to a 250-member CSA, farmers markets, co-ops, restaurants, institutional buyers and wholesale. The farm pushed the boundaries in winter production and season extension, and created a highly profitable business model. In 2015, Michael and his family moved to Ohio, where Michael directs his passion for farming toward helping other farmers become more efficient, productive, sustainable and profitable.

Physical Strengthening, Recovery & Injury Prevention for Vegetable Farmers

A healthy body is a vegetable farmer's most important tool. During this interactive session, Tony will show farmers how to safely and effectively pull, lift, twist and carry, and teach techniques to strengthen muscle groups for better stability and endurance.

Tony Gallo is a senior physical therapist at Grinnell Regional Medical Center, where he has practiced since 1988. In addition to injury recovery and orthopedic care, he specializes in athletic performance and sports medicine.

Swine Genetics Made Easy

This crash course in swine genetics will introduce you to the characteristics of different pig breeds, especially those best suited to the outdoors, and cover how to select the right breed for your farm. Bob will discuss what to look for in body structure and list traits for selecting replacement sows. He'll also teach the do's and don'ts of artificial insemination and breeding.

Bob Owen, with his parents, Bill and Karen Owen, operates North Iowa Boar Stud in Riceville. Bob comes from a long line of swine breeders; his family started breeding Durocs in the 1930s. He's the owner of a 15-head purebred sow herd, and produces replacement breeding stock. Bob also works part-time for James Frantzen at Riverside Feeds.

Separating Science From Pseudoscience

At some point in our lives, we've been tricked into spending time and money on something that didn't pan out. Fortunately, there are some questions we can ask to protect ourselves from being bamboozled. Kathy and Rachel will demonstrate how asking these questions can protect you and help you make sound decisions, using examples of products and services being sold to farmers and ranchers.



Kathy Voth is best known for using animal behavior principles to develop a method of teaching cows (and other livestock) to eat weeds, reducing costs and increasing forage for farmers and ranchers. Her background includes 12 years with the Bureau of Land Management working

with ranchers, university researchers and agency staff to develop solutions that help communities live sustainably in their environment. With Rachel Gilker, she publishes "On Pasture," a weekly online grazing magazine serving 100,000 readers a month.



Rachel Gilker earned her M.S. and Ph.D. in agronomy and soil science at the University of Maryland after serving in the Peace Corps in Niger. She spent more than a decade conducting on-farm research with and offering technical assistance to grass farmers in Maryland and

Vermont. In 2013, Rachel and Kathy Voth began publishing "On Pasture," a weekly online magazine.

Q&A: Hiring Migrant and Seasonal Workers and Year–Round Employees

Have questions about hiring walking crews, harvesters, seasonal workers or year-round farm employees? Join this session to get your questions answered.



Melissa Garcia is the monitor advocate for the state of Iowa. She works with a team of outreach specialists across the state to supply migrant and seasonal farm workers with information about available employment inside and outside of agriculture. She works with agricultural employers in all stages of the hiring process to fill their seasonal workforce needs.



Amy Beller is the registered apprenticeship program coordinator for Iowa Workforce Development. Amy works with a team of business service members across the state to provide business information about creating and registering their Registered Apprenticeship

Programs with the U.S. Department of Labor. She also assists job seekers who are interested in becoming a Registered Apprentice.



10 - 11:10 A.M. Session 2

Using the SmartMix Calculator to Develop Good Cover Crop Mixes

CCAs: 1.0 CEU credits approved.

Attend this session for an inside and in-depth look at the industry's No. 1 cover crop calculator. Keith will demonstrate how the newest version of the SmartMix calculator works, explain the logic and thought processes that went into its development and show how you can use it to select the most appropriate species for your next cover crop mix.

Keith Berns combines 20 years of no-till farming with 10 years of teaching about agriculture and computers. He also co-owns and operates Green Cover Seed, one of the major cover crop seed providers and educators in the U.S. Through Green Cover Seed, Keith has experimented with over 100 different cover crop types and hundreds of mixes. Keith also developed the SmartMix Calculator, one of the most widely used cover crop selection tools on the internet.

Balancing Quality of Life and Direct Marketing by Crunching Numbers

After 20 years of direct marketing, the Cory family began questioning their quality of life and wondered if they were really making money from direct markets. Tom "put a pencil to their feelings" and discovered astounding results. Tom will discuss home delivery, restaurants, grocery stores, farmers markets, ethnic on-farm butchering, and farm pickup in relation to profits and quality of life. You'll leave pondering your own journey as a direct-marketer.



Tom Cory grew up 3 miles from his home in rural Elkhart. He purchased a farm from his relatives in 1980 just before the farm crisis. His family lives on a Century Farm and their grazing farm is also a Century Farm. Tom taught high school agriculture for many years and Mary homeschools their children.

Making Your Planter Ready for Next Year

Maintaining your planter is important in achieving optimum yield potential. But this practice is often overlooked or not always prioritized in the busy times before and during planting season. Randy will explain how basic planter upkeep and maintenance pays off by ensuring seed placement and singulation, and why these planter performance characteristics are vital to crop performance.

Randy Peterson is a product specialist with Agco Corp. He focuses on Fendt and Massey Ferguson tractors, Sunflower tillage tools and White planters. Randy has been in the business almost 40 years servicing areas of Wisconsin, Nebraska, Iowa and southeast Minnesota.

Learning From On-Farm Research: Horticulture

Through Practical Farmers of Iowa's Cooperators' Program, fruit and vegetable farmers have designed and completed projects related to crop varieties, cover crops, weed control, high tunnel production, trellising, pollinators and more. Join farmer-researchers Rob and Carmen to discuss what they've learned from their research successes and failures, and how the research process impacts their farms. Liz will share how the program works and how you can get involved.



Carmen Black operates SunDog Farm and Local Harvest CSA near Solon. She raises vegetables for 200 families, and raises a small flock of sheep. She began participating in 2015, and has now completed four projects.



Rob Faux and his wife, Tammy, operate Genuine Faux Farm, a small-scale CSA and poultry operation near Tripoli. Since 2009, Rob and Tammy have completed 16 research projects with Practical Farmers.

Liz Kolbe is the horticulture coordinator for Practical Farmers of Iowa. Her work includes facilitating the fruit and vegetable research in the Cooperators' Program, and planning field days, workshops and conference sessions.

Iowa Author Panel: Reviving Culture in Agriculture

Farmers and non-farmers alike have opportunities beyond their purchasing practices to help local farms thrive across the Iowa landscape. Three Iowa authors have spent extensive time researching the challenges local foods and farms face in Iowa, and will share their insights for developing a vibrant Iowa food system rooted in culture and community.

Susan Futrell has spent over 30 years working in sustainable food distribution, including more than a decade with apple growers in the Northeast as marketing director for non-profit Red Tomato. Her new book "Good Apples: Behind Every Bite," digs into the apple industry to better understand how we as citizens and consumers can sustain the farms that provide food for our communities.

Brandi Janssen is a researcher and advocate for local food systems, as well as the director of Iowa's Center for Agricultural Safety and Health (I-CASH). She is the author of "Making Local Food Work: The Challenges and Opportunities of Today's Small Farmers," a book that uncovers the complex realities of building a healthy local food system.

Mary Swander is the poet laureate of Iowa, the artistic director of Swander Woman Productions and the executive director of AgArts, a non-profit designed to imagine and promote healthy food systems through the arts. Among her works is "Map of My Kingdom," a play commissioned by Practical Farmers of Iowa that tackles the critical issue of land transition.

Teaching Livestock to Eat Weeds

Worried about weeds in your pastures? Don't be. It turns out weeds are very nutritious and livestock can learn to eat them. Kathy will share what scientists have discovered about how animals choose food, and how she uses this info to train cows to eat weeds in just seven hours spread over eight days. When you leave this session, you'll have everything you need to train your livestock to be weed eaters.

Kathy Voth is best known for using animal behavior principles to develop a method to teach cows (and other livestock) to eat weeds, reducing costs and increasing forage for farmers and ranchers. Her background includes 12 years with the Bureau of Land Management working with ranchers, university researchers and agency staff to develop solutions that help communities live sustainably in their environment. With Rachel Gilker, she publishes "On Pasture," a weekly online grazing magazine serving 100,000 readers a month.

Winter Vegetable Production

Winter growing can be a highly profitable part of your farm plan. Michael will cover the principles of winter production, structures needed for winter production, how to plan successions to ensure winter-long harvests, and tips for preventing disease and pests in winter production systems.



Michael Kilpatrick and his brother, Philip, started Kilpatrick Family Farm in Middle Granville, New York, in 2005. They grew the farm to over 500 acres, with 15 acres in field vegetable production rotated on 50 tillable acres; 100 acres of pasture for layers, broilers and turkeys; and 350

acres of woodlot. Products were sold to a 250-member CSA, farmers markets, co-ops, restaurants, institutional buyers and wholesale. The farm pushed the boundaries in winter production and season extension, and created a highly profitable business model. In 2015, Michael and his family moved to Ohio, where Michael directs his passion for farming toward helping other farmers become more efficient, productive, sustainable and profitable.

Q&A with James Rebanks

Continue conversations on sheep production and farming in the context of wider social, cultural and economic systems with James.



James Rebanks is a shepherd in the mountains of northern England. He lives and works on the farm his family has worked for over six centuries. He farms native Herdwick and Swaledale sheep, and the British cattle breed called Blue Greys. His farm's acres are in permanent pasture and hay meadows, and he specializes in raising high-value breeding stock.



1 - 2:10 P.M. Session 3

Pragmatic Approaches to Sustainability and Profitability

Whilden will share experiences from his family farm's journey to increase profitability and environmental stewardship through crop diversity, precision agriculture and the constant search for niche markets.



Whilden Hughes works on his family's parallel production (organic and conventional) farm in Rock County, Wisconsin. He and his family grow corn, soybeans, wheat, rye, oats, vegetable crops, sweet corn, green beans, lima beans and other specialty crops for niche markets. In addition to

his love for farming, he is also passionate about being a good steward of the land and learning about new technologies for the farm.

Learning From On-Farm Research: Field Crops

CCAs: 1.0 CEU credits approved.

The Cooperators' Program is Practical Farmers of Iowa's vehicle for conducting on-farm research. Come learn about the research design process from Stefan and hear from two cooperators who have been conducting research on cover crops. Tim will share details of his trial investigating cover crop termination date and nitrogen fertilizer strategies ahead of corn. Jack will discuss his recent work on interseeding cover crops into corn.

Tim Sieren, and his wife, Ethel, run Green Iron Farms, a diversified crop and livestock farm near Keota. Since joining the Cooperators' Program in 2013, Tim has been conducting trials on cover crops, green manures and small grains.

Jack Boyer and his wife, Marion, are lifetime members of Practical Farmers of Iowa. They raise corn, seed corn, soybeans, cereal rye and cover crops near Reinbeck. Jack joined the Cooperators' Program in 2014, focusing primarily on optimizing his farm's cover crops.

Stefan Gailans is Practical Farmers' research and field crops director. His primary responsibility is to manage the Cooperators' Program. He also plans field days, conference sessions and workshops for Practical Farmers' field crops program.

Off-Target Movement: Can Herbicides Be Kept in Place?

CCAs: 1.0 CEU credits approved.

Herbicides are the backbone of weed management for conventional farmers. In 2017, the Iowa Department of Agriculture and Land Stewardship received a record 200 complaints of pesticide misuse. The discussion will focus on changes in herbicide use patterns, factors that influence off-target movement and concerns about increased Dicamba use.

Bob Hartzler is an agronomy professor at ISU. His primary responsibilities are weed science extension and teaching. A native of Indiana, Dr. Hartzler has been with ISU Extension since 1982.

Expanding Operations to Add Beef Cattle

Before adding an enterprise to your existing operation, it pays to explore all factors before going "all in." Join Matthew and Lori as they share their planning process before adding beef cattle to their vegetable and poultry enterprises. Joe will coach Matthew and Lori to help them make the right decision for their business and their family.



Matthew and Lori Wiese own and operate Heirloom Farm near Earlham. Since 2015, they have been raising vegetables for their CSA members, as well as producing eggs and broiler chickens that they sell directly to consumers.



Joe Sellers is the livestock field specialist for ISU, specializing in beef production.

Better Food, Farm and Conservation Policies Through Involvement

Climate change, water quality, soil degradation, rural decline – Iowans are facing many issues affecting the future of our landscapes and our communities. Fortunately, farmers and non-farmers in Practical Farmers' network see a path toward an Iowa with vibrant rural communities and diversified farms. Two members will share ideas on how to engage your community. Come join the discussion to help shape policy for a healthier Iowa.

Kamyar Enshayan was a 2008 recipient of PFI's Sustainable Agriculture Achievement Award; he directs the University of Northern Iowa's Center for Energy & Environmental Education, and has been a voice for better care of the land we share in Iowa.

Anna Johnson is a policy program associate at the Center for Rural Affairs, where she empowers farmers and rural community members to play an active role in shaping policy issues related to farming and conservation

Indoor Mushroom Production and Marketing

Oyster mushrooms are a delicious addition to a farm's offerings. When grown indoors, they are consistently productive and profitable. Tyson will share his expertise with setting up an efficient and cost-effective grow room, and producing and marketing mushrooms.

Tyson Allchin grows mushrooms year-round on his farm, Allchin Acres, near Columbus Junction. He primarily sells oyster mushrooms to grocery stores and restaurants, but has also grown lion's mane, shiitake and pioppino. Tyson also prepares and sells inoculated fruiting blocks to other growers.

Livestock Guard Dogs 101

Livestock guard dogs play a key role on farms with livestock. Angela and Jason have been breeding and training guard dogs for four years. Join our discussion on how to choose the right guardian dog for your farming operation and family needs. Angela will discuss breeds; training; normal guardian behavior; and using dogs to work with goats, poultry, cattle and pigs. She'll also speak on using a llama for predator protection. Bring your questions!



Angela Johnson owns and operates Lucky George Farm, with her husband, Jason, near Derby. Lucky George Farm is a diversified livestock farm specializing in the conservation of Large Black pigs and other British-breed livestock. The Johnsons are the only American

members of the British Pig Association and have extensive hands-on experience raising livestock guardian dogs for low-impact farmers across the U.S. Dogs born at Lucky George Farm now live on farms across the country, and throughout their home state of Iowa.

Q&A: Strengthening and Recovery With Tony Gallo

Tony will answer audience questions about proper form, strengthening, and injury prevention and recovery.

Tony Gallo is a senior physical therapist at Grinnell Regional Medical Center, where he has practiced since 1988. In addition to injury recovery and orthopedic care, he specializes in athletic performance and sports medicine.



2:30 - 3:40 P.M. Session 4

Using Tea Bags to Assess Soil: A Low-Cost Approach?

CCAs: 1.0 CEU credits approved.

Marshall will present some preliminary data from a 2017 study using decomposition of common types of tea as an inexpensive, yet scientifically robust way to measure soil health. This study included over a dozen PFI farms across Iowa. He will present major trends across soil types and management treatments, and also whether the tea decomposition seems to be a good indicator of soil health.



Marshall McDaniel is an assistant professor in soil-plant interactions at ISU. Soils and plants are in a give-and-take relationship with carbon and nutrients. The McDaniel Research Group studies how this relationship is affected by management and the environment to seek an understanding of what enhances soil-plant synergy, soil health and agroecosystem sustainability.

Cover Crops and Crop Rotations in Organic Systems Without Livestock

Using no-till, crimped cereal rye ahead of soybeans can make organic weed control a simple matter. Mark will describe the crop rotations he employs and the cover crop species he plants ahead of each crop in his organic system. He will also discuss the crop, cover crop and tillage systems he uses for the highly erodible land on his farm in south-central Wisconsin.

Mark Doudlah raises corn, soybeans and wheat on Doudlah Farms, a certified organic farm near Cooksville, Wisconsin. He is currently the fourth generation to farm his family's land. Mark and his wife, Lucy, have an organic cropping system on 1,750 acres using cover crops. He has integrated 15-inch row spacing in all crops with controlled traffic tram lanes. He was also an early adopter of one-pass no-till and minimum-tillage systems.

GAP, FSMA and Post-Harvest Handling for Food Safety

With the advent of Good Agricultural Practices, and now the Food Safety Modernization Act, growers have a lot to understand and implement when it comes to food safety. Michael will unpack the regulation, discuss areas where farmers should focus and show easy ways to track the required information, including new software on the market.

Michael Kilpatrick and his brother, Philip, started Kilpatrick Family Farm in Middle Granville, New York, in 2005. They grew the farm to over 500 acres, with 15 acres in field wegetable production rotated on 50 tillable acres; 100 acres of pasture for layers, broilers and turkeys; and 350 acres of woodlot. Products were sold to a 250-member CSA, farmers markets, co-ops, restaurants, institutional buyers and wholesale. The farm pushed the boundaries in winter production and season extension, and created a highly profitable business model. In 2015, Michael and his family moved to Ohio, where Michael directs his passion for farming toward helping other farmers become more efficient, productive, sustainable and profitable.

Estate Planning With Farming and Non-Farming Heirs

Bonnie and Vance have turned over the day-to-day management of their grazing dairy operation to son Olaf and are now thinking about him and their non-farming children in their estate planning. Hear their story and their plans, and listen to feedback from attorney Rachel about other issues and strategies they (and you) might consider.

Bonnie and Vance Haugen are PFI members from Springside Farm in Canton, Minnesota.

Rachel Dahl, a former farm kid, specializes in estate and farm transition planning for Hellmuth & Johnson law firm in Minneapolis.

Q&A with Kathy Voth and Rachel Gilker

Come with your grazing questions! "On Pasture" readers will have the chance to speak in-person with publishers Kathy and Rachel.

Kathy Voth is best known for using animal behavior principles to develop a method to teach cows (and other livestock) to eat weeds. Her background includes 12 years with the Bureau of Land Management working with ranchers, university researchers and agency staff to develop solutions that help communities live sustainably in their environment. With Rachel Gilker, she publishes "On Pasture," a weekly online grazing magazine serving 100,000 readers a month.

Rachel Gilker earned her M.S. and Ph.D. in agronomy and soil science at the University of Maryland after serving in the Peace Corps in Niger. She spent more than a decade conducting on-farm research with and offering technical assistance to grass farmers in Maryland and Vermont. In 2013, Rachel and Kathy Voth began publishing "On Pasture," a weekly online magazine.

Foraging for Market: Morels and Greens

Mushrooms are an exciting hunt, but foraged wild greens can also add diversity and nutrition to your market table and kitchen. Join Jill and Sarah to pick up practical information about foraging, marketing and preparing "the best of the best" wild edibles. They will cover foraged greens and morels, as well as a few other safe and delicious wild mushrooms.

Jill Beebout farms at Blue Gate Farm with her husband, Sean Skeehan. They steward 40 acres of family land near Chariton, where they raise Certified Naturally Grown produce, laying hens, honey bees, hay and alpacas; their marketing is done primarily through their CSA and farmers markets.

Sarah Foltz Jordan works as the Xerces Society pollinator conservation specialist for the Great Lakes Region. Based in Minnesota, Sarah also farms organic fruits and vegetables, and is an avid mushroom and plant forager.

Land Access: Pitfalls and Potential

Whether you've identified the land you want to farm on or are just starting your search, this session will share tools and best practices to help you in the process. Kate and Brett will cover assessing the farmability of a piece of land, whether buying or leasing is the best option for you, resources for finding land and what to know about financing. You'll also find out snags to avoid and issues to anticipate.



Kate Edwards is a CSA farmer near Iowa City, growing food for 200 families each week of the growing season. Kate is entering her eighth year of farming.



Brett Olson is co-founder and creative director at Renewing the Countryside. His work focuses on local food systems, entrepreneurship and community development in rural areas. Brett helps design and develop programming on issues including farm transitions, farmland access, sustainable tourism and farm-to-table.

More Sunlight to Corn = Space for Cover, Companion and Cash Crops

Bob will discuss his on-farm research covering non-traditional corn row spacing to support strip intercropping, cover crops and companion crops, as well as to provide a traffic pathway (tramline) for late season treatments. The yield of individual corn rows is higher due to greater sunlight access and a higher plant population. These sunlight openings proffer an alternate way to use the open spaces. Several will be discussed in this presentation and the ensuing discussion.



Bob Recker grew up on a farm in eastern Iowa and worked as a product engineer at John Deere until his retirement in 2008. He formed Cedar Valley Innovation LLC to "pay back" the farmers of the world for supporting him and his family for 41 years at John Deere. He uses his own mod-

ified equipment to conduct test plots and experiments on commercial growers' farms, with a focus on high-resolution yield data and heavy use of aerial and in-field imagery.

4 - 5:10 P.M. Session 5

Pack Shed and Post-Harvest Efficiency

On a vegetable farm, up to 50 percent of labor is spent after the crop is grown. In this session Michael will dive into principles behind a well-designed facility, tools and equipment to make the job easier, and systems that speed up the process and reduce stress levels. He will share washing shed designs and explain why they work (or don't), and help you figure out what makes sense for your farm.

Michael Kilpatrick and his brother, Philip, started Kilpatrick Family Farm in Middle Granville, New York, in 2005. They grew the farm to over 500 acres, with 15 acres in field vegetable production rotated on 50 tillable acres; 100 acres of pasture for layers, broilers and turkeys; and 350 acres of woodlot. Products were sold to a 250-member CSA, farmers markets, co-ops, restaurants, institutional buyers and wholesale. The farm pushed the boundaries in winter production and season extension, and created a highly profitable business model. In 2015, Michael and his family moved to Ohio, where Michael directs his passion for farming toward helping other farmers become more efficient, productive, sustainable and profitable.

Learning From On-Farm Research: Livestock

CCAs: 1.0 CEU credits approved.

Through PFI's Cooperators' Program, livestock farmers have designed and completed projects related to forage production and grazing, feed efficiency, milk production, meat quality and animal health. Join farmer-researchers Tom and Bruce to discuss recent swine and cattle trials: what they've learned from their research successes and failures, and how the research process impacts their farms. Meghan will share details about the program and how you can get involved.

Bruce Carney and his wife, Connie, are lifetime members of Practical Farmers of Iowa. They operate a diversified, pastured livestock farm near Maxwell, specializing in grass-finished beef. Bruce joined the Cooperators' Program in 2009, focusing on optimizing forage production and animal gains. Bruce is currently researching cover crop grazing for soil health and grazing for bird habitat.

Tom Frantzen and his wife, Irene, are lifetime members of Practical Farmers of Iowa and have been conducting on-farm research since 1988. They operate an organic crop and livestock farm near New Hampton. The Frantzens have conducted trials to reduce inputs, increase crop yields and feed pigs alternative rations. Tom is currently researching pelleting small grains and feeding hybrid rye instead of corn.

Meghan Filbert is Practical Farmers' livestock coordinator. She manages the on-farm livestock research trials and is responsible for planning all the livestock programs – field days, conference sessions and workshops.

Growing Better Brussels Sprouts

Brussels sprouts have become a culinary darling, but their long growing season and unusual growing pattern are challenging for many growers. Andrew and Ajay will help attendees navigate these challenges and discuss their own best practices for successful Brussels sprouts.



Ajay Nair is an assistant professor at ISU working on sustainable vegetable production.

Andrew Dunham and his wife, Melissa, operate Grinnell Heritage Farm in Grinnell. He is a fifth-generation farmer, raising 25 acres of organic vegetables, herbs and flowers.

Leaving Your Legacy

Seventy percent of U.S. farmland will transfer to the next generation within 20 years, yet only 11 percent of family farms have a transition plan in place. Transition planning is critical to successful transfer and retirement. The right plan can help you leave the legacy you intend! In this



session, two financial planning experts will preview the multitude of options available to you, including charitable gift annuities and life insurance.



Ashley Shafer is a financial advisor for Morgan Stanley and has more than a decade of charitable and estate planning experience.

Kent Creager is a regional program director for Nationwide's Land As Your Legacy program.

Landowners: Are Weed-Free Fields the Best Your Farm Can Be?

Weed-free fields are often seen as signs that a farm is well-managed – but we know that soil erosion and nitrate leaching are problems for much of Iowa's farmland. In fact, counties where much of the land is cash-rented have very few acres in cover crops and minimal in-field conservation practices. Three experienced Practical Farmers members will answer your questions about how landowners can do more with their farm.

Lee Tesdell farms near Slater on a Century Farm that has been in his family since 1884. On a small scale, he raises cross-bred sheep and layer hens. Lee participates in the Conservation Reserve Program, Regional Conservation Partnership Program and the Environmental Quality Incentives Program. He rents his crop ground to Mike Helland.

Mike Helland operates a Heritage Farm in Huxley that has been in his family since 1861. He has no-tilled beans for 23 years, one-tills his corn and integrates livestock on the farm. Last year he raised 500 acres of cereal rye for pasture and hay for cattle.

Gary Guthrie, "The Carrot King," has farmed fresh vegetables at Growing Harmony Farm near Nevada for more than 20 years. A lifetime member of Practical Farmers of Iowa, he has been active in hosting conservation— and production—focused field days and working with his tenant, Danny Harrison, to care for his rented farmland.

Livestock Insurance: Identifying Risks and Risk Management Tools

Ryan enrolled in livestock insurance policies to manage his farm's risks. In this session, he will discuss the process of assessing his on-farm risk and how he chose the right insurance program – including some negative experiences he has endured. Rodney Sebastian, with USDA Risk Management Agency, will answer specific questions from the audience about current insurance programs and risk assessment tools.

Ryan Marquardt and his wife, Janice, own Wild Rose Pastures near Van Meter. They raise chicken, turkey, beef, and eggs for Central Iowa customers using sustainable practices.

Rodney Sebastian grew up on a farm near Spencer, Iowa. He has worked with USDA for more than 30 years, first with the Ag Marketing Service in Dairy Programs, and the past 15 years with RMA.

Innovations in Weed Control

More farmers are expressing interest in new tools for mechanical weed control. Representatives from implement companies Steketee and Sutton Ag will speak about advances in mechanically managing weeds in row crops. They will discuss cultivators and other innovative weed control implements.

Joe Sutton is the sales and import manager at Sutton Agricultural Enterprises in Salinas, California. Joe and Sutton Ag have worked for years with European equipment manufacturers to bring cuttingedge farm equipment technology to the U.S. market.

Soil Health: Continuous Testing, Continual Learning

CCAs: 1.0 CEU credits approved.

Mitchell and his team at Continuum Ag are addressing soil health head-on in 14 states and three countries. Using continuous soil testing and results from over 1,000 soil health tests, data is helping farmers logistically and economically improve soil health. Learn how advanced testing procedures, including the Haney Soil Health Test, can paint a picture of your soil health while giving you the tools needed to improve your operation.



Mitchell Hora is a southeast Iowa farmer and a recent graduate of Iowa State University. He started Continuum Ag in the fall of 2015 as a consulting and data management company, focused on soil health. Today, Continuum Ag works with farmers, consultants and agri-

businesses around the world to advance sustainable agriculture by quantifying and improving soil health.

"The PFI conference is attended by the best of the best of innovative farm families and farm landowners that strive to improve each aspect of their farm. I am continually blown away by the caliber of speakers and topics."

- LUKE GRAN
PRUDENTERRA, PFI MEMBER & EXHIBITOR





FRIDAY, JANUARY 19				
SESSION 1	SESSION 2			
12:30 - 2:00 р.м.	3:00 – 4:30 р.м.			
Farming the Sun: The Ecology of Chemical Energy	Solar-Powered Livestock: From Plants to Animals			
Doudlah Farms: Why and How We Transitioned to Organic	Using Habitat to Increase Beneficial Insects on Fruit and Vegetable Farms			
Risk and Conflict in Family Farm Businesses	Carbonomics			
An Economic Evaluation of Cover Crops in Midwestern Agriculture	Traditional Methods of Accessing Capital			
Managing a Young and Growing Orchard	Developing Relationships to Implement Conservation on Rented Cropland			
Non-Traditional Methods of Accessing Capital	Alternative Models and the Future of CSAs			
Ecology & Management of lowa's Common Vegetable Insect Pests	How to Talk to Your Family About Succession Planning			

SATURDAY, JANUARY 20							
SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5			
8:30 - 9:40 a.m.	10:00 - 11:10 а.м.	1:00 - 2:10 р.м.	2:30 – 3:40 р.м.	4:00 - 5:10 р.м.			
The Shepherd's Life: Soil, Sheep Dogs and Social Media	Using the SmartMix Calculator to Develop Good Cover Crop Mixes	Pragmatic Approaches to Sustainability and Profitability	Using Tea Bags to Assess Soil: A Low–Cost Approach?	Pack Shed and Post–Harvest Efficiency			
Soil Health and Grazing – Can They Coexist?	Balancing Quality of Life & Direct Marketing by Crunching Numbers	Learning From On-Farm Research: Field Crops	Cover Crops and Crop Rotations in Organic Systems Without Livestock	Learning From On-Farm Research: Livestock			
Organic No-Till: Soil Health & Regeneration vs. Short-Term Returns and Weeds	Making Your Planter Ready for Next Year	Off-Target Movement: Can Herbicides Be Kept in Place?	GAP, FSMA and Post– Harvest Handling for Food Safety	Growing Better Brussels Sprouts			
Field Preparation, Cultivation and Fertility	Learning From On-Farm Research: Horticulture	Expanding Operations to Add Beef Cattle	Estate Planning with Farming and Non-Farming Heirs	Leaving Your Legacy			
Physical Strengthening, Recovery and Injury for Vegetable Farmers	lowa Author Panel: Reviv- ing Culture in Agriculture	Better Food, Farm and Conservation Policies Through Involvement	Q&A with Kathy Voth and Rachel Gilker	Landowners: Are Weed- Free Fields the Best Your Farm Can Be?			
Swine Genetics Made Easy	Teaching Livestock to Eat Weeds	Indoor Mushroom Produc- tion and Marketing	Foraging for Market: Morels and Greens	Livestock Insurance: Identifying Risks and Risk Management Tools			
Separating Science From Pseudoscience	Winter Vegetable Production	Livestock Guard Dogs 101	Land Access: Pitfalls and Potential	Innovations in Weed Control			
Q&A: Hiring Migrant & Seasonal Workers & Year-Round Employees	Q&A with James Rebanks	Q&A: Strengthening and Recovery with Tony Gallo	More Sunlight to Corn = Space for Cover, Companion & Cash Crops	Soil Health: Continuous Testing, Continual Learning			



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SPECIAL OPTIONS

SUBTOTAL D \$

 $\hfill \square$ I am interested in having a display in the exhibit hall.

 \square I know a company or organization that could benefit from exhibiting at the conference.

 \square I am a beginning farmer and would like to schedule a FREE 1:1 consultation with a financial expert.

 \square I plan to bring an item for the silent auction:

Make checks payable to "PRACTICAL FARMERS OF IOWA," or pay by credit card online at PRACTICALFARMERS.ORG.

A, B, C & D















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LOCATION

lowa State Center, Scheman Building 1805 Center Dr. Ames, Iowa

DIRECTIONS

Near the junction of Interstate 35 and U.S. 30, the lowa State Center is located at the corner of Lincoln Way and University Boulevard, Ames, Iowa. Just south on University Boulevard from Lincoln Way, turn west onto Center Drive.

LODGING

Practical Farmers has reserved a block of hotel rooms 2 miles south of the conference site at the Best Western Plus University Park Inn and Suites, 2500 University Blvd. (just south of U.S. 30). Please call (515) 296-2500 by Jan. 5 to guarantee a room. Prices range from \$94-\$99/night. Mention Practical Farmers of lowa to get a discounted rate.

QUESTIONS

Contact Erica at (515) 232-5661, or erica@practicalfarmers.org.



PRACTICAL FARMERS OF IOWA

ANNUAL CONFERENCE

IOWA STATE CENTER, SCHEMAN BUILDING AMES, IOWA

Registrations must be received or postmarked no later than Thursday, Jan. 11., or you must register as a walk-in at the conference

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