

# GREAT PLAINS *Growers Conference*

*A three-day conference for beginning and seasoned growers.*  
**Fulkerson Center, Missouri Western State University, St. Joseph, MO**

**January 9-11, 2020**



## **Keynote:**

### **3 Steps to a Profitable Farm**

Charlotte Smith has been named a food rebel, pioneer and visionary by PBS's Food Forward TV, and a "Pioneering Leader in Raw Milk Production" by Mark McAfee, CEO Organic Pastures Dairy. Food Tank named her one of the 25 "World's Most Influential Women in Food and Ag".

Charlotte Smith has created a sustainable farm-to-consumer business selling premium meats, poultry, eggs and milk. After witnessing one too many small business owners close up shop after being run ragged and still not being able to pay the bills with their sales, she founded 3 Cow Marketing to help others transform their marketing skills - including those selling fruits, vegetables, honey and cut flowers - and begin to live the life they dreamed.

3CowMarketing.com is an online marketing training company helping farmers in the U.S., Canada and around the world, learn the most current online marketing techniques to grow a successful business. Her book "Farm Marketing from the Heart" is an introduction to the in-depth concepts taught in her twice-annual marketing course. She helps farmers get results through coaching, mentoring and her podcast "The Profitable Mindset", a top-rated program helping farmers everywhere.

One participant in Charlotte's training program said "I feel like this knowledge has put me 20 years ahead with my business. What I mean is that it probably would have taken me 20 years to learn this stuff by trial and error, but you have handed it all to me at once in a neat little package."

Charlotte and her husband, Marc Rott, own a seasonal pastured poultry farm located in St. Paul, Oregon, producing a little raw milk, eggs, and poultry. She's the mother of 3 kids - two adults and just one left at home.

## **Features**

- Keynote address and presentations by knowledgeable speakers from across the nation.
- Educational information focusing on producers in Iowa, Nebraska, Kansas & Missouri
- Easy to reach venue offering great ADA compliant classroom spaces and the latest technology to support learning
- A la cart cafeteria dining experience with multiple choice stations
- Trade show featuring 50-plus exhibitors with the latest seeds, supplies, equipment and grower information
- Classrooms cafeteria and trade show all located within two connected buildings on campus
- Poster presentations with valuable current research
- Ergonomic tools hands-on learning clinic
- Free parking

# PRE-CONFERENCE WORKSHOPS

*Registration Opens 7:00 a.m.*

## **Food Safety Grower Training | 8:00 a.m. - 5 p.m.**

The PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement outlined in § 112.22(c) that requires 'At least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.'

Pre-registration is required! Class size limited to 50 participants.

Participants must be present for the entire eight-hour course to receive certificate.

### **Welcome, Introductions, Course Expectations**

**Introduction to Produce Safety** - Joe Hannan, ISU

**Worker Health, Hygiene, and Training** - Connie Fisk, Produce Safety Alliance

**Soil Amendments** - Cal Jamerson, KSU

**Wildlife, Domesticated Animals, and Land Use** - Joe Hannan, ISU

**What is an On-Farm Readiness Review** - MO Dept of Ag

**Agricultural Water - Part I: Production** - Connie Fisk, PSA

**Agricultural Water - Part 2: Postharvest** - Cal Jamerson, KSU

**Postharvest Handling and Sanitation** - Connie Fisk, PSA

**How to Develop a Farm Food Safety Plan** - Cal Jamerson, KSU

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## **Industrial Hemp 101 | 8:30 a.m. - 5 p.m.**

Following year one of pilot programs in Kansas and Nebraska, the recent Farm Bill has our entire Great Plains region preparing for commercial hemp production in 2020. Despite serious excitement for this new specialty crop and its potential to offer local producers greater diversification, there are serious challenges facing the local industry. This comprehensive workshop will cover hemp agronomy, IPM, legal requirements, local market opportunities, farmer crop reports, and early results from research activities at local colleges. Register today!

### **Welcome, Introductions, Course Expectations**

**Introduction - Definition, Background and Status of Current Regulation**

**Intro to Hemp Agronomy & K-State 2019 Field Report** - Jason Griffin, KSU

**"How Can I Sell My Hemp Crop?" Processing and Marketing** - TBA

**Regional Review of State Hemp Regulation** - Break-out Sessions with State Dept. of Ag Representatives

- Missouri - Alan Freeman, MDA Hemp Program Manager; Lyndall Fraker, Missouri Medicinal Marijuana Program
- Kansas - Braden Hoch, KDA Hemp Specialist
- Nebraska - Trevor Johnson, Certification Specialist
- Iowa - Robin Praisner, IDALS State Entomologist

**Hemp IPM** - Nicole Gauthier, Univ. of Kentucky

**UNL Greenhouse and Field Research Report** - Ismail Dweikat, UNL

### **THC, CBD, and Cannabinoid Testing for Hemp Growers**

- Eleni Pliakoni & Tricia Jenkins, KSU

**Grower Presentations & Panel Discussion**



**THURSDAY, JANUARY 9, 2020**

## **Honey Bees & Beekeeping | 8:00 a.m. - 5 p.m.**

Want to get into beekeeping? Already have a buzzing apiary? This workshop starts with the basics and then teaches you how to expand your hobby into a business with advanced beekeeping methods. This workshop will be presented by Grant Gillard, author of *Organic Beekeeping* and President of the Missouri State Beekeepers Association.

**Welcome, Introductions, Course Expectations**

**Part 1: What to think about when you're thinking about getting into honey bees**

**Part 2: How to get started in beekeeping**

**Part 3: Stepping into your second year**

**Part 4: Honey production.** Five critical steps to producing a honey harvest and streamlining your extraction process. Also a quick overview on marketing your honey crop.

**Part 5: Raising queens and making nucs.** Exploring the options of producing your own queens, saving money on replacement bees and the possibilities of raising a few nucs to sell.

**Part 6: Pushing the boundaries of your backyard hobbies.** What are your options to expand? Seven key factors in developing remote apiaries (outyards).

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## **Drip Irrigation Systems from Design to Production | 8:30 a.m. - 5 p.m.**

This workshop will address a variety of topics for drip irrigation systems in fruit and vegetable production. Topics to be addressed will include: Water Sources, Engineering the System, Quality & Quantity, Regulatory Considerations, Biological Water Demand, System Components, Fertigation, Smart System Controls, and more.

**FSMA Considerations, Crop Water Needs, Water Infiltration & Soils, Types of Irrigation** -  
*Jim Quinn, MU*

**Biological Water Use by Plants, The Need for Irrigation** - *David Trinklein, MU*

**Engineering Aspects of Irrigation Systems, Water Sourcing, Movement & Pressure: Part I** -  
*Joe Zulovich, MU*

**Fertilizing with Drip Irrigation Systems (Fertigation)**  
- *Cary Rivard, KSU*

**Irrigation Systems, Water Sourcing, Movement & Pressure: Part II** - *Joe Zulovich, MU*

**System Materials and Hardware Options** -  
*Dan Downing, MU*

**New Age Sensors, Controllers and Digital Technology** - *Jianfeng Zhou, MU*

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## **Cultivating Your Legally Resilient Farm | 8:00 a.m. - 5 p.m.**

A practical workshop that gives farmers the resources to address the legal basics of land use and leasing, farm financing, farm events, food safety, employees and volunteers, value-added production and business structures. Rachel Armstrong and Eva Moss with Farm Commons will present, along with Katie Nixon of Missouri and Tom Buller of Kansas with hands on experience using these principles in their farm operations.

**Welcome, Introductions and Module 1: What is farm law and why does it matter?**

**Module 2: Business Structures**

**Module 3: Insurance and Liability**

**Module 4: Farm Employment Law**

**Module 5: Land Use Issues**

**Module 6: Food Safety and Sales**

**Module 7: Diversification Through Agritourism, Processing, and Food Service**

**Conclusion: Action Plan Drafting, Closing Statements, Evaluations**

**Enjoy refreshments in the Trade Show area during breaks, plus a cash bar and snacks from 5:00 p.m. to 6:00 p.m. Thursday evening.**

# CONFERENCE AGENDA - FRIDAY, JANUARY 10, 2020

Registration and Trade Show open at 8:00 a.m.

9:00 a.m. - Welcome and Keynote | 3 Steps to a Profitable Farm

## Tree Fruit

**Growing Honeycrisp: the Good, the Bad and the Ugly** - Jon Clements, Univ. Massachusetts Amherst

**Drape Netting for KS High-Density Apple Production** - Zachary Hoppenstedt, KSU; Brice Gieringer, Gieringers Family Orchard & Berry Farm; and Gabe Spurgeon, South Baldwin Farms

**Pests that Plague Us, Michele Warmund, MU**  
**I can tell when to spray your orchard, and I don't even have to be there!** - Jon Clements, NEWA, RIMpro, Ag-Radar and Semios

**Updates on FSMA for Tree Fruit Growers** - Connie Fisk, PSA

**Biopesticides in Tree Fruit: Efficacy, Limitations, and Applications** - Nicole Gauthier, Univ. of Kentucky

**Trial and Tribulations of Establishing a High Density Orchard** - Vaughn Hammond, Vala's Pumpkin Patch

## Organic Farming I

**Growing Cover Crops for Soil Health and Reduced Input** - Vicki Morrone, Michigan State Univ.

**Organic Management of Key Vegetable Insects in the Midwest** - Donald Lewis, ISU

**Organic Management of Key Vegetable Nematodes in the Midwest** - Marisol Quintanilla, Michigan State Univ.

**FSMA in Organic Farming as Related to Irrigation Water, Soil Amendments, Time of Harvest, and Type of Crops** - Vicki Morrone & Phillip Tocco, Michigan State Univ.

**Organic Management of Key Vegetable Diseases in the Midwest** - Daniel Egel, Purdue Univ.

**Hygienic Equipment Design for the Small Farmer** - Phillip Tocco, Michigan State Univ.

## Vegetable IPM

**Nematode Management in Vegetable Crops** - Marisol Quintanilla, Michigan State Univ.

**Midwest Vegetable Production Guide: What's New at Your Finger Tips** - Ben Phillips, Michigan State Univ.

**Using Biocontrols to Manage Aphids in High Tunnels** - Elsa Sanchez, Pennsylvania State Univ.

**Scheduling Fungicide Applications in Cucurbits** - Daniel Egel, Purdue Univ.

**What's Wrong With My Plant? Assessing Grower Capacity and Grower Needs for Plant Health Questions** - Megan Kennelly & Chandler Day, KSU

**Resources to Scout for Vegetable Disease and Insect** - Lina Rodriguez-Salamanca, Iowa State Univ.

**Finishing Pumpkins and Decisions to Make Near End of Season** - Ben Phillips, Michigan State Univ.

## Greenhouse & Hydroponics

**Production and Marketing of Hydroponic Crops** - Steve Hamra, Amanzi Farms

**Food Safety and Risk Reduction in Hydroponics and Greenhouse Vegetables** - Steve Hamra, Amanzi Farms

**Greenhouse Planning: Structure Selection and High Tunnel Retrofits** - Stacy Adams, UNL

**Hydroponic Planning: Crop-based System Selection and Designs** - Stacy Adams, UNL

## Business Development

**Round Table: How are You Promoting Your Product?** - TBA

**Making Social Media Marketing Work For You** - Charlotte Smith, 3 Cow Marketing

**Enterprise Budgeting** - Emily Coll, ISU

**Round Table: What Accounting and Record Keeping Software are You Using?** - TBA

**Generate Profit From Your Website** - Charlotte Smith, 3 Cow Marketing

## Invasive Species

**From Crisis to Keystone Pest: Where We Stand Nationally on Spotted Wing Drosophila Research & Management** - Hannah Burrack, North Carolina State Univ.

**Economic and Ecological Effects of Emerald Ash Borer** - Wendy Klooster, Ohio State Univ. & Kevin Rice, Univ. of Missouri

5:00 PM Grower Association Meetings | Kansas, Nebraska & Missouri  
6:15 Innovation Night & Pizza Dinner

## **Invasive Species, continued**

**Integrating Tactics to Successfully Manage Brown Marmorated Stink Bug in Agroecosystems**, Tracy Leskey, *USDA ARS*

**Invasive Pest Threats** - Collin Wamsley, *MO Dept. Ag*

**Recent Invasive Insects in the Midwest** - Kevin Rice, *University of Missouri*

**Tracking and Reporting Invasive Species: Online Resources and How to Get the Most Out of Them** - Lina Rodriguez-Salamanca, *Iowa State Univ.*

# **CONFERENCE AGENDA - SATURDAY, JANUARY 11, 2020** *Registration and Trade Show open at 8:00 a.m.*

Programs Begin at 9:00 a.m.

## **Small Fruits**

**Spotted Lanternfly and Potential Impacts on Berry Production** - Tracey Leskey, *USDA ARS*

**Updates on National Spotted Wing Drosophila Research and Pollinator Health in Strawberries** - Hannah Burrack, *North Carolina State Univ.*

**Phytophthora and Berry Production** - Nichole Gauthier, *Univ. of Kentucky*

**What's Wrong With My Plant? Assessing Grower Capacity and Grower Needs for Plant Health Questions** - Megan Kennelly & Chandler Day, *KSU*

**Experience with Blackberry and the RCA Trellis** - Gabe Spurgeon, *South Baldwin Farms* & Patrick Byers, *MU*

**Considerations with Speciality Berries: Gooseberries, Honeyberries and More** - Patrick Byers, *MU*

## **Organic Farming II**

**Juggling Multiple Organic Markets** - Katie Nixon, *Green Gate Family Farm*

**How the Iowa Weed-Eater became the Colorado Potato Beetle, AKA the "Potatobug"** - Donald Lewis, *ISU*

**Gearing Up for Organic Certification** - Vicki Morrone, *Michigan State Univ.*

**Managing Swede Midge in Brassicas** - Ben Phillips, *Michigan State Univ.*

**Panel Discussion: Lessons Learned from Reading the New Organic Grower, the Lean Farm and the Market Gardener.** (Three popular books often referenced by small organic growers.) - Ben Phillips & Vicki Morrone, *Michigan State Univ.*

## **Cut Flowers**

**Looking Back, Looking Forward** - Karen Pendleton, *Pendleton's Country Market*

**TBA**

**Growers Roundtable** - Featuring Tim & Lynn Windmeyer, *Homeplace Fields*; Amy Shum, *Field and Florist*; Angela Tuner, *Belfiore Farm*; and Becca Monroe, *West Mill Flowers*

## **Vegetable Production**

**Soil Health and Irrigation Water Quality in Vegetable Systems** - Elsa Sanchez, *Pennsylvania State Univ.*

**Making a Mountain of a Molé Hill: The Story of a Specialty Chile Trial in Michigan** - Ben Phillips, *Michigan State Univ.*

**Cover Cropping and Nightshade Production at Pekarek's Produce** - Ryan Pekarek, *Pekarek Farms*  
**Using Compost on Vegetable Farms** - Elsa Sanchez, *Pennsylvania State Univ.*

**Novelty Melon Trial Results: Yield, Quality and Consumer Taste Testing** - Jim Quinn, *MU*

## **Business Financing**

**Show Me the Money: Grants for Small Farms** - Debi Kelly, *MU*

**USDA-RD: Value Added Producer Grant, REAP & FSA Financing Programs** - Brant Richardson, *Nebraska Dept. of Revenue*

**Risk Management: Whole Farm Revenue Protection**, John Schreiter, *Crop Insurance Solutions*; and a *Farm Service Agency* representative, *TBA*

**USDA-NCRS: EQUIP Funding for High Tunnels, Organic Certification Transition and More** - Corey Brubaker, *USDA/NRCS Nebraska*

**USDA-FSA: Micro Loans, Farm Operating Loans, Minority and Women Loans** - *TBA*

**End of Conference**  
**Have a safe trip home. We hope to see you in 2021!**