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AGRONOMIC CROPS TEAM (Agronomy Plots, just inside the exhibit area between gates B and C)

The OSU Agronomic Crops Team provides timely information to corn, soybean, wheat, and forage producers all year long. One tool the team uses is the weekly C.O.R.N. Newsletter at corn.osu.edu. At the Farm Science Review, we provide an overview of the work we do throughout the state. Ohio State University staff members will be in the plot area each day to visit with you about your problems and solutions.

We also have planned “Walk and Talks” each morning to hit on specific topics if you can spare about 15 minutes between 9 a.m. and noon each day. Topics for the “Walk and Talks” include: Manure Sidedress; History of Corn; Soil Health; Early Maturing Corn; NDVI: Getting to the Right N Rate; Variable Rate Seeding Soybeans; Cover Crop Choices and Reasons; and eFields On Farm Research.

Other demonstrations and equipment available in the Agronomy Plots area include: grid soil sampling, cover crops, grazing, precision sprayer, dual variety planter, hard hose manure applicator, soil health demos, and precision planter. We will have special group presentations each afternoon.

Tuesday, September 17

12–12:30 p.m.—Wheat and Barley Stand Evaluation, *Greg McGlinch* (CM 1/2)

1–1:30 p.m.—Herbicide Mode of Action, *Jeff Stachler* (PM 1/2)

2–2:30 p.m.—2019 Weather Review and Future, *Aaron Wilson* (CM 1/2)

3–3:30 p.m.—Why Fall Herbicide Applications, *Jeff Stachler* (PM 1/2)

Wednesday, September 18

12–12:30 p.m.—Phosphorus Management, *Greg LaBarge* (NM 1/2)

1–1:30 p.m.—P-index, *Libby Dayton* (NM 1/2)

2–2:30 p.m.—Herbicide Mode of Action, *Jeff Stachler* (PM 1/2)

3–3:30 p.m.—Best Management Practices, *Greg LaBarge* (SW 1/2)

Thursday, September 19

12–12:30 p.m.—2019 Weather Review and Future, *Aaron Wilson* (CM 1/2)

1–1:30 p.m.—New Tri-state Fertility Recommendations, *Steve Culman* (NM 1/2)

2–2:30 p.m.—Grazing Annuals, *Christine Gelley* (CM 1/2)

3–3:30 p.m.—Herbicide Mode of Action, *Jeff Stachler* (PM 1/2)

Be sure to stop by and pick up a copy of the 2018 eFields Report and take a virtual ride on the Digital Ag team planter with our 360 VR experience. Limited copies of the Ohio Agronomy Guide will also be handed out.

AG SAFETY AND HEALTH**Agricultural Safety** (Kottman St)

- Sun Safety
- Farm Safety Hazard Hunt
- Whole Body Vibration
- Hearing Loss Prevention
- Farm and Rural Stress
- Women In Ag

Our guest partner for the review is the Great Plains Center for Agricultural Health.

Ohio AgrAbility (Land Ave)

- Ohio AgrAbility Staff and Farmers Meet and Greet
- National AgrAbility Project
- Breaking New Ground/Purdue University
- Peer-to-Peer Network
- Ohio AgrAbility: A Focus on Livestock (*Interactive equipment and vendor exhibit for farming with a disability*)
- Universal Design in the Garage or Farm Shop (*in the McCormick Building on Friday Avenue*)
- “AgrAbility Bus” Shuttle Service to Field Demos (*pick up located at west end of Friday Avenue*)

8 Farm Science Review

- Peer-to-Peer Network Meetings 1–2 p.m. daily
- Fitness for Farm Life: Stretching and Everyday Exercises: 11 a.m. to noon daily
- Gardening Across the Lifespan: Tips for Gardening with Arthritis, Low Vision, and Other Age or Health-Related Conditions (*in the Utzinger Memorial Garden*) Tuesday 10 a.m.

ALUMNI AND FRIENDS TENT

(Beef St and Land Ave)

College of Food, Agricultural, and Environmental Sciences

Alumni and friends of CFAES or 4-H are invited to stop in between exhibits to take a break with us, visit with fellow alumni, and enjoy bottled water and a treat.

ANIMAL HEALTH (426 Friday Ave)**College of Veterinary Medicine**

- Ask a veterinarian?
- Veterinary Extension
- Veterinary Medical Center information
- Information for prospective students
- Public health

ASK THE EXPERT (426 Friday Ave)

All "Ask the Expert" talks are 20 minutes long.

Tuesday, September 17		
Time	Topic	Speaker
10:00–10:20 a.m.	Tax Strategies Under the New Tax Law	Barry Ward
10:20–10:40 a.m.	Climate Smart—Weather, Climate, and Extremes—Oh My!	Aaron B. Wilson
10:40–11:00 a.m.	Before the Pearly Gates—Getting Your Farm Affairs in Order	David Marrison
11:00–11:20 a.m.	Crop Inputs and Cash Rent Outlook for 2020	Barry Ward
11:20–11:40 a.m.	Farm Stress—We Got Your Back	Dee Jepsen
11:40 a.m.–Noon	The Legal Buzz on Hemp	Peggy Hall
Noon–12:20 p.m.	Current Status of African Swine Fever	Scott Kenney
12:20–12:40 p.m.	Farm Income Forecasts: Are Farmers Experiencing Financial Stress?	Ani Katchova
12:40–1:00 p.m.	How Much Money Stayed on the Farm? 2018 Ohio Corn and Soybean Production Costs	Dianne Shoemaker
1:00–1:20 p.m.	Where Are We on U.S. Trade Policy?	Ian Sheldon
1:20–1:40 p.m.	Farm Accounting: Quicken or QuickBooks?	Wm. Bruce Clevenger
1:40–2:00 p.m.	Commodity Markets—Finding Silence in the Noise	Ben Brown
2:00–2:20 p.m.	GMOs, Food Animals, and Consumers	Gustavo Schuenemann
2:20–2:40 p.m.	Solar Leasing Options	Peggy Hall and Eric Romich
2:40–3:00 p.m.	Poultry Backyard Disease Management	Geoffrey Lossie
Wednesday, September 18		
Time	Topic	Speaker
10:00–10:20 a.m.	Climate Smart—Weather, Climate, and Extremes—Oh My!	Aaron B. Wilson
10:20–10:40 a.m.	The Legal Buzz on Hemp	Peggy Hall
10:40–11:00 a.m.	Zoonotic Diseases: Can I Really Get Sick from My 4-H Project?	Jacqueline Nolting
11:00–11:20 a.m.	Solar Leasing Options	Peggy Hall and Eric Romich
11:20–11:40 a.m.	Where Are We on U.S. Trade Policy?	Ben Brown
11:40 a.m.–Noon	Impact of Peak Electric Demand Charges in Agriculture	Eric Romich
Noon–12:20 p.m.	Crop Inputs and Cash Rent Outlook for 2020	Barry Ward
12:20–12:40 p.m.	Commodity Markets—Finding Silence in the Noise	Ben Brown
12:40–1:00 p.m.	Public Perception Risk: Building Trust in Modern Agriculture	Eric Richer
1:00–1:20 p.m.	Farm Stress—We Got Your Back	Dee Jepsen
1:20–1:40 p.m.	How Much Money Stayed on the Farm? 2018 Ohio Corn and Soybean Production Costs	Dianne Shoemaker
1:40–2:00 p.m.	Poultry Backyard Disease Management	Geoffrey Lossie
2:00–2:20 p.m.	Tax Strategies Under the New Tax Law	Barry Ward
2:20–2:40 p.m.	CRISPR Gene Editing: Are Super Animals within Our Reach?	Scott Kenney
2:40–3:00 p.m.	Using On-Farm Research to Make Agronomic and Return on Investment Decisions	Sam Custer
Thursday, September 19		
Time	Topic	Speaker
10:00–10:20 a.m.	Horse Health Care and How to Feed a Horse	Dr. Eric Schroeder
10:20–10:40 a.m.	Farm Stress—We Got Your Back	Dee Jepsen
10:40–11:00 a.m.	Tax Strategies Under the New Tax Law	Barry Ward
11:00–11:20 a.m.	The Legal Buzz on Hemp	Peggy Hall
11:20–11:40 a.m.	Solar Leasing Options	Peggy Hall and Eric Romich
11:40 a.m.–Noon	Commodity Markets—Finding Silence in the Noise	Ben Brown
Noon–12:20 p.m.	Crop Inputs and Cash Rent Outlook for 2020	Barry Ward
12:20–12:40 p.m.	Antibiotic Use in Animals: Does It Impact Human Health?	Greg Habing
12:40–1:00 p.m.	Where Are We on U.S. Trade Policy?	Ben Brown
1:00–1:20 p.m.	Swine Biosecurity	Carlos Trincado
1:20–1:40 p.m.	Nutritional Support for Ruminants in Winter	Jeff Lakritz
1:40–2:00 p.m.	How Much Money Stayed on the Farm? 2018 Ohio Corn and Soybean Production Costs	Dianne Shoemaker

FARM OFFICE

(Firebaugh Building, 384 Friday Ave)

Visit with Extension professionals for information on agricultural law, farm management, and taxation to help you manage your farm office.

Ag Law and Farm Management

- Agricultural Law Bulletins
- Farm Based Foods Legal Guide
- Solar Leasing Guide
- Estate and Farm Transition Planning Fact Sheets
- Ohio Cropland Values and Cash Rents
- Crop Enterprise Budgets
- Ohio Farm Custom Rates
- Ohio Farm Business Summaries
- New Tax Law Effects on Farms

Ag Weather and Climate

The State Climate Office of Ohio (SCOO) will answer your weather and climate questions. Share your stories on how weather extremes have impacted your operations. We'll provide a review of this year's growing season weather and other seasonal outlooks. Learn about FARM: Field Application Resource Monitor, a tool providing real-time and historical precipitation forecasts to help with your farm management. For more information on SCOO, check out climate.osu.edu.

Central State University

Specialists from Central State University Extension will answer questions and provide resources on upcoming events and ongoing programs.

Nutrient Management

Visit us to learn about: how to better utilize manure nutrients; side-dressing corn with liquid manure; topdressing wheat with liquid manure; how many tons per acre your manure spreader applies.

Ohio Women in Agriculture

Are you a woman interested or involved in food, agricultural, or natural resource production or in a small business? Visit us for information about local, state, regional, and national networks, opportunities, and resources to balance farm, family, community, and business.

OSU Extension Resources

Visit us to learn how to access OSU Extension expertise and resources, including offices, publications, and fact sheets.

Water Quality

CFAES Water Quality Initiative uses science, innovation, partnerships, and education to improve Ohio's water quality. We are seeking input from stakeholders and Ohioans on the needs and priorities to improve Ohio's water quality. Visit us to complete the survey.

Career Exploration Fair (Celebration Tent near Gate I)
Wednesday, September 18, 10:00 a.m.–12:00 p.m.

NEW!

Visit with companies about employment or how to educate or train to become employees in agricultural businesses.

Energy Tent (near the corner of Land Ave and Kottman St)

The electrical demands of many farms have increased, requiring enhanced needs for high-quality electric to power equipment. The Energy Tent illustrates ways in which farmers can reduce energy usage, lower energy cost, and learn about ways to produce your own renewable energy.

Farm Bill Update (Celebration Tent near Gate I)

Wednesday, September 18, 3:00–4:00 p.m.

This session will provide an update on commodity programs authorized by the 2018 Farm Bill, as well as an overview of ARC/PLC enrollment decisions under current market decisions.

Farming the Crosshairs: How Markets and Policies Are Affecting the Farmer's Bottom Line

Tuesday, September 17, 10:00–11:00 a.m.

(Tobin Building, corner of Soybean Ave and Beef St)

Panelists: Ben Brown (moderator), John Newton, Ani Katchova, Ian Sheldon

Ohio's agricultural industry has been resilient in 2019, but not without noticeable scars. Delayed planting is showing economic ripples. Trade negotiations have suppressed exports. Choices under the federal safety net need to be made soon. These all add up to an unusual farm outlook.

Gwynne Conservation Area (See schedule in center of program)

The Gwynne is a 67-acre conservation area that offers programs, exhibits, demos, talks, and guided tours during FSR. Catch a shuttle to the Gwynne at the west end of Friday Ave. Shuttles run each day 9:30 a.m.–3:30 p.m.

Home, Health, and Wellness (McCormick Building, 389 Friday Ave)

College of Education and Human Ecology

OSU Extension Family and Consumer Sciences

- Universal Design exhibit—Tours 9:00 a.m.–3:00 p.m. daily
- Madison Health: Health screenings—10:00 a.m.–2:00 p.m. daily
- College of Nursing: Health screenings—10:00 a.m.–2:00 p.m. daily
- AgrAbility Universal Design garage display
- Lowe's Universal Design product display
- Madison County/London City Health District
- State Fire Marshal—Safety house exhibit
- Preventing opioid abuse: The 4-H medicine cabinet

Livestock Education Corral (495 Beef St)

Visit with Ohio State University researchers and Extension educators for information on beef Quality Assurance, Transport Quality Assurance with Hauling Cattle Demonstrations, and livestock educational resources.

Pesticide and Fertilizer Applicator Exhibit (1005 Beef St)

Learn to keep pesticides on target with the latest spray drift technology. Find out more about Ohio Pesticide Law, as well as Agricultural Nutrient Laws, and speak with experts about recordkeeping, PPE, and storage requirements. Inquire about training and recertification opportunities.

Restoration of Antique Tractors (Smith Farms Restoration)

(Tobin Building, corner of Soybean Ave and Beef St)

All talks begin at 1:00 p.m. **Tuesday:** Paint and Supplies; **Wednesday:** Sheet Metal; **Thursday:** General: Wire Harnesses to Ceramic Coating

SMALL FARMS CENTER

Sponsored by the Ohio State Sustainable Agriculture Team, the Small Farms Center provides information to smaller acreage farming operations. In addition to scheduled talks, poster displays are available on many topics relevant to small farm businesses.

Small Farms Center Tent (corner of Corn Ave and Beef St)

Time	Tuesday, September 17	Wednesday, September 18	Thursday, September 19
10:00 a.m.	Agronomic Management of Winter Malting Barley <i>Greg McGlinch</i> 30 minutes	PawPaws <i>G. Matt Davies</i> 55 minutes	Sulfur Availability in Your Fields for Crop Production <i>Sakthi Subburayalu</i> 30 minutes
11:00 a.m.	Small Fruit Production <i>Ryan Slaughter</i> 55 minutes	Are Livestock a Right Fit for Your Farm? <i>Elysia Rogers</i> 55 minutes	Controlled Environmental Agriculture: Aquaponics in 2019 <i>Matt Smith</i> 55 minutes
Noon	Greenhouse Strawberry Production to Extend the Ohio Market Season <i>Chieri Kubota</i> 55 minutes	Industrial Hemp in Ohio—What It Is and Is It Legal? <i>Lee Beers and Peggy Hall</i> 55 minutes	Getting Started in Dairy Beef <i>Jason Hartschuh</i> 55 minutes
1:00 p.m.	GMOs <i>Lee Beers</i> 30 minutes	Selling Farm Grown and Homemade Foods: Laws You Need to Know <i>Peggy Hall</i> 30 minutes	Alternative Agriculture <i>Mike Hogan</i> 30 minutes
2:00 p.m.	Selecting a Tractor for Your Small Farm <i>Jason Hartschuh</i> 55 minutes	So You Want to Learn About Mitigating Risk in Corn and Soybean Production? <i>Ben Brown</i> 30 minutes	Bee-ing a Good Neighbor—Getting Neighbors and Others on Your Beekeeping Team <i>Roy Ballard</i> 30 minutes

Small Farms Center Building (corner of Equipment Ave and Beef St)

Time	Tuesday, September 17	Wednesday, September 18	Thursday, September 19
10:30 a.m.	Economics of Malting Barley Production <i>Mary Griffith</i> 30 minutes	Glyphosate: Facts, Hype, and Best Practices <i>Jenny Andon</i> 30 minutes	Raising Backyard Chickens <i>Sabrina Schirtzinger</i> 30 minutes
11:30 a.m.	Highlights of the Germinate International Film Festival <i>Brooke Beam</i> 30 minutes	Comparing Corn Yield Response to Nitrogen Rates in Mineral and Muck Soils <i>Mark Badertscher</i> 30 minutes	So, You're Interested in Goat Production? <i>Trevor Corboy</i> 30 minutes
12:30 p.m.	Beyond Freezer Beef: Marketing Meat to the Consumer <i>Garth Ruff</i> 55 minutes	So You Want to Use a Walk-Behind Tractor <i>Dana Hilfinger</i> 30 minutes	FoodLink—A FREE Tool to Expand Farm Market Sales <i>Roy Ballard</i> 30 minutes
1:30 p.m.	Season Extension without a High Tunnel <i>Jacqueline Kowalski</i> 30 minutes	Wanted, Land to Farm: Getting Started <i>Suzanne Mills-Wasniak</i> 30 minutes	SARE Grants <i>Mike Hogan</i> 30 minutes
2:30 p.m.	Managing Your Pastures for Success <i>Debbie Brown</i> 30 minutes	Poultry Biosecurity for Small Farms <i>Tim McDermott</i> 30 minutes	Direct Marketing in Ohio <i>Hallie Williams</i> 55 minutes

Succession Planning (Skylight Financial Group)

(Tobin Building, corner of Soybean Ave and Beef St)

Tuesday, September 17, 2:00 p.m. and Wednesday, September 18, 10:00 a.m.

Turfgrass Plots (426 Friday Ave)

Talk with Ohio State University turf pathology experts about all of your turf needs. Look, touch, and walk on our turf show area for help choosing the right turf for your new lawn or renovation project. Find some help for that persistent problem you have been fighting in your yard. See an example of synthetic turf that's being used at all levels of sports fields.

Utzing Memorial Garden (near Friday Ave and Market St)

Presentations will take place in the gazebo, and Master Gardener Volunteers will be available throughout the garden to answer gardening questions. Ohio AgrAbility's "Gardening through the Lifespan" signs are scattered throughout the garden, and have tips for gardening with a disability, arthritis, low vision, or blindness. The West Central Ohio Beekeepers Association will answer questions about how to become a beekeeper and will show some of the equipment needed to get started.

Time	Tuesday, September 17	Wednesday, September 18	Thursday, September 19
9:00 a.m.	Herbs for the Garden <i>J. T. Benitez</i>	Growing Vegetables in Containers <i>Greg Meyer</i>	
10:00 a.m.	Gardening Across the Lifespan <i>Laura Akgerman</i>	Gardening for Pollinators <i>Elysia Rodgers</i>	Pesticide Safety in the Garden <i>Mimi Rose</i>
11:00 a.m.	Trees for Bees <i>Ann Chanon</i>	Make Your Garden a Haven for Pollinators <i>Denise Ellsworth</i>	Growing Garlic 101 <i>Carri Jagger</i>
Noon	Beekeeping 101: Your First Year <i>Peggy Gaines</i>		Beekeeping with Locally Adapted Feral Honey Bees <i>Dwight Wells</i>
1:00 p.m.	Helping Pollinators to Overwinter in Your Garden <i>Denise Ellsworth</i>	Home Lawn Care Basics—DIY <i>Greg Meyer</i>	The Benefits of Using Compost on Lawns <i>Pam Sherratt</i>
2:00 p.m.	The Wonderful World of Buckeyes <i>Ann Chanon</i>	Common Turf Challenges and What to Do <i>Joe Rimelspach</i>	Garden Tool Kit Favorites <i>Kathy McConkey</i>
3:00 p.m.	Ohio Weed Identification <i>Tom Davidson</i>	What Is Mozart Doing Now?... Decomposing <i>Thomas DeHaas</i>	Pruning 101—Tools, Techniques, Concepts <i>Rich Pearson</i>

ESPECIALLY FOR TEENS AND KIDS!**Future Buckeyes: Be the One!**

College of Food, Agricultural, and Environmental Sciences (Bailey Building, 383 Friday Ave)

Stop by to meet with academic experts from the College of Food, Agricultural, and Environmental Sciences at the Columbus and Wooster campuses. Our building features information and activities from 9:00 a.m. to 3:00 p.m. each day. High school students will learn about our majors and career opportunities.

College of Veterinary Medicine (426 Friday Ave)

Stop by our tent to learn more about becoming a student in the College of Veterinary Medicine.

Science and Technology in Ag and 4-H Tent (426 Friday Ave)

Join the Ohio 4-H program and explore STEM (science, technology, engineering, and math) in agriculture through hands-on activities at the 4-H Ag STEM tent. Learn how your 4-H or FFA project, or favorite class in school, is related to CFAES and a future career for you!

Hours: 8:00 a.m.–5:00 p.m. Tuesday and Wednesday
8:00 a.m.–4:00 p.m. Thursday

Hands-on activities: 9:00 a.m.–2:00 p.m. each day

Stamp Out Disease!

(426 Friday Ave, STEM Tent)

Interactive, hands-on learning with diseases in animal agriculture. Play the "Stamp Out Disease" arcade game and learn about bacteria facts and disease risks around the home.