2022 Conference Series AFRI PROJECT REPORT



The Organic Association of Kentucky

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INTRODUCTION

Nationally, farmers with certified organic operations report increased profitability, improved soil health and enhanced quality of life through greater economic stability. The Organic Association of Kentucky's (OAK) annual conference provides essential, regional access to organic research, technical assistance and foundational knowledge to farmers and growers interested in organic production in the Southeastern region of the U.S. OAK's 2022 Conference Series aimed to bridge knowledge gaps by bringing together multiple stakeholder groups (farmers, researchers, extension agents, certifiers, industry members, local food system workers and other organic stakeholders) and showcasing innovations in organic research and practices. Convening over 600 participants, the conference series built connections and created opportunities for deep knowledge transfer about sustainable production practices and organic markets.

The three-part 2022 conference series offered both virtual and in-person programming with the theme: Sowing the Seeds for Healthy Soils, Resilient Farms and Thriving Communities. The conference series featured science-based sessions and discussions on production and market solutions. Specifically, the series aimed to:

- 1. Host opportunities for science-based foundational knowledge transfer about organic and sustainable agriculture systems to increase the adoption of best production practices.
- 2. Increase human capital for organic agriculture in the region by hosting inclusive and accessible events as well as COVID-19-safe venues for farmers, researchers and other organic and sustainable agriculture stakeholders to support the momentum of this extensive and diverse network.
- 3. Identify and explore current challenges and opportunities for farmers using or interested in using organic practices in the region through interdisciplinary and interactive programming, live Q&A, panel discussions, cross stakeholder networking and participant feedback.

Conference series recordings are publicly available on OAK's website (<u>https://oak-ky.org/oak-conference-2022</u>) and on OAK's YouTube channel (<u>https://www.youtube.com/@OrganicAssociationofKentucky</u>).

MESSAGE FROM OAK'S DIRECTOR



We were thrilled to meet with farmers, researchers and agricultural professionals both virtually and in-person for the three-part OAK Conference Series in 2022. Attendees found inspiration in the sessions, connected with old networks and made new acquaintances. The events provided opportunities to learned about practices, tools and resources to advance their operation.

Participants were challenged to stretch in ways that led to new thinking about solutions to long-term problems we all face, and how we can work towards the solutions we need in Kentucky and the Southeast region. Through session conversations and participant feedback attendees worked to identify barriers to rapid adoption of organic practices in the region, while also defining needed research, resources, technical assistance and market development.

This event focused on growing resilience and creating the network of farmers, resources, value chains and communities making it possible for farms to thrive and regional food networks to grow wellness for all.

Participants made the most of this time together, sharing generously about successes and challenges, connecting with research and new resources, and making the most of expanded networks.

Brooke Gentile Executive Director

"We do this work so that all communities can gain the positive impacts of organic farming systems, and so more farmers are equipped for success and able to meet the needs of their communities." -Jennifer Taylor

CONFERERENCE SERIES 2022

The Organic Association of Kentucky's Conference Series' goal is to increase productivity and resilience of farming operations by increasing relevance of research and technical assistance, and by increasing networking and foundational knowledge transfer among extension agents, farmers and researchers. The Conference Series offered three events, reaching over 680 participants. The two 1-day in-person Conferences are located in proximity to distinct geographic farming hubs in Kentucky. The conference series offered **37** sessions that included facilitated Q&A, panel discussions, farm tours and short courses.



January – Virtual Conference

The Virtual Conference was designed to offer affordability, geographic accessibility and connectivity to prominent speakers. This first part of the conference series was held January 27-29, 2022.



March – Western KY Conference

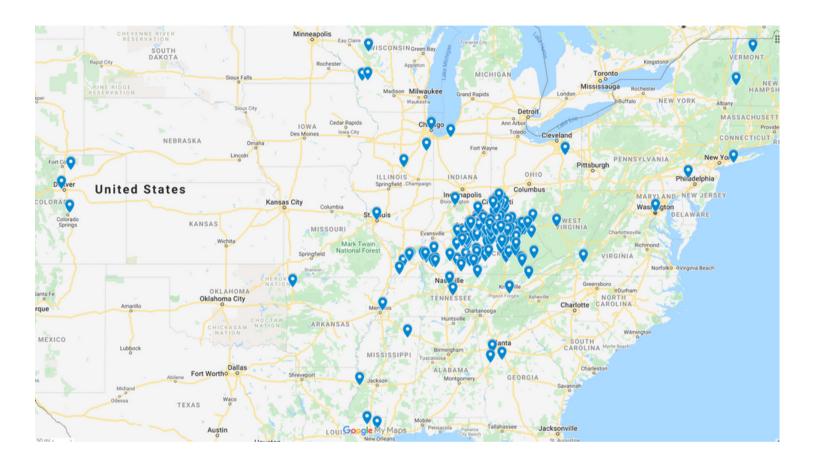
The in-person Western Kentucky Conference focused on soil micro-biology, row crops and organic feed, pasture management and organic dairy. This second part of the series was held in Hopkinsville, KY on March 18, 2022.



April – Northern KY Conference

The in-person Northern Kentucky Conference covered diversified vegetable production, organic pest management and developing new markets. This third part of the conference series was held in Burlington, KY on April 8, 2022.

PARTICIPANTS



686	Total conference series participants		
70%	Identified as farmers		
18%	Identified as Black, Indigenous or a Person of Color (BIPOC)		
19%	Identified as cooperative extension staff or researchers		

PARTICIPANTS

The conference series was designed to provide inclusive and accessible community learning experiences that strategically built the knowledge, connection and human capital of organic and sustainably-minded farmers, researchers, agricultural professionals and other stakeholders in the region. The three events aimed to connect Kentucky and Southeastern farmers with each other and with technical advisors and researchers to foster lasting connections and support the ongoing adoption of organic practices and management techniques. The Conference series engaged 686 participants and made 394 scholarships available. 22% of farmer attendees managed certified organic farms, 46% used organic practices but were not certified and 11% used conventional practices, demonstrating that an interest in learning more about organic practices is a priority among attendees.

Mus	Virtual Conference	In-Person Western KY	In-Person Northern KY
Diversified Produce	62%	51%	74%
Broad Acreage Row Crops	19%	46%	7%
Livestock	27%	39%	21%

Percentage of Farmer Participants by Production Type



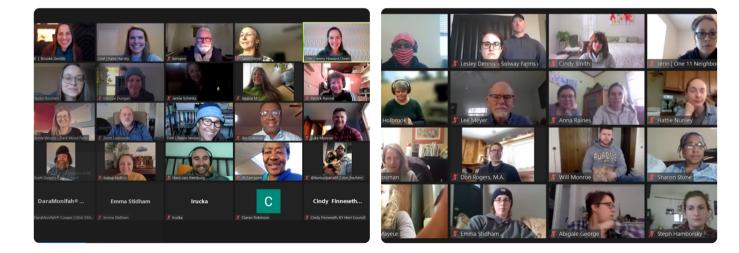


VIRTUAL PROGRAM

Online Conference, January 27-29, 2022



Hundreds of farmers, ag professionals, researchers and local food systems advocates gathered on Zoom during OAK's 3-day virtual conference.





SPEAKERS

Virtual Conference, January 27-29, 2022





JEFF ASHBA Organic Farm at Bear Creek **ADAM BARR** Barr Farms KRISTI DURBIN University of KY CSA **JIM EMBRY** Atrus Ballew Farm



REGINALDO HASLETT-MARROQUIN

Regenerative Agriculture Alliance

ADAM CHAMBERS

USDA NRCS



Mt Folly Enterprises

BEN PASLEY Mt Folly Enterprises

rtucky

MITCH HUNTER American Farmland Trust WATT HUTCHISON USDA NRCS - KY

TARA LITTLEFIELD Kentucky Nature Preserves **JASON NALLY** KY Department of Fish and Wildlife Resources



JOHN THOMAS HODGES

JENNIFER RANKIN

PATRICK RANVAL

TONY SILVERNAIL

JOHN WILHOIT



SPEAKERS



JENNIFER TAYLOR





JOHN KEMPF Advancing Eco Agriculture



BEN ABELL Rootbound Farm

DAVID GONTHIER University of Kentucky Dept of Entomology



University of Kentucky



MARK REED Kentucky Department of Agriculture



AMBER SCILIGO The Organic Center



The Food Connection,



MAGGIE DUNGAN Salad Days Farm

JESSE FROST Rough Draft Farmstead ANDY MCDONALD Cedar Ring Greens



FORD WATERSTRAT Sustainable Harvest Farm JEFF WINDHORST Spade and Table Farm



DAVID JOHNSON New Mexico State University; California State University-Chico



UK Horticulture Research Farm



SCOTT GOWERS Rolling Fork Farm



Virtual Conference, January 27-29, 2022

Ben Abell. Rootbound Farm. Ben Abell and Bree Pearsall are first-generation farmers operating Rootbound Farm, a 100% certified organic farm in Kentucky, for nine years. They offer organic vegetables, eggs, chicken and grass-fed lamb through a year-round webstore for local pickup and a robust CSA program delivering weekly to over 700 families. rootboundfarm.com

Kenya Abraham. Slak Market Farm. Kenya Abraham is a co-founder of Slak Market Farm LLC, a Micro-dairy outside Lexington where the Abraham family specializes in production of their signature raw milk and halal meat products. Kenya has a strong dedication to utilizing their farm as a place for serving the well-being of not only her family but the well-being of the raw milk community they have built through relationship farming. Kenya operates Stack A Story Bookshop, a 501c-3 nonprofit organization that brings kids into agriculture through Writing Workshops, Family Farm Stays, and Barnyard Expos. Kenya also works as a farmer liaison building relationships and working with others to push beyond the issues and limitations of systemic racism and bottlenecks within the industry that affect small farmers. She currently serves as a board member for Community Farm Alliance. In 2020 Kenya was awarded the Small Farmer of the Year Award from Kentucky State University and received the 2020 Emerging Leader Award from Community Farm Alliance. @slakmarketfarm

Jeff Ashba. Organic Farm at Bear Creek. Jeff, his wife, son and daughter-in-law started the 51 acre Organic Farm at Bear Creek (Ohio) in 2004. The farm grows certified organic vegetables and produces a line of value added products. Produce and products are home delivered to the consumer and available at several Cincinnati area retailers. Jeff and his wife host student farm tours and do presentations to local groups. Jeff holds a BS in Design from the University of Cincinnati, is a member of the Clermont County Planning Commission and sits on the board of the Cincinnati Permaculture Institute. organicfarmatbearcreek.com/

Adam Barr. Barr Farms. Adam Barr is co-owner of Barr Farms, a 6th generation farm in Rhodelia, KY. Barr Farms raises organic produce, grassfed beef, and pastured chicken and pork for CSA and farmers markets. Barrfarmsky.com

Bryan Brady. The Food Connection, University of Kentucky. Through the Cultivate KY Partnership, Bryan works directly with specialty crop producers and local food aggregators (e.g. Food Hubs and Produce Auctions), providing technical assistance and education on food safety (GAP, FSMA), quality management, and general wholesale readiness. Bryan helps farmers find cost-effective solutions to entering the local wholesale marketplace and connects them with resources to support them on that journey. @ukfoodconnect



Adam Chambers. NRCS Air Quality and Atmospheric Change Team . Dr Adam Chambers is a Scientist at USDA's Natural Resources Conservation Service (NRCS). Adam's work focuses on leveraging markets that value ecosystem services, building strategic partnerships, and getting 'more conservation on the ground.' His current focus is on conservation practices on managed agricultural lands that reduce greenhouse gas emissions and enhance carbon sequestration in soils, providing an emerging carbon market opportunity for US landowners and agricultural producers. Adam received his Doctorate from the Technical University of Vienna (Austria), Master of Environmental Management from the Yale School of Forestry and Environmental Studies, and his B.Sc. from Murray State University in Kentucky. nrcs.usda.gov/wps/portal/nrcs/main/national/climatechange/

Myrisa Christy. Kentucky Center for Agriculture and Rural Development (KCARD). Myrisa began working with KCARD in 2012 and brings over 10 years of project management experience to KCARD. Myrisa leads KCARD's work in Eastern Kentucky. Myrisa helps businesses with business planning and finding resources for their growing operations, with years of experience in diversified farm businesses. In Myrisa's free time, she loves hiking, playing in creeks, and anything outdoors. Kcard.info

Steve Diver. UK Horticulture Research Farm. Steve Diver has worked in alternative farming systems as a grower and researcher for over 35 years. He is the author of "Biodynamic Farming and Compost Preparation", "Alternative Soil Testing Laboratories", Nature Farming and Effective Microorganisms", "Controlled Microbial Composting and Humus Management", and more. He conducted the first biodynamic consultancies for USAID in Russia and India and served on the NOSB Compost Tea Task Force. Steve has worked as an Extension Horticulturist, soils consultant, and farm manager since 1984 – including 18 years as an agriculture specialist with ATTRA, the flagship sustainable agriculture program managed by the National Center for Appropriate Technology (NCAT). He is currently the Farm Superintendent at University of Kentucky's Horticulture Research Farm. https://research.ca.uky.edu/content/SouthFarm Maggie Dungan. Salad Days Farm. Maggie Dungan is owner and operator of Salad Days Farm, a certified organic farm located in Woodford County. Maggie grows a wide array of organic vegetables with sales to local restaurants, multiple farmers' markets, and an on-farm store. Saladdaysfarm.com

Kristi Durbin. UK CSA. Kristi Durbin has been farming at the University of Kentucky since 2012, and has been managing the UK-CSA program since 2016. UK-CSA has been in operation for 15 years and serves around 200 families. Kristi is also an instructor in the Sustainable Ag and Community Food Systems program in the Department of Horticulture at UK. @uky.csa



Daniel Eggert. High Mowing Organic Seeds. Daniel joined High Mowing in the fall of 2019 and is the grower representative for the Southeast. He gained farming experience through WWOOF and managing the organic division at Harris Seeds. These experiences sparked a love of food and a passion for organic agriculture. In 2020, he started Macedon Center Farm and grows diversified organic, no till vegetables and flowers on ¹/₄ acre. highmowingseeds.com

Jim Embry. Atrus Ballew Farm. Sustainable Communities Network. Jim is the 5th generation of family to occupy his 30 acre farm and is very blessed to continue the tradition of being agrarian intellectual activists at the local, national and international levels. Their farm serves as an environmental education center, a site for women's retreats and sweat lodges, an inspiration for pollinator habitats, beekeeping, medicinal herbs, heirloom seed production, genealogy research and much more. sustainlex.org

Laura Freeman. Mt Folly Enterprises. Laura Freeman is a farm entrepreneur from east central Kentucky. She founded The Laura's Lean Beef Company in 1985 and was the President and CEO for 23 years. After selling The Laura's Lean Beef Company, Freeman became a Donella Meadows Fellow and spent two years studying climate models and examining possible solutions to what clearly was a wicked problem. The knowledge she gained during this fellowship propelled her out of retirement, to set up a prototype of a local food system with a regenerative farm at the center. She returned to Mt. Folly Farm, raising certified organic crops and livestock; started a farm-to-table restaurant and a farm-to-bottle craft distillery; and launched an online mercantile for heritage grains and value-added products. mtfollyfarm.com

Jesse Frost. Rough Draft Farmstead. No-Till Growers. Farmer Jesse Frost runs a one acre, no-till market garden called Rough Draft Farmstead in Central Kentucky, USA with his Wife Hannah. Frost is also the host of The No-Till Market Garden Podcast and co-creator of NoTillGrowers.com roughdraftfarmstead.com

David Gonthier. UK Department of Entomology. Dr. David Gonthier is an assistant professor in the Department of Entomology at the University of Kentucky. His research seeks to evaluate the viability of agricultural management systems to curtail environmental problems, while maintaining farm productivity and profitability. His current research seeks to: 1) Identify alternative pest control practices that are organic compliant, profitable, and reduce the reliance on insecticide use. 2) Evaluate the costs and benefits of integration of poultry into vegetable rotations. 3) Optimize the profitability of organic, small-holder coffee production in Honduras. gonthierdavid.wix.com/djgonthier



Scott Gowers. Rolling Fork Organic Farm. Scott Gowers is entering his 10th season managing Rolling Fork Organic Farm in Boyle County. Scott farms 8 production acres, 7 high tunnels, & a greenhouse, producing diverse vegetables, herbs, flowers, and mushrooms. In addition to hosting a multi-farm CSA in Lexington & Louisville, the farm raises pasture-raised, non-GMO pigs and certified organic beef. rollingforkorganicfarm.com

Reginaldo (Regi) Haslett-Marroquin. Regenerative Agriculture Alliance. Reginaldo Haslett-Marroquin is an owner-founder of Regeneration Farms LLC, and Founder / President of the Regenerative Agriculture Alliance. He served as a consultant for the United Nations Development Program's Bureau for Latin America, as an advisor to the World Council of Indigenous Peoples, and was a founding member of the Fair-Trade Federation in 1994. Regi currently lives and farms at Salvatierra Farms, a 75-acre family farm home to Tree-Range® chicken and eggs in Northfield Minnesota. regenagalliance.org

John Thomas Hodges. Modern Heritage Farm. John Thomas Hodges is Co-owner and full time farmer of Modern Heritage Farm. A small scale diversified vegetable farm in Glendale, Ky focusing on low-tech organic growing methods to produce the healthiest products in a way that improves human, soil and environmental health. @modernheritagefarm

Mitch Hunter. American Farmland Trust. Mitch Hunter, Ph.D., is the Research Director at American Farmland Trust (AFT). He leads the Farms Under Threat research initiative and other efforts to protect U.S. farmland from development, mitigate climate change, and create thriving rural ecosystems. Mitch completed his Ph.D. in agronomy with a minor in ecology at Penn State University. ecoagronomy.org & farmland.org

Matt Hutchison. USDA Natural Resources Conservation Service - KY. Matt is a former Certified Crop Advisor and farmer who has worked for Natural Resources Conservation Service in Tennessee and Kentucky. He manages the Conservation Stewardship Program (CSP) and Agricultural Conservation Easements Program – Agricultural Conservation Easements in Kentucky (ACEP-ALE). CSP enrolls farm, ranch, and forest lands in contracts that encourage operation-wide management and conservation. Through ACEP-ALE, NRCS partners with private and public entities to place easements on agricultural lands, protecting valuable farmland from development. ky.nrcs.usda.gov

David Johnson. Institute for Sustainable Agricultural Research at New Mexico State University /Center for Regenerative Agriculture and Resilient Systems at California State University, Chico. David is a molecular biologist conducting research as Research Scientist at the Institute for Sustainable Agricultural Research at New Mexico State University, Las Cruces,



NM and an Adjunct Professor at the Center for Regenerative Agriculture and Resilient Systems at California State University, Chico, CA https://www.csuchico.edu/regenerativeagriculture/

John Kempf. Advancing Eco Agriculture (AEA). John Kempf is the founder of Advancing Eco Agriculture, a regenerative agronomy consulting company, and KindHarvest.ag, an agriculture social network. John is the host of the Regenerative Agriculture podcast, and is known for developing crop nutrition management systems that increase yields and profitability while reducing the need for fertilizers and pesticides. advancingecoag.com

Jann Knappage. University of Kentucky Cooperative Extension Service. Jann Knappage works for the University of Kentucky's Nutrition Education Program (NEP) as their Food System Specialist. Her work focuses on making local foods accessible to all Kentuckians no matter their socio-economic status. NEP Food System Initiatives include the Growing Your Own gardening publication series, Cook Wild Kentucky recipes and trainings, the Farmers Market Toolkit, Farm to School Hub Website, Recovery Center Gardens Pilot & Toolkit and more. Outside of work, Jann co-owns Fox & Hen Farm in EKY and co-founded the Red River Gorge Farmers Market. Accessible, local foods is much of her focus both professionally and personally. kynep.ca.uky.edu/

Tara Littlefield. Kentucky Nature Preserves. Tara Littlefield is the senior heritage botanist and manager of the Plant Conservation Section at the Office of Kentucky Nature Preserves. She also coordinates the states Plant Conservation Alliance and serves on the board of the Kentucky Native Plant Society. Tara has a B.S. in Biochemistry from University of Louisville and a M.S. in Plant Ecology from the University of Kentucky. @KentuckyNaturePreserves

Andy McDonald. Cedar Ring Greens. Andy McDonald and his wife, Connie Lemley, own Cedar Ring Greens, a certified-organic farm located near Frankfort, Kentucky. Cedar Ring Greens grows a variety of produce in all seasons, specializing in salad greens, cooking greens, and sweet potatoes, and have sold at the Franklin County Farmers' Market since 2005. Away from the farm, Andy works for Earth Tools, Inc., where he provides technical assistance for solar energy and green building projects as the Director of Apogee - Climate & Energy Transitions. fcmarket.localfoodmarketplace.com/Producers

Janet Meyer. Berea College Farm. Janet Meyer, Berea College Horticulture Manager, has worked with students to produce certified organic plants, seeds, fruit and vegetables since May 2009. Prior to joining the Berea College staff, she attended graduate school at UK, worked at



Kentucky State University, and graduated from Berea College. Before completing her undergraduate degree, Janet worked on farms in New Mexico, Maine, and Kentucky. farm.berea.edu

Dakota Moore. Kentucky Horticulture Council. Dakota joined the Kentucky Horticulture Council in July 2021 as the Grower Outreach Coordinator and began work on their Small Fruits Initiative and Specialty Crop Insurance Education Project. He comes to KHC with 6 years of experience in greenhouse production, greenhouse management, and public garden management and 3 years as a floral designer. Dakota lives in Western Kentucky with his many cacti. kyhortcouncil.org

Jason Nally. KY Department of Fish and Wildlife Resources. Jason Nally was born and raised on a beef cattle and tobacco farm in Loretto, Kentucky. Jason holds a degree in Wildlife Management from Eastern Kentucky University. After completing an internship with the Kentucky Department of Fish and Wildlife Resources and The Nature Conservancy, Jason traveled around the Commonwealth for ten years serving various roles within the USDA Farm Bill Program, Environmental Educator, professional wildlife biologist and manager of Star Hill Farm. Jason's current role is to coordinate public and private wildlife initiatives across the entire Bluegrass Region of Kentucky. fw.ky.gov

Mathieu (Mat) Ngouajio, Ph.D.. USDA National Institute of Food and Agriculture (NIFA). Dr. Mathieu Ngouajio is National Science Liaison for Plant Systems and Organic Farming at the National Institute of Food and Agriculture (NIFA). Prior to this position, Dr. Ngouajio served as a National Program Leader from 2013 to 2019 in the Institute of Food Production and Sustainability, where he administered competitive grant programs including the Organic Transitions (ORG), the Organic Agriculture Research and Extension Initiative (OREI) and the Agriculture and Food Research Initiative (AFRI). Prior to joining NIFA, Dr. Ngouajio was Professor in the Department of Horticulture at Michigan State University with a research and extension appointment. He received a Master of Science Degree in Weed Science and Plant Physiology from Virginia Tech and a Ph.D. in Weed Science and Plant Biology from Laval University (Canada). He completed a two-year Post-Doctoral Research at the University of California (Riverside) in Cropping Systems research. Dr. Ngouajio is a Fellow of the American Society for Horticultural Science (ASHS) and past Vice-President of ASHS. He represents NIFA primarily regarding programs related to plant systems as well as organic farming.

Ben Pasley. Mt Folly Enterprises. Ben Pasley is a 5th generation Kentucky farmer from Clark Count, y with years of experience raising tobacco, soybeans, corn, green bell peppers, hay, and a



cow-calf cattle operation. Ben graduated from Eastern Kentucky University in 2013 with a full scholarship. After college, Ben worked for Kentucky Governor Steve Beshear in his Policy and Legislative Affairs Office and later as the Governor's personal Executive Assistant. In 2016 Ben joined Mt. Folly Farm and Laura Freeman, and they went on to create the circular economy of Mt. Folly Enterprises, including Laura's Mercantile selling Laura's Homestead Alternative, and Wildcat Willy's Distillery & Farm To Table Restaurant. mtfollyfarm.com

Jennifer Rankin. Rankin Farm. Jen Rankin is a retired registered nurse and current small animal veterinarian. Together with family, she and her husband Chris purchased a 244-acre Anderson County farm in 2012, with organic certification since 2017. They raise and sell organic poultry, pork, and eggs at local markets and their on-farm store. rankinfarm.com

Patrick Ranval. Magney Legacy Ridge Farm. Patrick Ranval is the Horticulturist for the Magney Legacy Ridge Farm, a certified Organic farm in Princeton, Kentucky. Patrick holds a B.S. in Agriculture from Murray State University. When not working on the farm, he is spending quality time with his wife Hannah, or working to develop his agricultural records software, Seed Story Online. @magneylegacyridge

Mark Reed. Kentucky Department of Agriculture. Mark Reed is Produce Safety Program Manager for the Kentucky Department of Agriculture (KDA). kyagr.com/marketing/produce-safety.

Amber Sciligo. The Organic Center. As Manager of Science Programs for The Organic Center, Dr. Amber Sciligo works closely with researchers, industry, farmers, and policymakers to identify organic research needs, facilitate project implementation and communicate scientific results across the organic sector. She leads The Center's reports that compile current science on critical issues affecting organic food and farming, and heads The Center's grant-writing program. organic-center.org

Tony Silvernail. Beyond the Bridge Organic Farm. Tony Silvernail moved from Michigan to Kentucky 28 years ago to work for Kentucky State University and attend graduate school at the University of Kentucky. For 15 years he managed the organic research projects at KSU. In 2007, Tony started his own farm, Beyond the Bridge Organic Farm, in Franklin County. @BTBOrganic

Jennifer Taylor. Florida Agricultural and Mechanical University (FAMU); Lola's Organic Farm. Jennifer Taylor is the granddaughter of a sharecropper and BIPOC certified organic farmer in rural Georgia. Jennifer Taylor is an advocate for underserved small farmers and



their communities. At Florida Agricultural and Mechanical University (FAMU), Jennifer is associate professor where she created the FAMU State Wide Small Farm Program, a participatory capacity building sustainable development program that works to empower small farmers, build organic-capacity and enable organic benefits for all human beings. Jennifer currently serves as CoPresident of the International Federation of Organic Agriculture - North America (IFOAM NA), Convener of the Intercontinental Network of Organic Farmer Organizations - North America (INOFO-NA), and Vice President of the Organic Farmers Association. Jennifer is member of the Board of Directors for the Rodale Institute, Board of Directors for Georgia Organics, the Standards Board for the Real Organic Project, and member of the US Food Sovereignty Alliance. Jennifer serves as Advisor to the National Organic Coalition and the Cornucopia Institute. Jennifer Taylor served on the National Organic Standards Board for the USDA National Organic Program (2011-2016) and the USDA Beginning Farmers and Ranchers Advisory Committee (2014-2015).

Jacqueline Walters. University of Kentucky Cooperative Extension Service. Jackie Walters has promoted Farm to School in Kentucky throughout her career as an Extension Specialist, KY Department for Public Health administrator, Kentucky Action for Healthy Kids Chair, and Tweens Coalition member. She co-authored the Kentucky Farm to School Plan and KY Farm to School Curriculum, and was instrumental in the creation of the KY Farm to School Hub website. kyfarmtoschool.com

Ford Waterstrat. Sustainable Harvest Farm. Ford's journey to farming started unconventionally - as a competitive cyclist and school teacher. On his break from teaching, Ford picked up a summer job at Elmwood Stock Farm, where he fell in love with farming. On 35 acres of primarily leased fields outside London, Ford and Amanda, their three young sons, and his crew of 9 production and delivery staff have built and adapted systems to continually grow and improve their operation. A Certified Organic farm since 2010, Sustainable Harvest Farm has grown from a 15-member local CSA to a 420-member CSA serving Lexington KY to Knoxville TN. sustainableharvestfarm.com

Michele West. University of Kentucky Cooperative Extension Service. Michele West has over 20 years' experience in communications, education, distance learning, member engagement and marketing, positioning her to facilitate the development and maintenance of the KY Farm to School Hub. Related experiences include managing a social marketing research study to improve the dietary quality of SNAP-eligible Kentuckians through mobile technologies, and implementing multiple nutrition marketing, media and education efforts. kyfarmtoschool.com



John Wilhoit. Thistle's End Farm. John Wilhoit and his wife Sue Churchill operate Thistle's End Farm in southern Woodford County. They have a flock of Kahtahdin sheep, and John has been raising and selling organic vegetables for the past five years (certified for the past three). John was an extension specialist in Biosystem and Agricultural Engineering at the University of Kentucky from 2008 to 2016. thistlesendfarm.wordpress.com/

Jeff Windhorst. Spade and Table Farm. Jeff Windhorst, along with his wife Lisa own and operate Spade and Table Farm. As first-generation farmers, Lisa and Jeff turned their hobby farm and passion for growing good food into a functioning business 4 years ago. Located in eastern Jefferson County, KY, Spade and Table Farm is an organic no-till "back to the future" veggie-centric small-market farm that was certified organic in 2018. spadeandtable.com



Virtual Conference, January 27-29, 2022

Integrating Poultry into Vegetable Production Rotations. *Ben Abell, Rootbound Farm. David Gonthier, UK Department of Entomology.* There are many potential benefits to the integration of poultry into vegetable rotations, including: improved soil quality and health, which may lead to greater vegetable productivity, and overall farm profit. However, little research has validated these potential benefits. Further, there are many challenges to, and potential costs to integration that may keep many from adopting it. In this session, Ben Abell will discuss his strategy and experience integrating at Rootbound Farm. Additionally, Dr. David Gonthier, Assistant Professor at the University of Kentucky, will share his team's research findings from a multi-year study investigating the costs and benefits of integrating poultry into an organic vegetable rotation.

Panel: Food Safety on Your Farm. Bryan Brady, The Food Connection, University of Kentucky. Mark Reed, Kentucky Department of Agriculture. Amber Sciligo, The Organic Center. As food safety concerns are elevated in the policy and public eye, farmers are being asked to implement practices, protocols, and post-harvest tools which may be new to them. These Panelists will share free and cost-share resources, clarify policy and regulation, and explore challenges and frictions with Organic standards as they discuss and field questions from you - their farmer audience. Join the conversation and learn more about food safety as it relates to FSMA, GAP, NOP, and more.

Farmer, Ranchers and Private Forest Landowners Are Part of the Climate Solution. Adam Chambers, NRCS Air Quality and Atmospheric Change Team. Agricultural producers can voluntarily implement working lands conservation practices and deliver agricultural products and climate solution. The NRCS has identified conservation practices that sequester carbon and reduce greenhouse gas emissions. These voluntary conservation practices include cover cropping, agroforestry, crop rotations, nutrient management, and rotational grazing. Through the implementation of these NRCS conservation practices, agricultural producers have an opportunity to increase soil resilience, save time and money, and voluntarily pursue new and emerging markets that may lead to additional income from ecosystem service markets, such as carbon markets and renewable energy markets. Dr Chambers will share how we, as a farming community, can capitalize on the climate solutions and build an ecologically- and economicallyresilient future.

Crop Insurance for Organic and Farmers Market Growers. Myrisa Christy, Kentucky Center for Agriculture and Rural Development (KCARD). Dakota Moore, Kentucky Horticulture Council. Crop insurance isn't all corn and soybeans! In the last year, the Risk Management Agency has updated how those selling directly to consumers can use the Whole Farm Revenue Program,



reducing the paperwork burden. You no longer need records for individual crops to be insurable! This is a game-changer for small farms who want a safety net for their farm revenue.

Exploring the Integration of Minerals, Biology, and Energy for Plant Health and Pest

Resistance. *Steve Diver, UK Horticulture Research Farm*. Farmers commonly observe a relationship between soil fertility and plant health which brings up a lot of questions. This workshop will explore the integration of minerals, biology, and energy for plant health and how it relates to enhanced pest control. Advances in soil organic matter management and soil biology include multi-species cover crops, on-farm preparations, and microbial ferments. Soil testing and in-season crop monitoring have led to advances in targeted fertility programs, foliar fertilization, and fertigation schemes. The holistic farmers toolkit now includes biomagnetism, resonant frequencies, vitalizing water treatments, and related technologies that integrate biophysics with crop and livestock health.

Getting the Most out of Your Seed. Daniel Eggert, High Mowing Organic Seeds. Join your Regional Commercial Grower Representative from High Mowing Organic Seeds for a discussion that will help you optimize your seed investment and make the most of your growing space. We will provide a glimpse inside the quality control measures that seeds undergo before they are shipped to growers. We will then address some of the more common on-farm challenges to successful germination and vigorous growth for specific vegetable crops.

Customers, Climate, and Circular Economy Based in Agriculture. *Laura Freeman, Mt Folly Enterprises.* Our session will examine the elements of Mt. Folly Enterprise and Mt. Folly Farm's developing model of a climate-resilient farm economy, wholly dependent upon connection with customers, forward-focused for our climate, and circular in its "give and receive" economy built within the local community. The Mt Folly project is one of co-creating a local restaurant, a local distillery, a downtown storefront, and a mail order company run from a rural town. Once the system is in place and functioning well, the idea is to duplicate it in other rural areas of the Southeast. Join the conversation on how farms of any scale can use this model as a way to build your own circular, climate-resilient, farm-based economy.

Life as an Organic Farmer: A Decade of Observation. *Scott Gowers, Rolling Fork Organic Farm.* Scott will share stories from his experiences over the past 9 seasons farming at Rolling Fork Organic Farm, including organic crop production, CSAs, high tunnel production, livestock, vermicompost, mushrooms, and riparian and woodland management. A decade into the work, Scott will offer his perspective on land stewardship, building relationships on- and off-farm, pacing yourself as a farmer of diverse systems, and building towards "closing the loop."



Decolonization and Indigenization: A Foundation of Regenerative Agriculture. *Reginaldo (Regi) Haslett-Marroquin, Regenerative Agriculture Alliance.* This presentation will explore the precolonial ancestral roots of regenerative ways which gave origin to the current regenerative agriculture concept. We will explore practices preserved by native communities around the world who live according to their ancestral indigenous ways of thinking and being. These Indigenous communities have ensured the preservation of 80% of the biodiversity on Earth on no more than 20% of the Earth's land surface and have done so under the constant repressive genocidal attacks of colonizer societies. This presentation is a call to return to those proven ways of regenerating the planet so that we may feed the world going forward with dignity and justice.

Farmland Biodiversity and Conservation Panel. *Mitch Hunter, American Farmland Trust. Matt Hutchison, USDA Natural Resources Conservation Service - KY. Jason Nally, KY Department of Fish and Wildlife Resources.* This group of farm allies and conservation professionals will share the importance of, and resources for on-farm conservation of native species and wildlife habitat. Their work and their organizations view each farm as integral to landscape-scale efforts to promote thriving, connected ecosystems. Cropping, grazing, forest management, diverse habitats, and systems thinking are highlighted in this inspiring discussion.

Regenerating the Diversity of Life in Soils - Hope for Farming, Ranching, Nutrition, Environment, Health and Climate. David Johnson, Institute for Sustainable Agricultural Research at New Mexico State University/Center for Regenerative Agriculture and Resilient Systems at California State University, Chico. His keynote presentation will cover comprehensive information on why diverse soil biology and appropriate regenerative farming practices are important for the soil health and regenerate the agri-eco system. He will share some of his latest research data in both cropping land and grazing land. To include diverse cover crops; intentional grazing; fungal-rich compost/bioreactor.

Enjoy Disease-Free, Pest-Free Crops. John Kempf, Advancing Eco Agriculture (AEA). John will describe how to manage plant nutrition and microbiome integrity to enhance plant immunity and produce complete disease and insect resistance.

The Kentucky Farm to School Hub: Helping Kentucky Producers Feed Kentucky Children. Jann Knappage, University of Kentucky Cooperative Extension Service. Jacqueline Walters, University of Kentucky Cooperative Extension Service. Michele West, University of Kentucky Cooperative Extension Service. The University of Kentucky Nutrition Education Program has partnered with the Kentucky Department of Agriculture to produce an innovative website to



help producers and school food service purchasers locate one another and plan production, purchase, preparation and service of local food. View this pre-conference presentation to tour the website, and learn more about how it can work for you and Kentucky's children.

USDA National Institute of Food and Agriculture (NIFA) Organic Programs. *Mathieu (Mat) Ngouajio, Ph.D., USDA National Institute of Food and Agriculture (NIFA).* Learn about USDA National Institute of Food and Agriculture (NIFA) programs that support research, extension and innovations in organic and sustainable agriculture. Hear from Mathieu Ngouajio, the National Science Liaison for Plant Systems & Organic Farming about how NIFA has supported projects through the years. Learn about NIFA grant programs and related priorities in this prerecorded session.

Farmland Biodiversity and Conservation Panel. *Tara Littlefield, Kentucky Nature Preserves.* This group of farm allies and conservation professionals will share the importance of, and resources for on-farm conservation of native species and wildlife habitat. Their work and their organizations view each farm as integral to landscape-scale efforts to promote thriving, connected ecosystems. Cropping, grazing, forest management, diverse habitats, and systems thinking are highlighted in this inspiring discussion.

Customers, Climate, and Circular Economy Based in Agriculture. *Ben Pasley, Mt Folly Enterprises.* Our session will examine the elements of Mt. Folly Enterprise and Mt. Folly Farm's developing model of a climate-resilient farm economy, wholly dependent upon connection with customers, forward-focused for our climate, and circular in its "give and receive" economy built within the local community. The Mt Folly project is one of co-creating a local restaurant, a local distillery, a downtown storefront, and a mail order company run from a rural town. Once the system is in place and functioning well, the idea is to duplicate it in other rural areas of the Southeast. Join the conversation on how farms of any scale can use this model as a way to build your own circular, climate-resilient, farm-based economy.

Growing the Organic Movement. Jennifer Taylor, Florida Agricultural and Mechanical University (FAMU). Lola's Organic Farm. A key issue within global and local agricultural research and development is the need to positively focus on the sustainable development of small farmers, resource poor farmers and their families. Though these farmers make up to 80% of the world's farmers, often they have not had equal access and participation in programs and training designed to assist large producers and agribusinesses. Small farmers and underserved farming populations play an essential role as good food providers in their communities and the nation. Participatory capacity building strategies enable relationship building, access to organic



farming systems and organic-agroecology farm practices that empower underserved farming populations and their communities towards their own wellbeing and change.

Farmer-to-Farmer Innovations

Farmer Share: Round Bale Relocation. *Kenya Abraham, Slak Market Farm.* Moving big round bales of hay without big farm equipment.

Farmer Share: Bug Trap Hack. *Jeff Ashba, Organic Farm at Bear Creek.* A simple, cheap, reusable alternative to store bought sticky traps for the identification and controlling of a variety of flying pests (e.g., cabbage moths, whiteflies, aphids, thrips).

Farmer Share: Onion Starter Bed. Adam Barr, Barr Farms. Given how much space onions can take up, we followed the lead of other farmers and now start our onions in a propagation bed frame built inside the green house. About 30,000 onion plants come out of a 6x20 foot bed. Our modification is to use radiant heating below the plants and a simple plastic cover to get them germinated in January without turning on the main heat for the entire house.

Farmer Share: Gravel Snakes. *Maggie Dungan, Salad Days Farm.* Do you struggle with keeping tarps and row covers in place? We have the solution for you! Learn how to make your own gravel snakes and up your farming game. Guaranteed to change your life or money back!

Farmer Share: Stale Seedbed. Kristi Durbin, University of Kentucky Community Supported Agriculture (CSA). UK-CSA utilizes a custom stale seed bed implement in their bare ground production system. This tool effectively controls over 90% of weeds prior to seeding or transplanting.

Farmer Share: Pollinator Habitat. *Jim Embry, Atrus Ballew Farm. Sustainable Communities Network.* We began in June 2020 and completed our pollinator conservation project in October 2021 on 12 acres of our 30 acre farm using organic herbicide, cover or competing crop of crimson clover and native seeds from Roundstone Seed Company. This on- the-farm pollinator conservation project is part of my larger community work within the county and statewide to encourage every person to be engaged in creating the much-needed greater diversity of habitat and forage that will increase the diversity of our pollinators.



Farmer Share: Hands-Free Wash Station. *Jesse Frost, Rough Draft Farmstead. No-Till Growers.* One of our biggest duties on the farm is washing root vegetables--carrots, beets, turnips, radishes--and we've developed an efficient hands free wash station that can great reduce time and labor in this area.

Farmer Share: Allium Dibbler. John Thomas Hodges, Modern Heritage Farm. A simple, low cost tool that increases efficiency of planting allium crops. The dibbler is fully adjustable and allows you to quickly prep holes at desired spacing and depth all in one step and can be constructed from materials found on or around most farms.

Farmer Share: Haygrove High Tunnel – Reducing effects of wind on end walls and doors. Andy McDonald, Cedar Ring Greens. At Cedar Ring Greens we have a Haygrove high tunnel. The end walls of the Haygrove are secured to the hoops using "C" clips. The doors consist of a woven greenhouse plastic which is secured at the top by being clipped to a horizontal steel pipe. The bottom edge of the door is clipped to another steel pipe which gets rolled up and down to open/close the door. Two vertical posts on each side of the door provide a channel to guide and support the door as it rolls up and down. When the tunnel is constructed, the height and width of the door can be selected based on your needs. Our door openings are about 12 feet wide and 8 feet high. During windy days, the doors and end walls can flap a bit too much. To control this, we did two things. First, we installed "brush door seals" along the vertical posts, which serve to compress the plastic between the poles and hold it more securely. Brush door seals are commonly used to weatherize commercial roll-up doors. Second, we tie horizontal ropes across the doors and fixed sections of the end wall at about 30" and 60". The ropes go on the interior and exterior of the tunnel and provide additional support to the plastic. Together, these strategies greatly reduced the buffeting of the doors and end walls by gusty winds.

Farmer Share: One-person Silage Tarp Management. Janet Meyer, Berea College Farm. Moving a 50' X 100' silage tarp alone. Sometimes, we use silage tarps to kill vegetation prior to planting. We use a utility vehicle to drag the heavy tarp from one plot to another. Alternate pulling the tarp by the corners and the middle, thus not needing to roll and unroll it when we are only moving a short distance.

Farmer Share: Hoop Coop. *Jennifer Rankin, Rankin Farm.* I will be describing the versatile cattle panel hoop coop. It can be used as permanent housing for layers, turkeys and geese, or used as field tractors for broilers and turkeys. We have used these for pigs, goats and alpacas as well.



Farmer Share: Deer Defense Grid. *Patrick Ranval, Magney Legacy Ridge Farm.* The Deer Defense Grid is a simple but powerful tool for excluding deer from valuable vegetable crops on the small organic farm. It was developed by Patrick and Hannah Ranval on the Magney Farm after enduring two seasons of catastrophic crop losses due to deer. The grid can be quickly erected by one person from readily available components of movable electric livestock fence; it is patterned in such a way to prevent the browsing of deer, but still allow for the harvest of vegetables.

Farmer Share: Flipping Beds in High Tunnels. *Tony Silvernail, Beyond the Bridge Organic Farm.* Over the years, I've developed a SOP that helps me flip a bed from one crop to another in my high tunnels It does require a BCS, a bed rake, Jang Seeder and 45 minutes over two weeks. I have found that doing this from the end of November through December will help insure that I get a quick turnaround that allows for early harvests in late February.

Farmer Share: DIY rebar harvest wheelbarrow. Ford Waterstrat, Sustainable Harvest Farm. We had seen little strawberry wheelbarrows in pictures of strawberry harvests and decided that we'd like to utilize them instead of using the sleds that we had used for a couple of years-The Wheelbarrows are very lightweight, cheap to build, and are so useful. We really like using them to keep harvest totes and wax boxes off the ground. We used to spend several hours per week washing bins and now rarely have to.

Farmer Share: Three-Wheeled Machine Using Furrow Guidance. John Wilhoit, Thistle's End Farm. I developed this machine system when I was an extension specialist in Agricultural and Biosystems Engineering at the University of Kentucky, and have been using it to produce my own half acre of organic vegetables for the last five years. The simple concept uses furrows made by widely-spaced, narrow front wheels to guide the machine on the row with great precision, allowing for very close cultivation and freeing up the driver for accomplishing various operations in the establishment and maintenance of the crops.

Farmer Share: Non-toxic Fly and Wasp Control. *Jeff Windhorst, Spade and Table Farm.* Fruit flies: Use this "Kentucky special" fly trap to catch twice as many pesky fruit flies from your prep area and kitchen. Wasps: pest or beneficial? In high tunnels, shop/barn/garage, food prep area, try this non-toxic method for selective wasp removal.

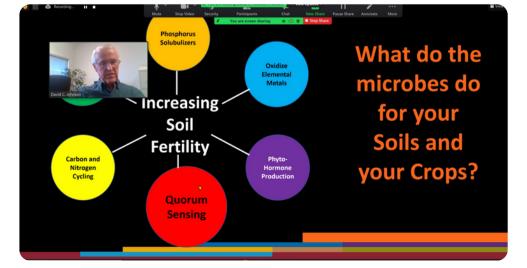




Each day, farmers shared presentations or videos of farming tips and tricks.



Conversations explored the power in making organic production practices mainstream and foundational to improving food systems for everyone.



Participants learned about soil health and methods to increase fertility.





Presentations showed variability in nutrient density among crops and how production practices and soil health influence nutrients in harvested crops.



Attendees heard about management strategies for integrating livestock and cropland to improve productivity and soil health.

Costs and benefits of rotational integration

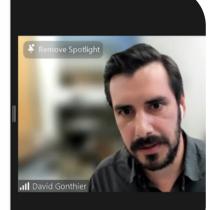
Lack of scientific data on integration

Does integration:

- 1. Increase soil health and crop productivity?
- 2. Increase food safety risk?
- 3. Benefit conservation of biodiversity and environment?
- 4. Increase farm profitability?

Vegetable - poultry integration







WESTERN KY Hopkinsville Conference, March 17-18, 2022



The in-person Western KY segment of the series was held in partnership with University of Kentucky Cooperative Extension in Christian County.





Attendees gathered in the extension expo and equine center.

Participants learned ecosystem solutions for dairy operations.



SPEAKERS

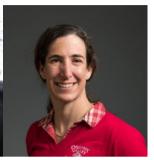
Western Kentucky Conference, March 17-18, 2022



JOHN KEMPF Advancing Eco Agriculture



University of Kentucky Dept of Plant and Soil Sciences KRISTA JACOBSEN University of Kentucky Department of Horticulture **GUY JODARSKI** Organic Valley



MEGGAN HAIN Organic Valley



MELVIN TROYER Rainbow Organic Dairy Farm & Kentucky Organic Farm and Feed, Inc.



NATHAN TROYER Rainbow Organic Dairy Farm





Western Kentucky Conference, March 17-18, 2022

Meggan Hain. Organic Valley. Dr. Meggan spent the first ten years of her career practicing in a primarily dairy practice in south-eastern Pennsylvania working with conventional and organic farms. Her focus in practice was on routine animal health and reproductive work, but her passion was working with farms to improve management practices to prevent disease and to improve farm productivity. She pursued a residency at the University of Pennsylvania focused on dairy cattle. In 2017 she joined Organic Valley as the Animal Care Specialist. She remains an advocate for farmers and dairy cattle and a proponent of finding practical solutions which keep farmers and their herds healthy and profitable.

Krista Jacobsen. UK Department of Horticulture. Krista has been conducting research in soil health in organic high tunnel systems in Kentucky for over a decade. When she doesn't have "tunnel vision" she teaches in UK's Sustainable Agriculture and Community Food Systems program and is the Faculty Chair of UK's local food systems institute, The Food Connection.

Guy Jodarski. Organic Valley. Guy Jodarski, DVM is based in Neillsville, WI and serves as lead Veterinarian for CROPP Cooperative/Organic Valley. He works in organic and sustainable livestock practice with an emphasis in dairy cattle herd health. Dr. Jodarski has been in practice for over 30 years. Dr. Jodarski serves on the One Health Committee of the Wisconsin Veterinary Medical Association (WVMA). He is also a member of the American Association of Bovine Practitioners and the National Mastitis Council.

John Kempf. Advancing Eco Agriculture (AEA). John Kempf is the founder of Advancing Eco Agriculture, a regenerative agronomy consulting company, and KindHarvest.ag, an agriculture social network. John is the host of the Regenerative Agriculture podcast, and is known for developing crop nutrition management systems that increase yields and profitability while reducing the need for fertilizers and pesticides.

Rebecca McCulley. UK Department of Plant & Soil Sciences. Dr. McCulley has been faculty in the Department of Plant & Soil Sciences at the University of Kentucky for 16 years. She has been Chair of the unit for 4 years. She is trained as an ecosystem ecologist. Her research program explores how climate change impacts agroecosystem structure and function and ways to build resiliency in these systems.

Melvin Troyer. Rainbow Organic Dairy Farm. Since 1998, Melvin Troyer has worked his family's Rainbow Organic Farm in Guthrie, KY, producing row crops and dairy cattle. After a significant loss of their herd due to disease in 1999-2000, Melvin's father John began rotational grazing, which brought their bottom line up and his disease pressure down. Melvin assumed



management of the farm in 2007, and in 2010, he gained Certified Organic status. Spurred by John Troyer's idea of a local organic feed mill, Melvin launched the Kentucky Organic Farm and Feed, Inc with a handful of partners.

Nathan Troyer. Rainbow Organic Dairy Farm. Nathan Troyer grew up tending the animals of his family's Rainbow Organic Dairy Farm, and in 2020, assumed management of the farm. Nathan currently grazes ~120 Fleckvieh cows on 4-year rotations of organic corn and hay and diverse cover crops, over 300 acres.



Western Kentucky Conference, March 17-18, 2022

Kentucky Livestock Farmers: Riding the Roller Coaster. *Meggan Hain, Organic Valley*. Over the past decades, Kentucky weather is getting wetter and warmer, and wilder! Dr Meggan will offer practical solutions for what livestock farmers can do to prepare for extreme weather such as heat, cold-wet winters, and extreme events such as tornadoes, floods, heavy snow, and drought. https://www.organicvalley.coop/

Sustaining Soil Health in High Tunnels. Krista Jacobsen, UK Department of Horticulture. In this session, Krista will talk about strategies and the state-of-the-science for maintaining healthy and productive high tunnel soils. She will draw from lessons learned from research at the University of Kentucky on movable and stationary high tunnels, maximizing cover crops while maintaining profitable crop rotations, and strategies to manage salts, organic matter and crop fertility. She will also discuss high tunnel soil and water testing and fertility management specific to organic high tunnels. sustainableag.ca.uky.edu/

Livestock as Part of a Healthy and Resilient Organic System. *Guy Jodarski, Organic Valley.* Building healthy organic livestock farms, in a time of climate extremes, starts with the soil and includes the entire diversity of life within the ecosystem. Through the use of animals in any farming system, we build resilience for our farm. Dr. Guy will speak to supporting animal health as essential to this resilience - including a focus on parasite management, fly control, and awareness of potential new disease threats. Although primarily based in solutions for dairy cattle, this presentation will provide benefit to any ruminant livestock farmers. organicvalley.coop/

KEYNOTE: Untapped Opportunities in Food Production. John Kempf, Advancing Eco Agriculture (AEA). We consistently harvest only a fraction of the yields and quality our crops are capable of. In this presentation, John will describe how to release untapped genetic potential, while regenerating soil and plant health at the same time.

Balancing Soil Health, Plant Health and ROI. John Kempf, Advancing Eco Agriculture (AEA). In this presentation John will describe how nutrient imbalances are often caused by excessive fertilizer applications at the wrong times. He will also discuss how the form of nutrients applied to a crop determines future availability (including how most commercial products actually reduce availability).

Climatic Resiliency of Kentucky Forage Systems. Rebecca McCulley, UK Department of Plant & Soil Sciences. Kentucky's climate is changing. How will this impact forage systems? Will Kentucky's current forage species adapt to future conditions? Will certain species win and



others lose? What consequences will that have for grazing animals? This session will explore how warming and altered precipitation are likely to impact Kentucky pastures. We will evaluate possible forage responses and attempt to predict the effects on forage production and animal performance. We will end with considering implications for Kentucky forage-based agroecosystems and identifying farm management strategies that might be employed to mitigate or capitalize on future changes. http://www.mcculleylab.org/

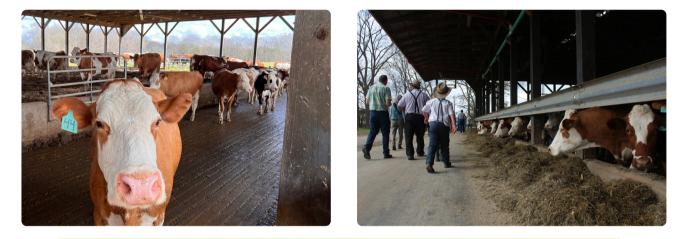
Expanding Opportunities in Kentucky Through Organic Feed Grains. *Melvin Troyer, Rainbow Organic Dairy Farm.* For over a decade, KOFFI has been a primary and growing source of organic feed for our region. What started as a small cooperative, supplying feed for local dairies, has now expanded to supply farms across 14 states. Over time, the mill's demand for certified organic grains has profited more and more Kentucky farmers - and the demand is growing faster than the supply! Learn how this cooperative business got its start, hear about the big impacts (and opportunities!) for local and regional farms, and see the inner workings of the mill systems and what it takes to mix, bag and deliver feed.

Organic Livestock, Forage, and Row Crops at Rainbow Dairy Farm. *Nathan Troyer, Rainbow Organic Dairy Farm.* On this farm tour, learn from Melvin and Nathan Troyer how they got started in organics and what it has done for the health of their herd, their farmland, and their bottom line! Visit their compost-bedded pack barn and their new milking parlor. Learn about the Troyers' strategies for maximizing forage quality and their improved organic crop rotations.



FARM TOUR

Western Kentucky Conference, March 17-18, 2022



Attendees met Rainbow Organic Dairy Farm's cattle at the compostbedded pack barn and saw design features that provide shelter for the animals while also managing manure and improving water quality.



A large group toured the farm to discuss pasture renovation, cool and warm season forages, forage quality, dietary requirements for milk quality, and grazing management.

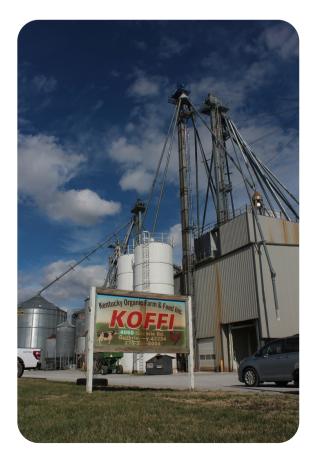


FEED MILL TOUR

Western Kentucky Conference, March 17-18, 2022



Participants toured Kentucky Organic Farm and Feed Inc. (KOFFI). KOFFI procures local organic grains and produces custom organic feed for poultry and livestock across the region.







NORTHERN KY

Burlington, KY Conference, April 8, 2022







OAK partnered with University of Kentucky Cooperative Extension in Boone County to host the NKY segment of the series.

Farmers, speakers, resource providers and State Representative, Rachel Roberts make new connections at the Trade Show during the Conference.

Participants learned about perennial crops and establishing agroforestry systems in ways that compliment existing farming operations.



SPEAKERS

Northern Kentucky Conference, April 8, 2022



ANNIE WOODS Dark Wood Farm



DAVID WILLOCKS The Baker's Table Restaurant & Bakery



JOEL DUFOUR Earth Tools



SANDY & JEFF ASHBA Organic Farm at Bear Creek



LINDSAY REBHAN Ecological Design



CASSIA HERRON Louisville Community Grocery, Louisville Association for Community Economics



APRIL PANDORA Eden Urban Gardens



KEVIN ARCHER Dandelion Ridge Farm





SPEAKER BIOS

Northern Kentucky Conference, April 8, 2022

Kevin Archer. Dandelion Ridge Farm. Coming from a long line of subsistence and tenant farmers, Kevin Archer grows culinary herbs and specialty produce at Dandelion Ridge Farm in Woodford County. He has established and cultivated gardens from coast to coast, from USDA Hardiness zones 5b to 8b. Also a certified chef, Kevin has led kitchens from Denver to Mendocino, from Santa Fe to Manhattan. His culinary background informs many of the growing decisions made at the farm, which he operates with his partner Abbie Rogers. Kevin has presented at a wide range of conferences, touching on agriculture, ecojustice, activist art, and the power of progressive movements. YES! Magazine includes him among their "Chefs We Love."

Jeff and Sandy Ashba. Organic Farm at Bear Creek. The Ashbas with son Darrick and daugherin-law Libby established the Organic Farm at Bear Creek 17 years ago. We grow a variety of vegetables and produce a line of value added products. Sandra's background includes restaurant ownership and local government. Jeff's includes the design and construction of food production facilities. organicfarmatbearcreek.com

Joel Dufour. Earth Tools. Joel grew up on a small farm in Southern Indiana where the family businesses included a small engine shop, selling organic produce in the summer, and firewood in the winter. Joel started his own business, Earth Tools, in Indiana in 1993, and then moved it to Kentucky in 1998. Located in southern Owen County, Kentucky and employing 16 people, Earth Tools is currently the nation's largest sales & service retailer of walk-behind agricultural equipment and is a supplier of high-quality gardening tools as well. Joel has no "formal" education, being home-schooled and then attending "the college of hard knocks." Joel, his wife and 2 daughters live north of Frankfort, KY in an off-grid home they built by hand. Joel has been using, selling and repairing walk-behind agricultural equipment since 1980, and he still uses only walk-behind farming equipment to manage his own acreage. https://www.earthtools.com/

Mike Hass. Idyllwild Farm. Mike has run a four-season organic farm in Northern Kentucky for the past 10 years. Prior to that he owned and operated an organic farm in Connecticut in the 90s and has managed an urban farm in Cincinnati. Greenhouses, high & low tunnels- manufactured & DIY, have always been in the mix, as well as attempts at profitability. idyllwildfarm.com/

Cassia Herron. Louisville Community Grocery. Cassia Herron is a proud Kentuckian who has spent two decades working to transition Kentucky's agricultural and energy economies from extractive industries to democratized, community-owned, cooperative economies that advance equity and justice. Cassia is a co-founder of the Louisville Association for Community Economics



SPEAKER BIOS

and the Louisville Community Grocery and is a consultant in cooperative development, planning and strategy. As a writer, she has published work in the Courier-Journal, Lexington Herald Leader, and Louisville Magazine. Cassia is a graduate of the University of Louisville and holds a Masters of Urban Planning from the University of Michigan. @cassiaspeaks

April Pandora. Eden Urban Gardens. April Pandora started her career in food systems as a community health educator, yet her path was pulled more towards healthy food production. Working full-time in health education, she began working part-time for local farms, supplemented her Bachelor's degree with agriculture and horticulture classes, and ultimately earned a Sustainable Agriculture Management Certificate from Cincinnati State University. Since 2016, she's grown her own urban farm, Eden Urban Gardens LLC, from a backyard, 1200 sq. ft. endeavor to a multi-site, Certified Organic operation with more than 1/2 acre of biointensive vegetable, herb, flower, berry, microgreen, and orchard production.

Lindsay Rebhan. Ecological Design. Lindsay Rebhan is co-owner of Ecological Design, a womanowned land planning and design firm. A specialist in agroecology, land use, farm design and land management, Lindsay works with farmers, land owners, food nonprofits, and organizations to increase the natural wealth of land over time. Lindsay co-teaches an annual Regenerative Farm Design Course at Mastodon Valley Farm and an undergraduate course on Environmental Sustainability with HECUA at Lily Springs Farm. She is on the Advisory Council for the Southeast Minnesota Agrarian Commons and the Savanna Institute.

Dave Willocks. The Baker's Table Restaurant and Bakery. Dave Willocks is the chef/owner of The Baker's Table and The Baker's Table Bakery in Newport, KY. Dave is devoted to sourcing local seasonal ingredients directly from farmers to provide sustainably-sourced nourishing food. In 2019, less than a year after opening, The Baker's Table was named one of "The 16 Best New Restaurants in America" by EATER.COM and "#4 Best New Restaurant in America" by USA Today.

Annie Woods. Dark Wood Farm. Annie Woods grows for an 85-member CSA and restaurant clients on her small-scale diversified vegetable farm in Northern Kentucky. She started her career as an ecologist, then caught the farming bug in the Pacific Northwest. She returned home to NKY to start her own farming business in 2014.



SESSIONS

Northern Kentucky Conference, April 8, 2022

Embracing Invertebrates: Pollinator Habitat for a Thriving Farm Ecosystem. *Kevin Archer, Dandelion Ridge Farm.* Establishing pollinator habitats can boost our farms' productivity and increase their resilience. By fostering a tight integration between our crops and the natural systems around them, we can strengthen the invertebrate population, improve IPM, and positively affect our farms' overall health. Kevin will review methods and strategies for developing plots of various size and discuss the tools and materials necessary—most of which are already part of any working farm. Counteracting pollinator decline is regenerative and productive, not to mention abundantly beautiful.

Get Practical with Organic Farming: Tips From a Local Farmer. Sandy and Jeff Ashba, Organic Farm at Bear Creek. In this session you will learn simple, sustainable and economical organic methods for growing on small plots and home gardens. The Ashbas will share their experiences using everyday, economical and readily available materials and inputs such as homemade pest traps, companion planting, wood ash and pollinator planting. This discussion will help home gardeners and beginning farmers learn how to lessen their dependence on purchased inputs, especially chemical pesticides and fertilizers.

Walk-Behind Tractors for Small-Scale Agriculture. *Joel Dufour, Earth Tools*. If you have a small farm, you shouldn't have to buy BIG equipment to work it. Enter Walk-Behind Tractors, which are designed to work micro-farms efficiently and reliably. Explore the history, applications, construction, usability, and scale-appropriate nature of these versatile machines with Joel Dufour, who has been using, maintaining and selling walk-behind tractors since 1980.

Idyllwild Farm Tour. *Mike Hass, Idyllwild Farm.* Join us for this visit to Melbourne's Idyllwild Farm: 4 greenhouses, 5 high tunnels, and 3 acres in organic vegetable production. Mike Hass will share systems developed over 3 decades of growing in the Northeast and in Kentucky: seasoned variety selection, cover crops, early tomatoes, year-round greens, and efficient use of shade cloth, ground cover, and tarping.

Why Cooperatives are Good for Local Food System Development. *Cassia Herron, Louisville Community Grocery*. Participants will learn how cooperative development is challenging conventional thought in the community development sector while connecting a diversity of community leaders and enhancing local food systems.

Urban Farming for Profit: Overcoming Land Access and Capital Start-Up Challenges. April Pandora, Eden Urban Gardens. Hear the story of Eden Urban Gardens, LLC: a commercial USDA Certified Organic and Real Organic Food Project certified 1/2-acre, multisite working farm in the



SESSIONS

Cincinnati city limits. Learn how we found affordable land to purchase, funded start-up costs, navigated municipal red tape, and made a profitable farm business. We will also share our path developing trust within the local community and overcoming resistance to urban farming development.

KEYNOTE : Regeneration Nation. *Lindsay Rebhan, Ecological Design.* To be a Regeneration Nation means we are supporting agroecosystems and building communities that will endure. We are hopeful when we look at our future and have the tools and knowledge to act. What are the critical leverage points and the most needed skills of our time? We will look at some of the most exciting regeneration tools and acts of our time. As we evolve with the land it is vital we connect with ancient wisdom and balance with appropriate technology. The way we plan our ecology is also the way we design our social realms. Healthy soil, clean water, and local foods are the ecologies that give us clear examples of how to thrive during turbulence. Everyday we have an opportunity to become a good ancestor.

Land Resilience and Regenerative Farm Design Workshop. *Lindsay Rebhan, Ecological Design*. This workshop will explore strategies for building regenerative farming systems and working landscapes. We will leave this workshop with an understanding of regenerative principles, observational exercises and tools to implement regeneration at any scale. Lindsay will share insights, lessons and stories from years of transitioning urban and rural lands. The workshop includes resiliency design examples, agroecosystem lessons and stories, land assessment, water & soil strategies, succession and its relationship to regeneration, understanding disturbance and monitoring success. We will leave with resources for taking the next step for your land!

Growing for Restaurants & Working with Chefs. Dave Willocks, The Baker's Table Restaurant and Bakery. Annie Woods, Dark Wood Farm. In this session, we will cover which vegetable crops are most successful for year-round sales to restaurant clients and how to execute a growing plan for restaurants alongside other market channels. We will also discuss how to successfully communicate with chefs, tips for successful deliveries, and keeping strong client relationships.



SESSIONS Northern Kentucky Conference, April 8, 2022

During permaculture workshop, attendees observe soil structure, discuss soil testing and fertility management.



Participants learn to select and establish plantings to increase pollinators and biodiversity.





FARM TOUR

Northern Kentucky Conference, April 8, 2022



A tour group visited Idyllwild Farm's intensive growing infrastructure.



Participants heard about the host farmers' early tomato growing practices.



SERIES RESOURCES

OAK's 2022 Conference Series was recorded, when feasible, and sessions can be publicly accessed:



OAK Conference Series 2022

On OAK's website:

 <u>https://oak-ky.org/oak-</u> conference-2022 Thank you to everyone who participated in the 11th Annual OAK Conference - a three-part Series in 2022! The OAK community adapted to the unusual year and planned this conference series to deliver high-quality content, while buffering the uncertainty that comes with a large conference center during a global pandemic. Team OAK extends huge gratitude to all who attended one or two or all three of the Virtual and in-person Conferences that spanned the early months of 2022.

The learning continues - watch all the sessions (for free) on OAK's YouTube channel! Agendas and speaker details are available below. Conference sessions covered an array of production topics, pest and disease management, soil health, regenerative organic agriculture, current research, livestock management, marketing, and food systems change-making. Watch the recordings to learn from experienced farmers and national speakers in sessions and keynotes.

> Watch Virtual Conference 2022

On OAK's YouTube channel:

- Virtual Conference Sessions 2022: <u>https://www.youtube.com/playlist?</u> <u>list=PLVbNZ-guznA0JOe8b3t2HjJTVdtojntBE</u>
- Western Kentucky Regional Conference Sessions 2022: <u>https://www.youtube.com/playlist?</u> <u>list=PLVbNZ-guznA3mKdysEGkYu-</u> <u>yFmOl0mvuN</u>
- Northern Kentucky Regional Conference Sessions 2022: <u>https://www.youtube.com/playlist?</u> <u>list=PLVbNZ-guznA2Osk_Q9OGsyC58yxDlnFIQ</u>



STAKEHOLDER FEEDBACK

During the conference series, OAK used virtual platform polls and session evaluations to gauge audience participation and seek program-specific feedback from **686 participants**. After each segment of the conference series, attendees were asked to provide feedback on the segment they attended. Analysis of all the surveys and input from series stakeholders were aggregated, with key outcomes shared below, demonstrating a change in knowledge, anticipated change in actions and behaviors and therefore likely long-term changed in conditions.

Key Indicator	Activity / Project	Data / Outcome
Overall conference series rating	Conference Participant Survey	 91% rated series "Excellent" or "Good"
Utility of conference educational programming	Conference Participant Survey	 92.2% "Definitely" or "Most Likely" will use learnings
Conference impact on larger community	Conference Participant Survey	• 83.3% "Definitely" or "Most Likely" will share learnings with community
Accessibility of conference programming	Scholarships utilized for registration	 394 scholarships requested and provided



Conference participants were asked about their **greatest production challenge**. Here are the results, represented in a word cloud:





Conference participants were asked to highlight what OAK's **priorities** should be in future programming. Here are the results, represented in a word cloud:

community education organic research farmer education mentors policy marketing

Stakeholder Identified Research, Resource, Market and Policy Needs

OAK's 2022 Organic Conference Series participants were prompted to share significant production or business challenges for their operations. Through session discussions and panels, farmer stakeholders and agricultural professionals worked together to identify opportunities and make recommendations for future research and information dissemination to support the adoption of organic practices throughout the region. The success of sustainable and organic production systems in providing economic opportunity for farmers has been driven by scientific research that is adoptable by stakeholders and continues to be identified as high priority. General research, resource, technical assistance and policy needs are identified here and a longer list is provided on subsequent pages.

With a high percentage of young and beginning farmers, many of the challenges identified are common for farmers that are just getting started and those that do not benefit from generational family farming. Throughout the conference series farmers, agricultural stakeholders and OAK staff shared resources that are useful in providing production knowledge, funding resources, or research opportunities.

OAK staff collected these resources and formatted them on OAK web page where everyone can access them: <u>https://www.oak-ky.org/farming-resources</u> and a downloadable PDF version is available in print at outreach events.

In most cases continued and expanded production technical assistance that offers crop planning, fertility management plans and soil test interpretation will significantly support these beginning farmers. Additionally, conversations continued to explore concepts of nutrient budgeting and soil balancing. A collaboration among organizations to develop a nutrient budgeting decision tool that is accessible to beginning farmers and appropriate for small and organic farms.

Stakeholder Identified Research, Resource, Market and Policy Needs

Farmers keenly feel the challenges presented by warmer temperatures, increased flooding and other extreme weather events. Experiencing these challenges first-hand, farmers highlighted the clear need for seed and breed genetics that are selected for success in the Southeastern growing conditions. Among many topics, participant discussions explored organic seed variety selection from brassicas and cucurbits to high gluten wheat, noting that these crops suffer unique regional pressures of pest and diseases, temperatures and rainfall. Additionally, participants continued to request strategies to improve soil health for more resilient crops. Conversations explored the economics of soil balancing and identified the need for an economic analysis of management strategies and a timeline to improve farmland with degraded soil health. In the southeastern region, often the most affordable farmland is cropland that has been degraded over decades, necessitating an assessment of efficient, affordable and holistic management strategies appropriate for small to mid-sized farms to rapidly improve soil health.

Access to information is of key importance for farmer stakeholders, researchers and other organic industry players and local food system stakeholders. The full scope of the organic industry economic impact in Kentucky or the southeast region is largely undefined, illuminating the demand for a comprehensive needs assessment of producers and industry actors. An overall organic industry economic assessment for the region that highlights impacts, infrastructure and projected growth should be conducted to illustrate the opportunities for interested farmers.



Stakeholder Identified Research, Resource, Market and Policy Needs

Identified Research Needs:

- Develop a nutrient budgeting tool that is accessible for small organic farms and can be used alongside soil test results to support decision-making for small farms using organic practices.
- Explore timelines and provide data on economics of fertility management when integrating crop and livestock systems on average cropland versus degraded soils.
- Explore organic seed breeding for brassicas and cucurbits that are well adapted to the Southeastern region.
- Compare organic and conventional corn, soy and small grains in rotation in response to increased demand for domestically grown organic grains and premium pricing opportunities to support farmers in the region. Specifically, many western Kentucky farmers inquired about enterprise budgets and a three-to-five-year study that offers guidance on management, yield and economics through a 3-year transition from conventional management to organic management.
- Assess capacity and identify gaps and opportunities of Kentucky nurseries
 producing agroforestry planting stock and certified organic annual
 transplants, both in terms of volume and regionally appropriate varieties.
 Farmers have noted a lack of local access to plants as a barrier to sector
 growth, identifying that not all farms have the infrastructure or desire to start
 their own plants.

Stakeholder Identified Research, Resource, Market and Policy Needs

Identified Research Needs Continued:

- Publish research and stories from farms in the region featuring scalable and accessible climate smart practices and emerging market access. Discuss management strategies that offer the largest impact in the Southeastern region. Explore the tension between carbon credits and GHG reduction in the marketplace.
- Research viability of no-till organic production on small farms and broad acreage farms in Kentucky. Identify no-till management strategies that are required for economic success in smaller, biointensive operations and large acreage, including yield data over time. Identify opportunities for technical assistance in managing no-till systems.
- Implement research on broad acreage crimped rye in organic systems over time, based on farmer desire to reduce tillage events and understand management, timing, germination and equipment considerations. Potentially include a Kentucky farmer working group to provide feedback on management techniques and assessing impact on productivity and weed management.
- Conduct an organic industry assessment and look at the economic impact of the sector in Kentucky.
- Invest in and conduct on-farm organic seed breeding projects that are relevant for Kentucky farmers.
- Conduct research and economic analysis on the use of the Biologically Enhanced Agricultural Management (BEAM) bioreactor that creates on-farm fungal-rich compost. Explore adoption of this and other soil health improvement opportunities at different scales and in the Kentucky climate.

Stakeholder Identified Research, Resource, Market and Policy Needs

Identified Production Technical Assistance Needs:

- Continue and expand Technical Assistance that is responsive to the needs of organic operations and small farms for crop planning, pest and disease management, nutrient budgeting, business planning and food safety.
- Provide recommendations for practical ways farmers can build on-farm resilience in response to new and extreme weather patterns.
- Host demonstrations of conservation practices at every possible farmer education event to grow adoption of conservation practices on the ground.in Kentucky.
- Host on-farm demonstrations of on-farm activities that could improve soil health and soil biology, in response to limited locally- available fertility inputs and cost of shipping. For example, farmers shared particular interest in the Biologically Enhanced Agricultural Management (BEAM) bioreactor that creates on-farm fungal-rich compost. The design of the system improves upon most composting systems, allowing plant material to be composted aerobically without needing to be turned.



Stakeholder Identified Research, Resource, Market and Policy Needs

Identified Marketing Technical Assistance Needs:

- Support farmers in storytelling and marketing their animal protein products and/or use of integrated crop and livestock/agroforestry and livestock practices, given the complication of livestock's role in climate change. As organic animal husbandry sits in the forefront of the climate change/regenerative ag discussion, one viewpoint offers that failures of the industrial CAFO model signify a need for consumers/the market to prioritize a plant-based diet. Alternatively, another view argues that livestock are critical to a self-sustained organic farming systems. Help farmers address these concerns in ways that are quantifiable and marketable.
- Invest in expanded marketing and value chain coordination for organic products, direct to consumer, wholesale and institution.
- Explore cooperative models for input purchases, vertical integration, sale increases and expanded market shares. Highlight success stories to inspire collaborations in the region.

Stakeholder Identified Research, Resource, Market and Policy Needs

Identified Educational Needs:

- Expand opportunities for peer to peer learning and explore mentorship programs, particularly with young and beginning farmers who are interested in organic practices.
- Support consumer education about the ingenuity and innovation of farmers using organic practices. Communicate a full story about organic production, including and beyond messaging that no prohibited pesticides and herbicides are used in organic production.

Identified Policy Needs:

- Coordinate learning opportunities about the Farm Bill in future years to support ag and food system stakeholders in connecting their needs and desired outcomes with policy discussions. Topics could include Farm Bill priorities, marker bills and overall legislative strategies. 2023.
- Provide a regular overview of organic and sustainable agriculture policy for interested stakeholders. Consider collaborating with Organic Farmers Association, National Sustainable Agriculture Coalition and regional organizations like OAK and Community Farm Alliance to find the synergies and connect the Kentucky farmer voice to the discussions.
- Continue to share the importance of increased funding for organic research. Continue to highlight the opportunities in organic markets and emphasize the need for specialized technical assistance.
- Increase funding for conservation practices and EQIP in the region and highlight the opportunities for an Organic Management Practice Standard.

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CONCLUSION

The annual Conference provided a critical mechanism for the dissemination of information to support a regional increase in foundational knowledge of organic and sustainable agriculture systems. Farmers and researchers participated in the program planning, ensuring relevant content. In 2022 this resulted in sessions and speakers addressing production practices that focus on minimizing ecological impacts, promoting soil health and biodiversity, improving crop quality, and ensuring food safety, while also supporting open conversations about regional challenges and opportunities related to production, markets and research needs.







Additionally, the conference series was designed with key discussions and networking opportunities to foster lasting connections that will support the ongoing adoption of solutions in organic production. This culture of sharing and engagement was a hallmark of the events, providing a welcoming and valued known feedback loop to identify challenges and research opportunities. These collected insights will shape research agendas and work plans in the coming years with the continual goal of allowing farms to increase yields and encouraging increased acreage to go into organic transition.

We encourage you to share your insights and needs, and stay engaged with this network that is creating expanded opportunities for farmers through organics in Kentucky.

ACKNOWLEDGEMENTS

OAK shares gratitude with all the people and organizations who collaborated with OAK on this project. It takes thoughtful planning and many hands to deliver the impactful conference events included above. It is through these ongoing relationships that the project was able to deliver meaningful learning and networking opportunities based on farmer identified needs. Many thanks to:

- The Conference Advisory Committee for broad insights, agenda design and speaker connections;
- Presenters at all three conference events for so joyfully sharing their time and expertise;
- The 2022 Planning Team for their dedication to the details and delivery of three events;
- Conference sponsors and collaborators who supported the conference series financially, with in-kind contributions and through expanded communications and outreach to promote the events;
- And to those farmers and agricultural professionals at the core of this project, we are grateful for the work you do everyday to advance opportunities for organic agriculture as land stewards, researchers and technical service providers.

Thank you to partners, collaborators, speakers and attendees who made the 2022 Conference Series a success!



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