



## ***2017 Healthy Farms Conference Breakouts Sessions!***

***Registration is still open!***

### **Friday, January 27th**

10:30 am

**A. “Blasting, biomulch, and cover crops: Multifunctional weed management tools for vegetable crops”:** Non-chemical and organic weed control can be expensive and time-consuming. The goal of my recent research efforts is to develop new weed management tactics that provide multiple functions and improve farming efficiency. Research on “weed blasting” seeks to integrate weed and fertilizer management in a single field pass. New and continued work on bio-based mulches and films are focused on achieving season-long weed suppression and soil water conservation, but also rapid soil degradation of the mulch after the growing season. Lastly, cover crop research is aimed at finding species and developing cultural practices to provide multiple functions including weed suppression and soil nutrient retention. The latest research findings and on-going studies will be discussed and feedback will be requested from attendees to help guide future research directions.

Sam Wortmann received a bachelor’s degree in biology and environmental studies from the University of St. Thomas in St. Paul, MN and a master’s degree and doctorate in agronomy from the University of Nebraska–Lincoln. He then spent 4 years as an assistant professor at the University of Illinois developing teaching and research programs in urban agriculture. Sam is now an assistant professor of environmental horticulture at the University of Nebraska – Lincoln. He teaches several classes in horticulture, and his research program aims to develop innovative management tools for local, urban, and organic specialty crop growers that increase yield and reduce labor without jeopardizing environmental quality.

**B. Resource Planning for Sustainable Pasture and Rangeland.** From a complete resource inventory to developing alternatives to designing practices to monitoring progress toward objectives, the Natural Resources Conservation Services provides a number of services to assist farmers and ranchers in planning for sustainable grazing land. An overview of the types of resource inventories NRCS can provide, including rangeland health and pasture condition assessments, available planning tools, and other technical assistance will be discussed in this session.

Nadine Bishop is the State Rangeland Management Specialist for NRCS in Nebraska. Nadine grew up on a small farm in North Central Kansas and received a B.S. and M.S. in Biological Sciences from Fort Hays State University. She has worked in various locations throughout Nebraska for NRCS including Chase, Dundy, Hitchcock, Hayes, Perkins and Lincoln counties in Southwest Nebraska and Brown, Keya Paha and Rock counties in North Central Nebraska.

### C. **Holistic Sheep & Goat Production;** The Double

M <<https://www.facebook.com/Double-M-138083779651280/>> features minimum/no inputs of: steel, diesel, fertilizer, herbicides, mechanically produced-harvested- delivered feed resources, antibiotics, anthelmintic, etc. through careful use of knowledge of sheep nutrition, and holistic pasture management principles, and, questioning the "conventional wisdoms" of modern livestock production. The program will revolve around discussions of aspects of grazing ungulate production as a means to long term sustainability of the land, livestock, and finances.

Mike Wallace was raised on a family operated 30 cow dairy in south central Ohio. His father bought him a Horned Dorset bummer ewe lamb for his 5th birthday. His flock grew to 100 ewes by the time he went to Vietnam for his senior trip. Later, he received degrees from Wilmington College in Ohio, and the University of Kentucky. For five years He worked as an Associate Animal Scientist, managing, and conducting studies on 1,000 ewes at the Dixon Springs Agricultural Center for the University of Illinois. Starting in 1978, he served as Sheep Operations Manager at the Roman L. Hruska U. S. Meat Animal Research Center until his retirement in 2012. Mike maintained his personal flock of purebred Dorset ewes until they were dispersed in 2006. During the late 1990's Mike, and wife Fran's interest transitioned to sustainable land management and livestock production. They own, and operate the Double M, a sheep-cattle- goat year-round pasture based operation.



12:00pm Lunch

1:30 pm

**A. Cover Crop Opportunities;** It takes approximately 500 years to replace 1 inch of topsoil lost to erosion. The minimal soil depth for agricultural production is 16 inches. From this perspective, productive fertile soil is a nonrenewable, endangered ecosystem. Cover Crops and Grazing are a just a few tools in our tool box that will allow us to not only keep the soil under our feet but keep the nutrients in place. Cover Crop Opportunities will discuss the benefits of cover crops as well as the opportunities that are available when cover crops are used.

Devin Lovgren is an Agricultural Consultant and is one of the owners of Veteran Ag Service in southeast Nebraska. He received his Degree in Agribusiness from the University of Nebraska - Lincoln in 2013 and has been advocating for the producer ever since. His passion for soil health and agriculture is what drives him to succeed every day. He believes that every producer should have a voice in our current market and actively finds ways for his producers to differentiate themselves and find untapped markets.

**B. Agriculture Leasing:** I will give a general overview of leases and focus on writing ag leases. I will also focus on the opportunities for beginning farmers and how leases are a great way to develop relationships with established farmers, ultimately aiding in transitioning the farm.

Amy Swoboda, the Farm and Food Attorney, works with the beginning farm and ranch project at Legal Aid of Nebraska. She currently works with any beginning farmer who is in need of legal assistance. Her background includes water law, food systems, land tenure issues, and agriculture law. Ms. Swoboda is a graduate of the University of Nebraska-Lincoln and attended the University of Idaho for graduate and law school.

**C. The Pro's and Cons of a Diversified Farm: a Realistic Look at Profit and Sustainability:** This session will use real world examples from New Earth Farm & Goods, as well as a few other permaculture farms on how to manage and not manage a diversified farm. You will learn about enterprise budgets, time/space management, cashflow, as well as tree, plant, and animals systems. Diversity is the key to making biological farms work; however, if so is capital. Sustainability must consider building both farm and farmer capital.

Jonathan Dodd is the executive director of Kepios, a non-profit focused on restoring people and place, and is the owner at New Earth Farm & Goods, in Papillion, NE. After completing his MDiv at Regent College, he began working with the rural coffee farming community of Santa Martha de Loma Azul, Nicaragua where his heart of mercy and justice for the poor met agriculture, sustainability and community development. Jonathan is an entrepreneur who has started and managed 2 farms, started a permanent organic market, a coffee company (twice), and a non-profit. Over the past 6 years he has worked in three different bioregions, including: tropic, sub-tropic and temperate climates. During that time he has continued to teach workshops on soil,

gardening and design. After completing a PDC course at Midwest Permaculture, Jonathan has sought to create sustainable and replicable models of abundance at New Earth Farm, inner city Omaha, and Nicaragua, as well as all the other fanciful models in his head. He loves homesteading with his spouse Catherine and 3 children, where they have planted thousands of trees, grow lots of food, and manage a diversity of animals.



3:00 pm

#### **A. Using a Flamer to control weeds in Organic Crops**

**B. Understanding Soil Health and dual purpose cover crops**, By Aaron Hird, NRCS/USDA. Soil Health is a broad concept that encompasses biological, chemical, and physical soil properties that sustain productivity, environmental quality, and support healthy organisms. The four Soil Health Management Principles are to keep the soil covered, disturb the soil less or not at all, keep a living root in the soil 10 or more months, and allow for lots of plant and root diversity. Integrating these principles with a livestock grazing management system can create an opportunity for a dual purpose cover crops. Discover multiple short and long term benefits for yourself.

Aaron Hird: Is the State Soil Health Specialist in Nebraska and have worked for the USDA/NRCS for 10 years. I grew up on a ranch, near Litchfield, in central Nebraska. I attended Chadron State College in western Nebraska where I graduated with a Bachelors of Environmental Biology, and minors in Plant Sciences and Wildlife Management in 2006. I primarily worked with the State Range. In 2016 I was selected for the new position of State Soil Health Specialist and am now located in Lincoln, NE. Initially I have guided the development, administration and inventory of 12 EQIP Cover Crop Adaptive Management Demonstration Farms across the state, as well as the worked to build partnerships with others promoting Soil Health in Nebraska

**C. Designing, Building & Maintenance Fences for Livestock;** Fencing: Mike will explain how to build a good hi-tensile fence and the keys to a resilient system. He will also discuss various options for portable water and grazing pivots.

Mike Anderson's heart and soul has been in the world of agriculture since his childhood days spent on his family's farm in South-Central Nebraska. As an international wildlife fencing & irrigation consultant working in the industry for more than 40 years, he's been sought after for his vast industry knowledge by numerous state and federal agencies, university researchers, dealers, distributors, landowners and managers. After years spent as a territory rep responsible for design training and sales of power fence products and irrigation systems, Mike has also parlayed his extensive knowledge into the design and construction of vineyards and orchards. When he's not spending his days traveling to support his valued customers and colleagues you can find him enjoying time with his family at his home in Lincoln.



## **Saturday, January 28th**

9:30 am

**A. Holistic Management Policy:** In the year 2000, Malcolm Gladwell wrote the book, *The Tipping Point*, in which he describes how little things can make a big difference. Understanding Holistic Management policy can contribute to sustainable agriculture's development, maturity, and impact on the world around us. Come join us as we take a brief view into some of its underlying principles.

Ralph Tate: Ralph is an engineer, served a career in the Air Force and worked in the aerospace industry for over 12 years. Ralph became interested in sustainable agriculture after a friend shared Joel Salatin's book, *You Can Farm*. Since then, Ralph has read extensively on sustainable agriculture, health and nutrition, and the importance of nutrient dense foods, such as grassfed beef. Ralph and his wife, Carolyn, are graduates of the first Nebraska Farm Beginnings class in 2006. He became a Holistic Management Certified Educator in 2010. During his CE training, he developed grazing planning

software following Allan Savory's approach to planned grazing. This software is now offered through Holistic Management International and has been purchased around the world. Ralph is currently a member of the Nebraska Sustainable Agriculture Society and a beekeeper. Carolyn comes from a family who has farmed in Jefferson County for over three generations. Ralph and Carolyn bought part of her family's farm, had it certified organic in 2008, and use it to custom graze cattle. They have four children and four grandsons.

**B. Using DriftWatch:** An introduction/background will be given on the Nebraska Department of Agriculture's Pesticide Program ([nda.nebraska.gov](http://nda.nebraska.gov)). The remainder of the presentation will be on DriftWatch/BeeCheck ([fieldwatch.com](http://fieldwatch.com)), a tool for increasing communication between commercial specialty crop growers and pesticide applicators. DriftWatch/BeeCheck is a web map that displays commercial specialty crop locations as well as non-specialty certified organic and non-specialty transitional organic crops and beehives. NDA and UNL Extension promote DriftWatch/BeeCheck to acreage owners, farmers and commercial pesticide applicators. An explanation of how this service works, a clarification of who is who and who does what, and what this service does and does not do will be provided. A brief demonstration of the website will also be given.

Craig Romary is an environmental program specialist with the Nebraska Department of Agriculture's Pesticide Program and is responsible for administering and coordinating the water quality, endangered species, and buffer strip sub-programs. Craig manages DriftWatch submissions for Nebraska, reviews pesticide applicator training material and pesticide product labels, reviews buffer strip program applications, and works with local, state, and Federal agencies in assessing pesticide water quality data.

**C. The true cost of Food: Does farm size matter?** We often hear that consumers don't pay the true cost of food because they don't have to pay for the negative economic impacts of today's industrial food system on the environment and on society. Economists call these ecological and social externalities. We also hear that farm size doesn't really matter when it comes to externalities, or that ecological and social sustainability is not a matter of scale or farm size. However, the economic externalities include but a small fraction of the total ecological and social costs and benefits of farming. When we include "all" of the internal and external costs and benefits, we find that farm size really does matter.

John Ikerd was raised on a small dairy farm in southwest Missouri and received his BS, MS, and Ph.D. degrees in agricultural economics from the University of Missouri. He worked in private industry for a time and spent thirty years in various professorial positions at North Carolina State University, Oklahoma State University, University of Georgia, and the University of Missouri before retiring in early 2000. Since retiring, he spends most of his time writing and speaking on issues related to sustainability with an emphasis on economics and agriculture. He currently resides in Fairfield, IA with his wife, Ellen, two dogs, and two cats. Ikerd is author of *Essentials of Economic Sustainability*, *Sustainable Capitalism*, *A Return to Common Sense*, *Small Farms are*

Real Farms, Crisis and Opportunity: Sustainability in American Agriculture, and A Revolution of the Middle. All books are available through Amazon.com via <http://johnikerd.com/books>. More complete background information and a wide selection of writings are available at <http://faculty.missouri.edu/ikerdj/> or <http://johnikerd.com/>



11:00 am

**A. Holistic Management Grazing:** Cover crops are a current topic of interest with graziers, and for some very good reasons. Join me as I walk through my experience of last summer grazing yearlings and cows, share some of my challenges, understand some fundamentals of soil health and fertility and discuss soil sample results.

Ralph Tate

**B. Farm Accounting:** Accurate financial records are important to the success of a small farm. Being able to track cash flow and know what your bottom line is, are crucial skills that help you make intelligent decisions about your operation. Accounting software need not be daunting, and there are now some good online options that weren't available just a few years ago. In this presentation we will walk through how to use Wave, a free, online accounting package that let's you securely access your records anywhere you have an Internet connection.

Gary Fehr is co-owner of Green School Farms, now entering its third year of production. The farm supplies food grown with organic principles through several channels including CSA, direct school sales, and online distributors. Gary's involvement in local food and related groups include: active in organizing Farm to School activities, Steering Committee of Lincoln Lancaster County Food Policy Council, President of Wachiska Audubon, member of Nebraska Sustainable Agriculture Society, member of Nebraska Farmers Union, and a former officer of the Nebraska Food Cooperative. In 2014 he completed the Farm Beginnings course sponsored by Nebraska Sustainable Agriculture Society. That same year he also completed an internship on an area organic

farm. His plan is underway to transition from a previous career in software engineering to full-time organic farming.

Shannon Moncure is also co-owner of Green School Farms. She is working towards her PhD in the School of Natural Resources at the University of Nebraska-Lincoln. Her research interests center on motivational factors that drive participation in local food and sustainable agriculture. She is a founding board member and past President of Nebraska Food Cooperative. She serves on the advisory board for SARE's Professional Development Program. She also consults on research projects involving local food.

**C. Using Tractors:** In this session, participants will learn about the decision-making process used to select a tractor and implements for a small scale (2 to 40 acre) agricultural operation. This session is intended for beginners with limited experience selecting farm equipment. Participants will explore how a tractor and implements can help them meet their farming goals, and features to consider when selecting a tractor and implements. The group will examine tractors currently on the market to explore their usefulness in meeting individual farming needs. Tractor maintenance issues will also be discussed.

Ron Rosati developed a passion for agriculture while working on the fruit, vegetable, and dairy farms of upstate New York. His early agricultural experiences were influenced by the Rodale Institute and the New Alchemy Institute. He received his associate's degree in agronomy from SUNY Farmingdale, his bachelor's and master's degrees in agricultural education from Cornell University and his doctorate from Iowa State University. He thoroughly enjoyed 19 years of undergraduate and graduate teaching and research in agricultural engineering technology, aquaculture and agricultural education at various institutions, including Texas A&M University-Kingsville, Illinois State University and the Ohio State University Agricultural Technical Institute. As a faculty member he published twenty-two refereed manuscripts and acquired forty-two externally-awarded grants totaling \$2.3 million. In addition to his academic experiences, Ron has been owner/operator of 4 farms range in size from 27 acres to 150 acres producing corn, soybeans, sheep, pigs, and wood products.. He also served a lead role in the construction and operation of a 20 acre commercial shrimp farm. He has been serving in various capacities as an academic administrator since 1999. He currently serves as campus chief executive officer for the Nebraska College of Technical Agriculture (NCTA), a unit of the University of Nebraska, which provides agricultural programming to approximately 300 residential students pursuing coursework primarily at the associate degree level. NCTA's educational programs focus on applied education and hands-on training for students interested in learning the skills necessary to be successful in production agriculture, veterinary technology, agricultural mechanics and horticulture. NCTA recently initiated the development of an Urban Agriculture program in Omaha in partnership with Nebraska Extension and the Omaha Home for Boys

1:30 pm

**A. Carbon Farming for Soil Health;** Carbon is the basis for healthy soil, in this session we will look how carbon is stored in the soil, give you a toolbox of proven carbon storing practices that can work from backyards to thousands of acres, annual to perennial crops & livestock. We will wrap up with an example from our place, Darby Springs Farm.

Crystal A. Powers is an Extension Engineer in Biological Systems Engineering at the University of Nebraska –Lincoln. Her research and extension involve the impact of livestock on agroecosystems. She is currently the Project Coordinator for the Animal Agriculture in a Changing Climate national Extension project where her focus has been on using science-based communication strategies. She has been involved in the development and application of the Nebraska Odor Footprint Tool and various other air and water quality technologies. She received her B.S. from University of Nebraska – Lincoln in Biological Systems Engineering and M.S. from Cornell University in Agricultural and Biological Engineering.

**B. The Tiny Farms Group; A Model for the Small Vegetable Farms;** Five very small farms in and near Lincoln are actively cooperating on crop planning, joint purchasing, marketing and deliveries. Can it work for other small farms?

Gene G. Gage is the owner of Heartland Organics near Martell, NE. His principal products are organically grown starter plants, vegetables and herb produce for restaurants. He was the founder and long time operator of Papa Geno's Herb Farm. His most important crop has been the group of interns, apprentices and mentees he has worked with for the past ten years, most of whom are growing food somewhere in America.

Skylar Falter, co-owner of RhizoCity Farms, organic certification specialist at OneCert, is a local food advocate and farm entrepreneur whose goal is to help build a more sustainable local food system in Lincoln, Nebraska. Her farming roots began at the UNL Student Farm where she planned and operated their first CSA program in 2014. After graduating with a B.S. in Biological Systems Engineering, Skylar gained practical knowledge of vegetable production as assistant farm manager at Lakehouse Farm. Skylar currently is co-owner of RhizoCity Farms, an urban farm in Lincoln using bio-intensive practices and soil ecology to grow healthy vegetables.

**C. Purchasing a Small Farm;** You're thinking about buying a small farm to pursue your dream. That's great, but how to find it and how to purchase? We will cover how to locate land, but more importantly, once located, what steps to take to make a successful purchase. This includes aspects such as negotiating a price, preparing a legal purchase contract without expensive realtor commissions, proper transition if it is currently leased to tenants, drilling a well, and many other considerations. The presenters have

recently completed a several-year search and closed on a small farm in 2016 that will allow them to take their vegetable operation to a permanent home.

Gary Fehr & Shannon Moncure



3:00 pm

**A. How to Start a Cooperative Farm**, the Big Muddy Urban Farm Story with Brent Lubbert

**B. Increasing Farm Productivity:** Do you find your biggest limit is lack of time? Does the end of the day come before the end of the work? As entrepreneurs, farmers and ranchers have to wear so many hats it can become overwhelming. The initial joy and passion that brought you into this business can be lost under a wave of burnout and frustration. When it ALL has to get done, what can you do? In this presentation we will look at some planning techniques and online tools that can help you track your priorities, eliminate unnecessary work, and use your time more efficiently.

Gary Fehr & Shannon Moncure

**C. Nebraska Permaculture:** If you saw last year's presentation, you may still want to see this one. Gus has improved upon the same theme with more perspective for the Nebraskan farmstead. Gus makes the case for using every inch of your Nebraskan land to improve your efficiency, safety, community, maintenance, management, wildlife, productivity and enjoyment. Through permaculture practices and ethics, Gus demonstrates easy ways to get into farming resourcefully with practical design improvements that allow you to achieve success more easily. Using climate change as an opportunity, he will also advocate for new ways to diversify the farm so the proverbial eggs are placed in many baskets. If you could use a different perspective on land

management to improve your farm or to eventually purchase a farm, please check out Gus's presentation.

Gus Von Roenn; Gus is an advocate for permaculture and sustainable practices throughout Nebraska. He works through many organizations like the Nebraska Farmers Union, the Sierra Club, Nebraskans for Solar, Nebraska Sustainable Agricultural Society, the Metro Omaha Food Policy Council and Omaha Permaculture to elevate the discussion of issues surrounding healthy food accessibility, land stewardship and entrepreneurship in low-income communities. His academic background is in anthropology, sociology, archaeology and permaculture while working in landscaping, photography and home remodeling to pay off school. Currently, Gus is a certified permaculture designer with his own Permaculture design consulting firm and landscaping crew to install the designs. He is also the founder of a nonprofit called Omaha Permaculture that accepts degraded, vacant land for restoration while providing space to incubate agriculture-related entrepreneurial opportunities. As an advocate for everything Permaculture and sustainability in Nebraska, he likes to help many organizations teach their constituents the limitless opportunities that create abundance in all of our communities for all of us to share.

*Register online today!*

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