

Spring-Grazing Cover Crops with Nebraska's Knuth Farms

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When a fourth-generation farm in Mead, Nebraska began to diversify their primarily cash crop operation in 2012, they gave some thought to cover crops and livestock. Knuth Farms didn't want to buy cattle or become beef producers, but they did want to diversify their income stream, capture some of the soil benefits of cover crops, and explore the benefits of grazing.

"We're not livestock producers and we didn't want to raise the cattle ourselves," explained Angela Knuth. "But we wanted to use the land resource that we had that was underutilized and make it more profitable in early spring before planting."

The Knuths wondered if a spring-grazed cover crop in their existing corn and soybean rotation could cover the cost of the cover crop seed. In 2016, Knuth Farms approached the University of Nebraska-Lincoln (UNL), where graduate student Ashley Conway teamed up with Beef Systems Specialist Mary Drennowski to help them develop a spring-grazed cover crop system with support from an \$11,997 NCR-SARE Graduate Student grant.

"That field is just sitting there doing nothing for us, so it made sense, with all the talk of cover crops and the benefit of them to the soil, to get those on our soil and in our field," said Knuth.

The Knuths planted cereal rye just after fall harvest—the cereal rye would either germinate to briefly establish then die off in the winter, or lie dormant and vernalize through the winter. When the rye sprouted up in spring, they brought in cattle to graze that lush, green growth in March, April, and May and then killed it immediately before spring planting. They stocked their research fields at a rate of 0.9 head per acre and 1.8 head per acre. Cattle grazed for a total of 22 days and gained an average of 3.2 lbs.

per day. The Knuths had some initial concerns about compaction with spring grazing, but it didn't become an issue.

"Everybody's always worried about compaction with cattle, and we were planting corn that spring so we were a little nervous about compaction and how our corn seeding would go," said Knuth. "We actually didn't have a single problem with that."

Knuth said the corn crop in the fields planted with cover crops had harvest yields as good or better than in years past. They planted 30 acres of rye after harvest this fall and plan to spring-graze cover crops in the future.

As for the cattle, they demonstrated considerable growth over a short period, according to Conway, indicating that cattle can perform well on spring rye maintained in a vegetative state. Regardless of the grazing management strategy, she says incorporating cattle into this system offset the increased costs of planting the rye by providing additional returns, and improved the profitability of the whole system. Based on the spring 2017 calf market price of \$140 per cwt., returns ranged between \$62.81-70.09 per acre or \$36.63-48.68 per head. Conway notes that market conditions may not always result in profitability. Still, there is potential for this system to offer diversified revenue streams for both crop and livestock producers under certain conditions.

"We think that the information that we got is extremely practical for producers in the region who are also interested in looking at ways to diversify their cropping system production," said Conway.

Conway has since moved on from UNL to the University of Missouri's Center for



Knuth Farms is a fourth generation farm in Mead, Nebraska that is moving toward a more diversified rotation. With help from the University of Nebraska-Lincoln, they integrated a spring-grazed cover crop in their existing cash crop system to cover the cost of the cover crop seed. Photo by Angela Knuth.

Agroforestry, where she is currently an Assistant Research Professor investigating intensive integrated tree-forage-livestock systems (silvopasture).

"Going through the process of writing a SARE grant gave me a lot of confidence to apply for the job I have now," said Conway. "I think the experience I gained from this grant project made me a stronger candidate for the position and it made me feel more confident in my abilities. Learning how to write grants and how research funding works was the best experience I could ask for."

UNL has developed resources for farmers and cattle producers who want to develop similar mutually beneficial agreements for grazing cover crops. Find them online at <https://agecon.unl.edu/cornhusker-economics/2015/rental-agreements-cover-crop-grazing>. Read more about this NCR-SARE Graduate Student Grant project and watch a YouTube video about this project at <https://projects.sare.org/GNC16-220/> or contact the NCR-SARE office for more information.

New SARE Cover Crops Fact Sheets



Along with cutting costs and increasing crop productivity, cover crops provide various ecosystem services that benefit the environment both on and off the farm. For instance, adding cover crops to a rotation can significantly increase the portion of the year when living roots are present for soil organisms to feed on, which can have a significant impact on carbon sequestration. They also support wildlife and beneficial insects, and protect water quality by playing an important role in nutrient management.

SARE's new cover crop fact sheets explore the many ways cover crops can maintain soil and benefit the farm ecosystem. Resulting from a synthesis of scientific literature documenting the impacts of cover crops on water quality and soil health, these fact sheets provide a brief look at cover crops' impact on soil erosion, water infiltration, water quality, and nutrient and soil organic matter losses.

New cover crop fact sheets include:

- 10 Ways Cover Crops Enhance Soil Health
- Cover Crops Improve Soil Conditions and Prevent Pollution
- Cover Crops at Work: Covering the Soil to Prevent Erosion
- Cover Crops at Work: Increasing Infiltration
- Cover Crops at Work: Keeping Nutrients Out of Waterways
- Cover Crops at Work: Increasing Soil Organic Matter
- Cover Crops and Carbon Sequestration
- Impact of Cover Crops on Natural Enemies and Pests
- Cover Crop Impacts on Soil Invertebrates
- Cover Crop Impacts on Pollinators
- Cover Crop Effects on Deer and Other Mammalian Wildlife
- Cover Crop Effects on Songbirds and Game Birds

These free, downloadable, and printable fact sheets are an excellent resource for educators, Extension service providers, farmers hosting field days, and others. A great overview fact sheet is the "10 Ways Cover Crops Enhance Soil Health," which addresses the four basic principles for maintaining and improving soil—and how cover crops support those principles. Find them online at www.sare.org/Learning-Center/Topic-Rooms/Cover-Crops/Ecosystem-Services-from-Cover-Crops.

Grant Project Highlights

Learn more about exciting SARE-supported projects! Use the project number listed with the projects below to find more information at <https://projects.sare.org/> or follow NCR-SARE on Facebook or Twitter to receive regular updates like these:

- At the University of Wisconsin, Hanna McIntosh is using a SARE grant to determine whether mulches can impair spotted wing Drosophila (SWD). She's learning how mulch color and reflectivity affect SWD management, fruit yield, and quality. This is SARE project GNC18-265.
- North Dakota State University's Carrington Research Extension Center and three farmers are working on a SARE project that involves grazing feedlot-aged calves on late fall cover crops. They will measure soil compaction caused by grazing cover crops and report on any issues associated with livestock manure. This is SARE project LNC18-412.
- With SARE support, Hongmei Li-Byarlay and students with Central State University's apiculture program in Ohio are working with producers to improve honeybee queen qualities and genetic diversity by transferring selected queen cells. This is SARE project ONC19-062.
- Mallika Nocco's SARE-supported project found that irrigated farms within Wisconsin's vegetable-growing Central Sands region are significantly cooler than nearby rain-fed farms or forests. This is SARE project GNC13-178.
- SARE-supported research at Iowa State University has shown that prairie strips can improve water quality and biodiversity with minimal impact on crop production. The Sand County Foundation received SARE support to build on that research. They're working with Wisconsin farmers on prairie strips that fit both with their cropping patterns and with the width of their farm machinery. These are SARE projects LNC09-314 and LNC16-378.
- With support from SARE, Kaitlin Hossom is researching the impact of goat grazing on invasive species at Indiana University's outdoor center, Bradford Woods. This is SARE project FNC19-1168.

Grant-Writing Assistance for SARE Grants

For general advice on NCR-SARE grant applications, you can contact the SARE state coordinator in your state, such as Gary Lesoing, SARE State Coordinator in Nebraska. Photo by Mandy Hall Photography.



Are you interested in writing a proposal for an NCR-SARE grant? NCR-SARE can provide assistance with grant applications, reports from other projects, lists of funded projects, and other sustainable agriculture information. To receive more information about the NCR-SARE grant program's preproposal/proposal processes and timelines, contact the NCR-SARE office, or visit www.northcentralsare.org/Grants/Write-a-Successful-Grant.

Before writing a grant proposal, determine a clear project goal and explore previous research. It often helps to contact NCR-SARE, local agriculture groups, the Natural Resources Conservation Service, and/or Extension educators to share ideas and invite participation.

Michael Fields Grant-Writing Assistance

Did you know that the Michael Fields Agricultural Institute's (MFAI) Grant

Advisory & Resources that can help you apply to state or federal grant and cost-share programs? They have resources for designing sound projects, finding funding sources, and writing successful grants, along with other valuable information. To learn more and to sign up for an e-list for program announcements, please visit the MFAI website at <http://michaelfields.org/grant-advising-resources/>, or contact MFAI Grants Advisor Martin Bailkey at grants@michaelfields.org.

Assistance from SARE State Coordinators

SARE has a network of state coordinators working in each state and island protectorate. They hold workshops and field days to share sustainable practices and research results and serve as agriculture resources in their state. SARE state coordinators help train agriculture

professionals in sustainable practices, share SARE project results, and work with SARE grant applicants. Your SARE state coordinator can provide advice and feedback as you work on your grant proposal.

If you have questions about SARE in your state or have a grant proposal idea your SARE state coordinator can help. Find your SARE State Coordinator and view documents about funded grants in your state by visiting www.northcentralsare.org/State-Programs. You can also sign up to receive notifications when grant programs are accepting proposals; simply go to www.sare.org/About-SARE/Join-Our-Mailing-List, or contact the NCR-SARE office at ncrsare@umn.edu or 612-626-3113.



Grantees Sharing Stories at Farmers Forums

Claire Hintz, Rachel Henderson, and Erin Schneider shared insights on growing hardy perennial fruit during the NCR-SARE Farmers Forum at the Women in Sustainable Agriculture Conference in October 2019 in Minnesota. Photo courtesy of the Midwest Organic and Sustainable Education Service (MOSES).

The NCR-SARE Farmers Forum is an event that gives NCR-SARE grant recipients the chance to share information about sustainable agriculture practices with a regional audience. The talks focus on research, demonstration, and education projects that promote sustainable farming and ranching. The projects emphasize the three pillars of sustainable agriculture: environmental stewardship, profitability, and social responsibility.

The next Farmers Forum will be at the 2020 Northern Plains Sustainable Agriculture Society's Food & Farming Conference, January 23-26, in Fargo, North Dakota. Find more information at www.npsas.org/event/2020-food-farming-conference. Highlights and videos from past Farmers Forums are posted online at www.northcentralsare.org/Educational-Resources/Regional-Program-Materials/NCR-SARE-Farmers-Forum-Highlights.

Developing a Women and Farmer-Led Meat Cooperative

Livestock producers Betty Anderson, Bethany Emond Storm, and April Prusia visited Story City Locker in Story City, Iowa, to learn more about job satisfaction and employee retention in the meat processing industry. Photo courtesy of Betty Anderson.



Wisconsin needs more butchers. That's what April Prusia, Betty Anderson, and Bethany Emond Storms determined during their farmer-led research project in 2017. The three livestock producers raise beef, pork, poultry, and goats in south central Wisconsin. While they all have big dreams of charcuterie plates made with their meat, they lack processing options in the area and other producers share their concerns.

"There's increasing unmet demand from area farmers for meat processing, especially a facility specializing in no stress kill, organic, and artisan-cured meats," said April Prusia. "The current facilities available are only Wisconsin licensed and have long wait times."

Prusia of Dorothy's Range in Blanchardville, Anderson of the Old Smith Place near Brodhead, and Emond Storm of Blanchardville put their heads together to work on a solution. **The three women farmers applied for a \$20,175 NCR-SARE Farmer Rancher grant to explore meat processing options in south central Wisconsin and figure out ways to bring more women into the industry.**

"While women farmers are increasing in number at over 20 percent in the last 20 years, we remain significantly underrepresented in the meat industry," said Prusia. "This statistic manifests itself locally with no female leadership in the current meat processing facilities."

Assessing the feasibility and demand for a cooperatively owned, federally licensed, women-farmer led mobile slaughtering unit or retail butcher shop in south central Wisconsin was the task before them, so they got to work. They visited local grocery stores and butchers to determine the existing resources available in their counties. They developed a producer survey to assess feasibility and demand. More than 80 area producers raising as many as 3,700 food-production animals responded, and the consensus was straightforward, "We need more meat processing options." Learning the ins and outs of the meat processing industry was not as straightforward.

Prusia said there were many steps in the project and they weren't always orderly. They met with butchers, local extension agents, zoning offices, the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP), and the Southwest Business Development Center. During the meetings, the team learned a lot about butchering, but they also learned something else—the industry was understaffed.

"From talking with local agencies and people involved in the butcher industry in our area, we found that the biggest gap in the system is the human capital," said Prusia "It is hard to find and retain staff to cut meat and even more challenging to find someone to work

the kill floor. During our project, three local butcher shops closed their doors."

The team plans to work on training programs, which is one way to support existing meat processors and encourage more women to enter the field. They'd also like to develop their own women-run, cooperatively owned mobile slaughter unit. While they raise funds, they are meeting with key stakeholders to develop their vision and business plan.

"As farmers, we recognize that solving our problem of not having enough access to USDA butcher facilities would help solve the same problem for many of our local farmers," said Prusia. "If we don't do something to change the way things are, we will lose more farmers. Thankfully we believe the DATCP and our local extension offices recognize this issue and are eager to work to solve these problems."

While they work on their venture, Prusia says the team will continue to support and work with existing facilities.

"While they do not fill all of our hopes for our products, we recognize that they are a huge asset to our communities and it is important that we continue to work with them, not against them, as we move forward."

Learn more about this NCR-SARE Farmer Rancher project on the SARE project reporting website at <https://projects.sare.org/FNC17-1094/> or contact the NCR-SARE office.

Three women livestock producers toured meat processing facilities like Natural Harvest's mobile slaughter facility in Spring Green, Wisconsin to better understand the meat processing business, and the physical and mental demands associated with the work. Photos courtesy of April Prusia.



Paving the Way for Shared-Use Kitchens

New cottage food laws are making it easier for producers to can, freeze, bake, and pickle their raw agricultural products at home and sell them directly to their customers. While they might fit under the regulations, home kitchens might not be a good fit for everyone, and there are also producers who want to expand without investing in their own commercial kitchen. Shared-use kitchens (sometimes referred to as kitchen incubators or commercial kitchens) are licensed commercial spaces that can give producers and other food entrepreneurs the space and community resources they need to develop their products and businesses.

As a former producer and local food supporter, Jodee Ellett is curious about shared-use kitchens. She works with the Sustainable Food Systems Science project at Indiana University and has been working on building sustainable food systems in Indiana since she started farming in 2011. While serving as the local foods coordinator for Purdue University in 2013, she became interested in the opportunities that shared-use kitchens could provide—she was also aware that the pathway to launching one could be rocky.

“I was very curious to learn who was using shared kitchens, how different models of kitchens remain viable, and why,” said Ellett. “What are the key factors that lead to sustainability for the kitchens? What services do kitchens need to provide for users, and how can a nonprofit, government organization, or business understand the breadth of issues when considering a shared-use kitchen in a community?”

With support from a \$135,819 NCR-SARE Research and Education grant, Ellett worked with Purdue Extension Services, Ashley Colpaart with The Food Corridor, and Fruition Planning and Management to survey shared-use kitchen operators, organize tours, and develop materials.

The team surveyed regional kitchen owners and managers to learn more about their work. Ellett said the 92 responses to their survey helped them understand the viability, sustainability, and economic impact of shared-use kitchens. As a follow-up to the regional survey work, Econsult Solutions recently

completed a nationwide survey for kitchen incubators to identify industry trends and offer insight into how shared-use spaces approach challenges. A preliminary analysis of the 180 responses has shown that kitchen incubators need increased awareness, consistency in regulations, and more financing opportunities. Ellett says this kind of data is what shared-use kitchen operators need.

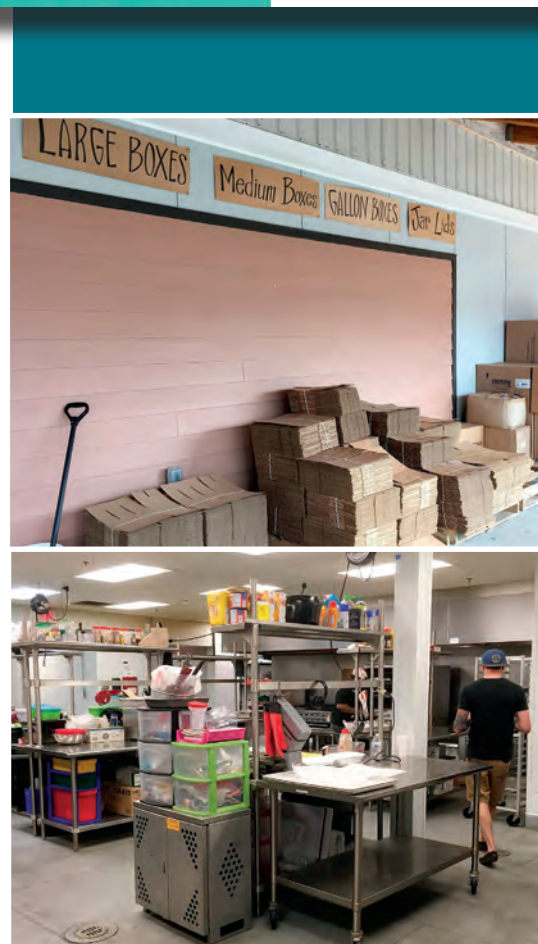
“It is important for shared kitchens to have data to deliver when it comes to economic development decisions,” explained Ellett. “Most shared-use kitchens are nonprofits and have a socially-driven mission, in addition to economic and environmental goals. They are major connectors in a food system and can become a keystone business for a thriving local food economy.”

Following the tours conducted through the grant project, tour participants reported an increased understanding of shared kitchens, and the challenges of starting and sustaining them.

“I’m in the process of opening a commercial kitchen in Minneapolis,” said one tour participant. “I found value in meeting others who are involved with kitchens and learning from the kitchens we visited. The operational intelligence was invaluable. My learnings will help shape how I operationalize my kitchen.”

Informed by the survey and tours, the team started to formulate useful management practices for the day-to-day operations of shared-use kitchens. This culminated in the publication of the *Shared Kitchen Toolkit: A Practical Guide to Planning, Launching, and Managing a Shared-Use Commercial Kitchen*. The guide showcases successful models and provides information for planning, launching, and managing a shared-use kitchen. Referred to by some as ‘the bible’ for shared-use kitchens, the guide has helped bolster momentum for more industry research.

You can download the *Shared Kitchen Toolkit* online at www.northcentralsare.org/Educational-Resources/SARE-Project-Products/Shared-Kitchen-Toolkit. View survey data and read more about this NCR-SARE Research and Education grant project online at <https://projects.sare.org/LNC15-374/> or contact the NCR-SARE office.



Tours of shared-use kitchens like the Washtenaw Food Hub in Michigan (middle) and Chef Space in Louisville, Kentucky (lower) were an integral part of the research process that culminated in the development of the *Shared Kitchen Toolkit: A Practical Guide to Planning, Launching, and Managing a Shared-Use Commercial Kitchen*. You can download the Shared Kitchen Toolkit online at www.northcentralsare.org/Educational-Resources/SARE-Project-Products/Shared-Kitchen-Toolkit.



Educators Seek Beginning Farmer Training

Beginning farmers and ranchers are some of agriculture's greatest innovators and experimenters. The 2017 Census of Agriculture revealed that the average age of U.S. farmers was 57.5 in 2017 (USDA, April 2019). A new generation of farmers is needed, and many who are entering farming are doing it with little or no background in farming. NCR-SARE has made fostering this next generation and its ingenuity a priority, through grant programs and educational resources.

In October 2019, almost 100 educators from across the Midwest came together for NCR-SARE's beginning farmer regional training in Indianapolis, Indiana. The 1.5-day "Enhancing the Success and Sustainability of Beginning Farmers and Ranchers" training gave educators who work with producers an opportunity to learn practical approaches in supporting beginning farmers and ranchers. Workshop topics included guidance on farm business plans, farm financing, ag legal issues, land access, labor efficiency, marketing,

network-building, and skill development. Programming helped educators learn more about beginning veteran farmers, urban farmers, immigrant farmers, and socially disadvantaged farmers. Attendees toured two area farms run by beginning producers, Blue Yonder Organic Farm and Gordon Family Farm, to learn about the challenges facing beginning farmers.

Included in the program was time for attendees to gather as state delegations and plan for beginning farmer train-the-trainer opportunities in their states. You can contact the SARE state coordinator in your state to learn more here: www.northcentralsare.org/Professional-Development/State-Coordinator-Contact-Info. Copies of the program, as well as PowerPoint presentation files, are available through the NCR-SARE office at ncrsare@umn.edu. For more information about beginning farmers, visit USDA's New Farmers website at <https://newfarmers.usda.gov/>.

Above: Big Muddy Farm Aspiring Farmer Residents in Omaha, Nebraska; Adam Igwe of Water Rock Farming in Pahrump, Nevada; and Amelia LaMair of Flotsam Farm in Tecumseh, Missouri, are all beginning farmers who have interacted with the SARE program. Photos by Marie Flanagan

Right: Founding member of the Hoosier Young Farmers Coalition and past Farmer Rancher review committee member, Liz Brownlee, was inspired to write a SARE proposal after serving on an NCR-SARE grant review committee. Photo by Marie Flanagan.



Join a SARE Grant Review Committee

NCR-SARE is seeking nominees for our grant review committees. NCR-SARE's review committees read proposals and make recommendations for funding to the Administrative Council. Serving on one of these committees can be a rewarding and educating experience for those interested in sustainable production and the grant-making process. Liz Brownlee says serving on an NCR-SARE grant review committee made her a more hopeful producer. Brownlee, pictured below, and her husband, Nate, farm on her family's 250-acre farm in Crothersville, Indiana. Brownlee is also the President of the Hoosier Young Farmers Coalition.

"It was encouraging to get to know the farmers on the review committee since we all have similar challenges and hopes," said Brownlee. "And maybe, more importantly, it was inspiring to read the grant applications. Farmers all across the region were doing useful and interesting research and outreach. It was uplifting to know that these farmers were hard at work and that by serving on the committee, I was helping in a small way to make their work possible. Last but not least: I became a better producer because I felt connected to SARE's resources. I got to know the folks behind the scenes, and understood just how much knowledge was at my fingertips, thanks to SARE."

Each NCR-SARE review committee has varying requirements, but generally, review committee members are required to review proposals, discuss the proposals on a conference call or in-person, and live and work in one of the 12 states that comprise the North Central region (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI). Members of an NCR-SARE review committee may not apply to that particular grant program during their time serving on that committee.

To nominate yourself for one of NCR SARE's review committees use our online form at <https://tinyurl.com/NCRSAREReviewCommittee>. In addition to completing the online form, we request that you provide a 1-2 page resume or curriculum vitae (CV) if you have one and email it to ncrsare@umn.edu.

Scaling Up Specialty Dairy in Ohio's Appalachian Region

A community works to amplify specialty dairy opportunities in Ohio's Appalachian region.

The beautiful vistas of Ohio's Appalachian region delight visitors with ancient forested foothills, winding creeks, and unglaciated terrain. In the late 19th century, extraction industries like the coal industry also discovered value in this landscape, but as coal resources declined, local economies deteriorated. Today, scaling up local foods is one way these historic communities are strengthening their agricultural roots and regional economies.

"The topography of Appalachia Ohio has resulted in fragmented tracts of farms with varying degrees of soil types, which has proved suitable for small scale livestock farmers," said Tom Redfern, Director of Sustainable Agriculture and Forestry at Rural Action, a community organization in rural Ohio. "Being attentive to our place-based assets and generational agricultural practices has encouraged remaking our smallholdings and a diversified approach into a more sustainable model that builds resilience."

With their land, their community, and small-scale livestock in mind, Rural Action and a group of community members received a \$165,500 NCR-SARE Research and Education grant to do research and education about specialty dairy products. They had evidence that suggested there was an unmet demand for locally-made products like cheese and soap. Products like these could be made with milk from small-scale livestock, which are well-suited to their landscape. The team set out to bring attention to small dairy opportunities with local producers and food entrepreneurs.

Rural Action staff members Becky Rondy with Green Edge Organic Gardens and Leslie Schaller with the Appalachian Center for Economic Networks (ACEnet) worked with area dairy producers to gather information and develop a training program. Four specialty dairy producers (Krista Duval of Creekside Farms, Michelle Gorman of Integration Acres, Abbe Turner of Lucky Penny Farms, and Annie Warmke of Blue Rock Station) received training on using the materials.

These four women hit the road to meet with producers across the region, with resources in one hand and their expertise in the other. Their peer-to-peer workshops, webinars, and podcasts focused on specialty dairy operating models, regulatory compliance, and improving profitability. In total, they reached 220 producers, specifically women and limited resource producers.

One of the workshop instructors, Krista Duval, is a cheesemaker in Athens, Ohio. She made goat milk soap with workshop attendees, showcasing it as a scalable specialty product for people not interested or ready to start a creamery. Related to her experiences with the workshop, Duval developed a *Goat Milk Soap Making Manual*. Another workshop leader created a publication as well. Abbe Turner operates a creamery in Kent, Ohio. Inspired by the cadre of women-led dairies in Ohio, Turner and her daughter, Madeline, worked together on a book in conjunction with the grant. *The Land of Milk and Money* features 17 successful women dairy producers in Ohio. In addition to providing book inspiration and business information, the workshops raised awareness about supporting small, local producers. Both Duval and Turner gained new customers through their workshop interactions.

"It's hard for small producers to compete, our methods are slower," said Turner. "Organizations like Rural Action and ACEnet provide the necessary support that producers need. They're critical for building infrastructure in communities."

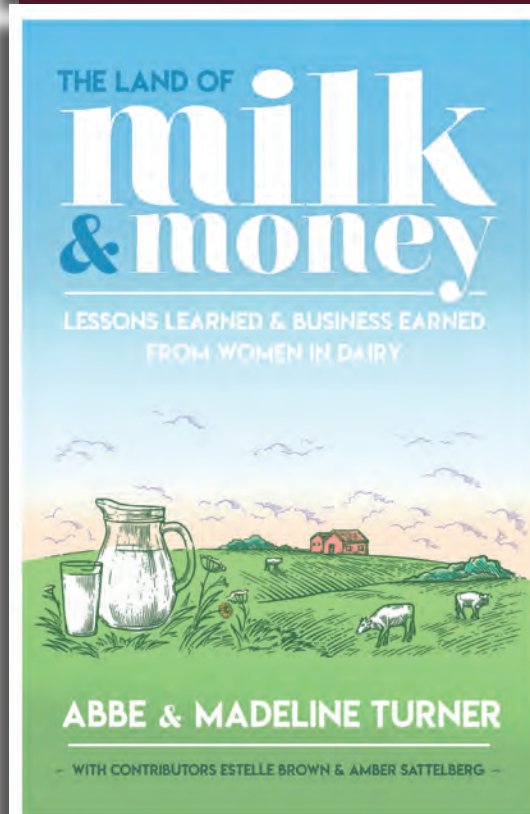
Rural Action said changes would be gradual as new markets open and producers scale up. They will track the long-term impacts of the project using statewide market reports and monitor producers' activities in the region. Throughout the course of the project, the specialty dairy project team authored 2 books (right, developed 18 print resources, recorded 9 podcasts, and held 2 on-farm demonstrations, 8 online trainings, and 3 webinars. You can access many of the materials associated with this project on the SARE reporting site at <https://projects.sare.org/lnc16-384/> or contact the NCR-SARE office for more information.



Goat Milk

Soap Making

Manual



Resources like Krista Duval's 38-page goat milk soap making booklet (top) and Abbe and Madeline Turner's book about 17 women dairy producers (bottom) are just two of the many resources developed by and for small-scale dairy producers by a project team in Ohio. Find them online at <https://projects.sare.org/lnc16-384/>



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Did you know NCR-SARE is on Facebook, YouTube, Instagram and Twitter? Keep track of our grant opportunities, projects, events, and more. Search for North Central Region SARE and follow us!



ABOUT NCR-SARE

NCR-SARE funds cutting-edge projects every year through competitive grant programs, and has awarded more than \$74 million worth of grants to farmers and ranchers, researchers, students, educators, public and private institutions, nonprofit groups, and others exploring sustainable agriculture in the 12 states of the North Central region.

Are you interested in submitting a proposal for an NCR-SARE grant? Before you write the grant proposal, determine a clear project goal, and look for sustainable agriculture research on your topic. Need help determining which program is best suited for your project? Go to www.northcentralsare.org/Grants for more information, or contact the NCR-SARE office.

For more information about any of the NCR-SARE grant programs, go to www.northcentralsare.org or contact the NCR-SARE office at 612-626-3113 or ncrsare@umn.edu.

NCR-SARE GRANT TIMELINES*

Farmer Rancher*

Mid-August - Call for Proposals Released
Early December - Proposals Due
February - Funding Decisions
Spring - Funds Available to Recipients

Graduate Student*

February - Call for Proposals Released
April - Proposals Due
Late July - Funding Decisions
September - Funds Available to Recipients

Research and Education*

August - Call for Preproposals Released
October - Preproposals Due
Late January - Full Proposals Invited
April - Full Proposals Due
Late July - Funding Decisions
Fall - Funds Available to Recipients

Professional Development Program*

February - Call for Proposals Released
Early April - Proposals Due
August - Funding Decisions
October - Funds Available to Recipients

Youth Educator*

Mid-August: Call for Proposals Released
Mid-November: Proposals Due
February: Funding Decisions
Spring: Funds Available to Recipients

Partnership*

Early August: Call for Proposals Released
Late October: Proposals Due
February: Funding Decisions
March: Funds Available to Recipients

*Timelines are subject to change.

NORTH CENTRAL REGION
SUSTAINABLE AGRICULTURE RESEARCH AND
EDUCATION PROGRAM

CONTACT INFORMATION

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NCR-SARE Administrative Council member, Sherman Reed, staffs an exhibit at the Future Farmers of America Convention in Indianapolis, Indiana in October 2019. With almost 70,000 attendees, this event is one of the world's largest student conventions, and is one way that NCR-SARE reaches young people and educators with sustainable agriculture resources. Photo by Suzanne Mills-Wasniak.