# Sustainable Agriculture Research & Education





# Goats Adapt to Virtual Fences

Folks along the Saint Croix River in Minnesota and Wisconsin have a goat-for-hire company they can call to clear land or manage unruly plants like buckthorn. Allysse Sorensen's "Munch Bunch" goats tackle overgrown, rocky, and sloped areas to help control brush and weeds without herbicides. From May to October, Sorensen transports her goats to graze more than 100 acres in a season.

"I heard about targeted grazing with goats as a business at a conference," said Sorensen. "Little did I know the job is mostly fencing, and it's not as simple as just setting up and tearing down."

The portable energized net fencing Sorensen was using to control the movement of her goats wasn't a good match for her operation. She was curious if she could replace the net fencing with virtual fencing.

#### How Does Virtual Fencing Work?

"Virtual fences are appealing because they require no wires in the ground but rely on a global positioning system (GPS) and cellular networks," said Sorensen. "A virtual boundary of any shape or size can be created on a map, allowing the user to customize the area where the animals are contained."

In 2021, with support from an \$8,910 NCR-SARE Farmer Rancher grant, Sorensen compared virtual fencing with net fencing, looking at labor needs and overall effectiveness.

For her experiment, Sorensen used the virtual Nofence system. In this system, goats wear collars that consist of a rubber strap, a metal chain, and a battery housing with two solar panels on the sides to help charge the rechargeable battery (upper right). The herder uses a mobile phone or tablet application to set the boundaries. The app records animal movements and alerts when a perimeter has been breached. When a goat approaches a virtual boundary, the collar emits warning sounds. If the animal continues past the boundary, the device administers a three-kilovolt electric pulse through the collar's chain.

To get started, Sorensen ordered collars for 30 wethers older than one year and non-lactating

does; the breeds were Kiko, Boer, Nubian, and Myotonic. She trained the goats for about one week on the Nofence system and then set up paddocks. She added another 30 goats to the virtual fence system in the second year and was pleased with the two-year project results.

#### **Virtual Fence Findings**

The system worked well for the Munch Bunch, and Sorensen intends to continue using virtual fencing in the future.

- The rechargeable batteries lasted between three weeks and three months.
- The system averaged 0.4 to 2 shocks a day during the training period. After the training period, Sorensen said it was normal to have no shocks daily.
- Collars fell off goats twice. Both times, it was due to improper fit, and Sorensen learned that collars were tighter than necessary.
- There was one virtual fence breach, which Sorensen was able to respond to immediately by adjusting the virtual fence on the app to adjust the containment boundaries.
- There were no incidences of predation.
- With virtual fencing, Sorensen saved, on average, three days per week on fence upkeep and replacement. It gave her more time for season extension and managing herd health.

"While portable net fencing may have its applications due to current limitations in virtual fence technology, we plan on managing all goats primarily with Nofence in the future," said Sorensen.

#### Dig Deeper

To learn more, and see videos of the Munch Bunch in action, visit <a href="https://munchbunchgoats.com/research-study">https://munchbunchgoats.com/research-study</a>. Read this SARE project report at <a href="https://projects.sare.org/project-reports/fnc21-1306/">https://projects.sare.org/project-reports/fnc21-1306/</a>.

NCR-SARE's Farmer Rancher Grant program starts accepting proposals in mid-August, with a deadline in December. Learn more here: <a href="https://northcentral.sare.org/Grants">https://northcentral.sare.org/Grants</a>.

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Allysse Sorensen has been experimenting with virtual fencing for targeted grazing with goats.

Watch a video of Sorensen's virtual fence in action: https://youtu.be/atefzgEeBoE

Photos courtesy of Allysse Sorensen.



## NCR-SARE Awards \$6.8 Million in Grants

NCR-SARE is pleased to share the results of our grant programs for 2022-2023. NCR-SARE's competitive grant programs awarded 128 projects, more than \$6.8 million this past year; the programs offer grants for producers, researchers, students, educators, organizations, and others exploring sustainable agriculture in America's Midwest. Another \$1.8 million supported NCR-SARE's regional state coordinators, who train agriculture professionals in sustainable practices and raise awareness about SARE resources.

The Farmer Rancher Grant Program is a competitive grant program for farmers and ranchers who want to explore sustainable solutions to problems through on-farm research, demonstration, and education projects. In 2023, 41 projects were selected to receive more than \$720,000 through NCR-SARE's Farmer Rancher Grant Program.

For the 2023 Youth Educator Grant Program, NCR-SARE awarded more than \$97,100 to 17 projects. Youth Educator Grants support educators who want to teach youth about sustainable agriculture practices and careers.

The Graduate Student Grant Program funds graduate student projects addressing sustainable agriculture issues. For the 2022 Graduate Student program, NCR-SARE awarded more than \$311,000 to 21 projects.

For the 2023 Partnership Grant Program, NCR-SARE awarded more than \$995,000 to 21 projects. This program aims to foster cooperation between agriculture professionals and farmers and ranchers to catalyze on-farm research, demonstration, and education activities.

The Research and Education Program is a competitive grant program for researchers and educators involved in projects exploring and promoting environmentally sound, profitable, and socially responsible food and/or fiber systems. For the 2022 Research and Education program, NCR-SARE awarded more than \$3.8 million to 17 projects.

For the 2022 Professional Development Program, NCR-SARE awarded almost \$926,000 to 11 projects. NCR-SARE Professional Development Program grants emphasize training agricultural educators in extension, the Natural Resources Conservation Service, private and not-for-profit sectors, using farmers as educators, and addressing emerging issues.

#### Apply for an NCR-SARE Grant

Visit the NCR-SARE website to apply and for more information about funded projects and timelines at <a href="https://">https://</a> northcentral.sare.org/grants/apply-for-agrant/, or contact the NCR-SARE office.

To learn about the SARE grants in your state, visit the NCR-SARE website: https://sare.org/grants/funded-grantsin-your-state/, where you can view a portfolio summary and list of grants funded for every state and island protectorate. The focus for each of the NCR-SARE grant programs is on research and education. Funding considerations are based on how well the applicant presents the problem being addressed, the project's relevance to sustainable agriculture in the 12-state North Central region, and how well it aligns with NCR-SARE's goals, among other factors specific to each grant program.

NCR-SARE's Administrative Council (AC) members decide which projects will receive SARE funds. The AC includes a diverse mix of agricultural stakeholders in the region. Council members hail from regional farms, ranches, the Cooperative Extension Service, universities, federal agencies, and nonprofits. Since 1988, the SARE program has helped advance farming systems that are economically viable, environmentally sound, and good for communities through a nationwide research and education grants program. Part of USDA's National Institute of Food and Agriculture, the program funds projects and conducts outreach to improve agricultural systems.

### **Grant Assistance**

NCR-SARE currently has four open grant programs. If you are interested in writing a proposal for an NCR-SARE grant, we have resources for you. We can provide grant reports from other projects, lists of funded projects, or other sustainable agriculture information. Visit <a href="https://northcentral.sare.org/grants/apply-for-a-grant/">https://northcentral.sare.org/grants/apply-for-a-grant/</a> for more details, or contact the NCR-SARE office at <a href="mailto:ncrsare@umn.edu">ncrsare@umn.edu</a>.

## Grant-Writing Assistance from SARE State Coordinators

SARE has a network of state coordinators working in each state and island protectorate. Your SARE state coordinator can provide advice and feedback as you work on your grant proposal. Find your SARE State Coordinator and view documents about funded grants in your state by visiting NCR-SARE online at https://northcentral.sare.org/state-programs/state-coordinators/.

#### Grants Advising from Michael Fields Agricultural Institute (MFAI)

Michael Fields Grants Advising is a free service for Midwestern producers, agricultural entrepreneurs, and institutions.

MFAI's Advisors can help you apply to grant, loan, and cost-share programs of state or federal sources, including SARE grants. Email grants@michaelfields.org for assistance.



#### **Managing Stress**

Farming and ranching are stressful businesses. One key metric of a farm's sustainability is its capacity to provide a quality of life that meets our most basic human needs - good mental health. A new resource from SARE highlights successful SARE-funded projects using innovative strategies to help farmers and ranchers manage stress. Visit <a href="https://www.sare.org/resources/managing-stress/">https://www.sare.org/resources/managing-stress/</a>.

# From the Earth: Advancing Food Sovereignty with the Stockbridge-Munsee Community

In northeastern Wisconsin, the Stockbridge-Munsee Mohican Tribe has been working to bolster self-reliance with food sourcing and encourage more local food production.

In 2018, a group of Stockbridge-Munsee Community (SMC) producers and educators were preparing to expand their half-acre community garden into a learning space to demonstrate sustainable food production. They applied for and received a SARE Research and Education grant to support the project.

"We believe that if we can teach individuals a variety of techniques on sustainably producing vegetables, document the cost associated with each technique, demonstrate the importance of incorporating all aspects of the environment, and share our project findings in ways that are easily accessible, then the number of individuals producing these goods will increase," explained Kellie Zahn, a farmer and the SMC Agriculture Agent who proposed the SARE grant in 2018.

The Keek-Oche or "From the Earth" group set up growing trials and demonstrations. They planned outreach events like grower workshops and field days where they shared hands-on learning and resources on beekeeping, traditional growing methods such as Three Sisters gardening, and vegetable growing and preservation. In addition to in-person events, they developed videos and fact sheets to create a long-term support system.

The food sovereignty project that started with 4,250 pounds of produce harvested from a half-acre learning farm at the beginning of the project has grown. The farm expanded, community interest increased, and in 2022, From the Earth harvested more than 13,550 pounds of produce from six acres and two high tunnels. They now have two apprentices who help with farming and beekeeping, along with volunteers. Produce is shared in the community via a CSA farm-box program, a weekly farm market, and donations to the Elderly Center, Head Start, and the Ella Besaw Center. They grow a variety of crops, including traditional crops like Lenape Blue Corn, Stockbridge Beans, Lenape Blue Beans, and Boston Marrow Squash. The Stockbridge Bean was reunited with the community in Wisconsin after a historic preservation team located the seed in Stockbridge, Massachusetts, many years ago. SMC growers have been growing and saving the seed from this traditional variety for their community and their seed bank.

"In 2022, we could share the Stockbridge Bean as part of the CSA box. It is absolutely humbling that the farm can assist that connection to the Tribe's journey and history," said SMC's current agriculture manager, Maria Duits, who started as a farm apprentice in 2022.

Overall, 79% of community members and local farmers surveyed said they have raised more vegetables, fruits, or bees since 2018.



These Stockbridge beans were grown by and for community members of the Stockbridge-Munsee Band of Mohican Indians. With their From the Earth project, Tribal growers and educators are increasing access to traditional foods using sustainable growing methods. Photo courtesy of the Stockbridge-Munsee Community.

"The successful framework created throughout this project will continue with every growing season and forever impact food production in this community," said Duits. "The community has expressed interest in continuing to hold on-farm demonstrations of Mohican and sustainable farming techniques. Our goal is to continue sharing this knowledge as we grow and learn on the farm."

#### **Dig Deeper**

View From the Earth's grower resources and videos online at <a href="https://www.mohicanag.com/education.">https://www.mohicanag.com/education.</a> For more information on this NCR-SARE Research and Education grant project, visit <a href="https://projects.sare.org/project-reports/Inc18-414/">https://projects.sare.org/project-reports/Inc18-414/</a>. NCR-SARE's Research and Education grant program starts accepting proposals in mid-August. Learn more: <a href="https://northcentral.sare.org/Grants/">https://northcentral.sare.org/Grants/</a>.

# "Lessons to Go" for Youth with KC Farm School

KC Farm School at Gibbs Road is a nonprofit organization on a 14-acre urban farm in Kansas City, Kansas. With support from a \$4,000 NCR-SARE Youth Educator grant, KC Farm School developed 'Lessons To Go' to bring sustainable agriculture education and food sovereignty practices to local youth aged 4-18. They wanted to provide additional lessons for teachers to engage students when they cannot visit the farm.

With their "Lessons to Go," youth can learn about sustainable and regenerative ag practices. Each of their lessons includes examples of classroom activities and on-farm activities.

Their Lessons to Go topics include:

- Many Types of Farms
- The Farm as an Ecosystem
- Farm to Market
- Global Farming

#### **Dig Deeper**

They also created a series of four videos to accompany their Lessons to Go, which are available online: <a href="https://tinyurl.com/mw8jurky">https://tinyurl.com/mw8jurky</a>. Learn more about this NCR-SARE grant project online at <a href="https://projects.sare.org/project-reports/yenc21-169/">https://projects.sare.org/project-reports/yenc21-169/</a>



KC Farm School at Gibbs Road is a nonprofit organization that empowers individuals through on-farm, hands-on experiences, and vocational education, connecting them to the land, soil, food, community, and opportunity. Photo courtesy of KC Farm School.

NCR-SARE's Youth Educator grant program starts accepting proposals in mid-August. Learn more here: <a href="https://northcentral.sare.org/Grants/">https://northcentral.sare.org/Grants/</a>.

# New Perennial Planning Tool

Since perennial fruit and nut crops can take several years to mature and yield, producers planning a farm featuring fruit and nut crops can benefit from careful planning. The new "Fruit and Nut Compass" gives producers a framework to make plans before devoting resources to plants and infrastructure.

#### **Perennial Projections**

"The Fruit and Nut Compass enables a person to examine the complete costs and expected returns of up to 12 crops simultaneously, as part of an integrated farm plan over 15 years," explained the developers. "The tool is designed as an 'open workbench' where users enter information based on specific plans to assess whether their enterprise will be profitable. It does NOT include any assumptions about crops, yields, costs, or selling prices...those are all data entry tasks for the user. The main questions this tool helps the user answer are: how deep of a financial hole will I be digging, and when might my perennial crop farm become profitable?"







#### FRUIT & NUT COMPASS: Perennial Farm Planning Workbench

Welcome to the Fruit and Nut Compass financial planning tool! This tool is designed to help you plan a financially sustainable, diversified perennial farm. This workbench provides space to plan up to 12 individual crops over a 15-year timeline.

This planning tool is comprehensive in scope. It includes worksheets to enter data on land preparation, planting, establishment years, harvest years, land costs, capital costs (buildings and equipment), overhead, marketing expenses, and selling prices. There is no denying that using this tool requires time, dilegence, and a willingness to do some research as well as make some assumptions. At the end, you will be rewarded with a 15 year financial forecast for each crop as well as a total combining all crops. You will then have the ability to adjust base yields and prices to observe how these changes impact profit and cashflow. Please note: the time you put into this tool will help you more accurately predict costs and profit, so it is beneficial to do careful and detailed research on each crop.

The Fruit and Nut Compass is a new farm business planning tool that helps producers project financial costs and returns from perennial crops.

Developed with support from an NCR-SARE Research and Education grant, the tool was conceived and designed by John Hendrickson, Matt Raboin, Jim Munsch, and Leah Potter-Weight in collaboration with the Savanna Institute for the Center for Integrated Agricultural Systems (CIAS) at the University of Wisconsin.

It is available as a free, downloadable Excel file at <a href="https://cias.wisc.edu/our-work/farming-systems/farm-viability/fruit-nut-compass/">https://cias.wisc.edu/our-work/farming-systems/farm-viability/fruit-nut-compass/</a>. Read more about the grant project <a href="https://projects.sare.org/sare\_project/lnc16-376/">https://projects.sare.org/sare\_project/lnc16-376/</a>.

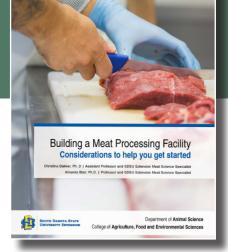
# A Guide to Building a Meat Processing Facility

A new decision tool is now available for those interested in the meat industry. With support from a \$39,863 NCR-SARE Partnership grant, South Dakota State University (SDSU) meat scientists teamed up with the South Dakota Animal Industry Board and meat industry professionals to guide producers in the upper Midwest through the requirements of establishing and operating small processing facilities.

"There is growing producer interest in establishing small meat processing facilities to provide alternative marketing opportunities. However, there are not enough small processors to meet this need," said Amanda Blair, an Extension Meat Science Specialist at South Dakota State University (SDSU). "Producers want to take more control of their marketing options, but few possess the knowledge to operate a meat processing facility."

Blair worked with SDSU meat scientist Christina Bakker on an education and training program with producers regarding regulations and requirements of the meat industry. They also developed a guidebook for people entering the meat industry.

Two of the program partners involved with the project have moved forward with plans to enter the meat processing sector. One partner recently purchased an existing custom-exempt meat processing facility in southern Minnesota. The



other partner has moved forward with plans for a USDA-inspected meat processing facility in north central South Dakota.

#### **Dig Deeper**

Download "Building a Meat Processing Facility" or view it online at <a href="https://northcentral.sare.org/resources/guide-to-building-a-meat-processing-facility/">https://northcentral.sare.org/resources/guide-to-building-a-meat-processing-facility/</a>. Learn more about this NCR-SARE grant project online at <a href="https://projects.sare.org/sare\_project/onc21-084/">https://projects.sare.org/sare\_project/onc21-084/</a>.

The Partnership grant program starts accepting proposals in mid-August. Learn more here: <a href="https://northcentral.sare.org/Grants/">https://northcentral.sare.org/Grants/</a>.

# Saving Seeds and Fostering Communities

By Adelle Niebur, NCR-SARE student intern

Seed-saving initiatives can play a key role in enhancing food security and the well-being of communities. With a focus on social, environmental, and economic sustainability, two recent projects funded by NCR-SARE were dedicated to conserving heritage seeds.

Zuleyja Preito and a group of three growers in Goshen, Indiana, have been preserving heritage varieties of corn. Preserving heritage corn requires minimizing cross-pollination and contamination from genetically modified (GM) varieties of corn. Contamination occurs when genetic material spreads from GM plants to non-GM plants. Prieto and the growers grew and saved seeds from small-scale, heritage corn varieties, including Avati Moroti Mita, Bofo, and Walpole Island White Flour Corn. They used different pollination windows to avoid pollination times with nearby commercial corn and did hand pollination to help limit contamination. Test results confirmed that cross-contamination was limited using these methods. They shared information with the community about growing these culturally significant varieties of corn through several workshops, events, and resources. View a video of Prieto sharing more information about this heritage corn project at https://youtu.be/DlfcTGxsJiQ. Learn more about this project at https://projects.sare.org/projectreports/fnc21-1295/.

Seed Savers Exchange received support from two NCR-SARE grants to work with the non-profit group Dream of Wild Health, the Oneida Nation, the Meskwaki Nation, and the Stockbridge-Munsee Community to grow and preserve indigenous seed varieties. Working with 11 growers in 4 different states during the projects, they grew over 50 seed varieties. They shared their findings on seed-saving indigenous seeds through brochures, a webinar series, and a field day. Learn about these Seed Savers projects at https://projects.sare.org/sare\_project/onc20-071/ and https://projects.sare.org/sare\_project/onc21-091.



24 pounds of Avati Moroti Mita corn seed was saved in 2022 during Zuleyja Prieto's heritage corn project. Photo by Gerardo Morales.

# NCR-SARE's 2023 Heroes: Dean Baas and KB Paul

In 2012, the NCR-SARE Administrative Council created the NCR-SARE Hero Recognition to highlight, recognize, and pay tribute to those who have made contributions to NCR-SARE and/or National SARE. Dean Baas and KB Paul have been named the 2023 NCR-SARE Heroes.

#### **Dean Baas**



Dean Baas. Photo courtesy of MSU College of Agriculture and Natural Resources.

Dean Baas' academic training started at Michigan State University (MSU), where he received a bachelor's in agricultural engineering. Baas worked for 20 years with the Kellogg Company in Battle Creek, Michigan, in technical/management positions. He returned to MSU in 2001 to start a doctorate in environmental geosciences and biosystems engineering.

Upon completing his doctorate in 2009, Baas began his career as an extension educator in sustainable agriculture for MSU Extension. His research and outreach areas included cover crops, soil health, and organic agriculture in Michigan and the Midwest. His work was known for stemming from real farmer issues/questions.

Baas' service to SARE spanned more than 15 years. Baas joined Dale Mutch as a research associate in 2007 and then as the state cocoordinator for Michigan in 2009. He took over as the SARE state coordinator in Michigan when Mutch retired in 2014. Baas stayed on as the Michigan SARE state coordinator until he retired from MSU in 2022. As the face of SARE in Michigan, Baas attended countless events in the state promoting sustainable agriculture and devoted significant time to reviewing SARE grant proposals. Baas served as a Midwest Cover Crops Council Executive Committee member and provided considerable leadership during their Cover Crop Decision Tools development from 2007 until retirement. After retiring in 2022, Baas continues to serve as an Emeritus Investigator at the Kellogg Biological Station.

#### **KB Paul**



KB Paul. Photo courtesy of Gina Avery.

Dr. Kamalendu (KB) Paul is Lincoln University's longest-serving faculty member, with a career that spanned more than 42 years. Paul's academic training in biology and agriculture commenced with undergraduate studies in India. He received a master's degree in plant and soil science from Tuskegee University in Alabama and a doctorate in biology from the University of Ottawa.

In 1975, Paul started his career at Lincoln University, a historically black 1890 land-grant university in Jefferson City, Missouri. He began as an assistant professor of agricultural sciences. Then, in the mid-1980s, Paul refocused his work in Africa in various agriculture and natural resources roles; he worked with 14 countries for over 13 years.

Paul eventually returned to Lincoln University in 1998; he served as a professor of agriculture and environmental sciences and a state extension specialist with Lincoln University Cooperative Extension (LUCE). With Paul's leadership, LUCE launched the Innovative Small Farmers Outreach Program in 2008, where he served until his retirement in 2017. Paul was a co-principal investigator for the Missouri AgrAbility project, which helps farmers with disabilities and their families succeed. For ten years he served as the SARE state coordinator in Missouri from 2007-2017. He was a familiar face representing SARE at events. He encouraged potential grantees and reviewed numerous grant proposals. As a Professor Emeritus, Paul returned to help coordinate the Innovative Small Farmers Outreach Program in 2023 while Dr. Clement Akotsen-Mensah was out of the country.

Learn more about NCR-SARE's Heroes at <a href="https://northcentral.sare.org/about/regional-initiatives/heroes">https://northcentral.sare.org/about/regional-initiatives/heroes</a>.

# New Bulletin Highlights Social Sustainability in Agriculture

Sustainable farming emphasizes the need to consider the environmental, economic, and social impacts of agriculture. For decades, sustainable agriculture research has focused more on environmental stewardship and profitability than on personal and social issues. SARE's newest bulletin, "Resilient Farmers, Ranchers, and Communities: Social Sustainability in Agriculture," describes how an increasing number of farmers and ranchers are realizing that addressing social issues is crucial to making farming systems more prosperous, resilient, and sustainable.

"Resilient Farmers, Ranchers, and Communities: Social Sustainability in Agriculture" focuses on the human side of agriculture and provides strategies for tackling some of the most pressing social challenges facing agriculture today:

 Social justice, equity, and inclusion: eliminating systemic inequities and discrimination



- Health
  and wellbeing: prioritizing the physical and
  mental health of farmers and workers to
  foster a productive and resilient working
  environment
- Pathways for the next generation: helping young farmers access land and benefit from preserving generational farming knowledge
- Community connections: developing a sense of belonging and mutually beneficial relationships in the farming community
- Entrepreneurship as an engine for innovation and adaptation: encouraging a culture of innovation and adaptability that facilitates long-term success

Download or order your free print copy of "Resilient Farmers, Ranchers and Communities" at <a href="www.sare.org/social">www.sare.org/social</a>. The bulletin is available in quantity for free to educators for use in educational workshops, classes or tours.

Transitioning to Organic Production

## New Organic Transition Bulletin

SARE's new bulletin, "Transitioning to Organic Production", explains how many farmers adopt organic production to increase profits while improving the resilience and environmental impact of their production systems. Long-term success requires patience, flexibility, good record-keeping, and a commitment to stewardship.

"Transitioning to Organic Production" lays out basic transition strategies for livestock, field crop, and horticultural systems, including a summary of the certification process and the National Organic Program standards. Practices common to all organic systems are also addressed, including:

crop rotation





- addition of organic fertility
- · disease prevention
- integrated pest and weed management
- conservation tillage

"Transitioning to Organic Production" also outlines how these research-based practices, paired with sound transition strategies such as flexible timelines, using alternative labels, and coordinating with NRCS programs, can help farmers successfully navigate the transition.

Download or order your free print copy of Transitioning to Organic Production at <a href="www.sare.org/transition-to-organic">www.sare.org/transition-to-organic</a>. It is available in quantity for free to educators for use in educational workshops, classes or tours.

## NCR-SARE Grants At-A-Glance

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

In Chicago, Illinois, Star Farm's Disability Farmers program is a SARE-supported initiative to create



disability visibility in the community. The program supports folks with disabilities so they can take on leadership positions in sustainable food and highlights their work as advocates. This is SARE grant YENC19-135.

With support from a SARE grant, Harmony Hill Farm built swallow houses for their Missouri farm.



Attracting swallows reduced fly pressure on their cattle. They found that spacing the birdhouses 200 feet apart in the pasture had the best results. This is SARE grant FNC21-1281.

SARE recently partnered with PBS KVIE to produce an episode of RFD-TV's "America's



Heartland" featuring South Dakota siblings Erin and Drew Gaugler. In the video, they discuss their SARE grant projects focusing on bale grazing to improve soil health and range quality on their 4,000-acre ranch in South Dakota. View it: http://ow.ly/TycF50NOjHn.

Andy DeVries has been working with the Fond du Lac County Land and Water Conservation Department in



Wisconsin on planting corn on 60-inch centers, with cover crops planted between. He grazed a portion of his beef herd on the cover crop and corn stalks in December 2022. This is SARE grant FNC22-1322.

Educators in the Appalachian Region of Ohio have been working with area high schools to share information about cooperative business models and agricultural careers.

Since the early 1900s, cooperatives have had an active role in rural America, from small grocery co-ops to multistate agricultural co-ops. Many people in many counties in the Appalachian Region of Ohio struggle with poverty. The Ohio State University College of Food, Agricultural, and Environmental Sciences (OSU-CFAES) Center for Cooperatives has been working to raise awareness about the co-op business model as an opportunity for economic development and justice in the region. They've been showing young people how cooperatives can be a strategy for sustainability.

"After learning more about the future talent needs of cooperatives, a colleague suggested we develop a program to help young people see varied cooperative career opportunities, and I was excited to help young people see agriculture from lots of perspectives the way I have been lucky to personally," said CFAES Center for Cooperatives at OSU program director, Hannah Scott, who comes from an Ohio

# A Cooperative Experience for Ohio High Schoolers

Andy Lynd of Lynd Fruit Farm and Market shared wisdom about cooperative marketing and customer service with high school students in the Appalachia Region of Ohio. Photo by CFAES Center for Cooperatives.

farm family. "I get excited about students seeing how agriculture, or working in rural communities, could fit their careers even if they work off-farm."

With support from a \$3,946 NCR-SARE Youth Educator grant in 2019, the CFAES Center for Cooperatives at OSU piloted a new Cooperative Student Leadership Experience program to share cooperative models and career opportunities with students in the Appalachian Region of Ohio. 16 high school students from the Ohio Valley Career and Technical Center in Adams County learned about cooperative principles, types of cooperatives, member roles and responsibilities, and the benefits of cooperatives.

During one of the student tours, Andy Lynd with Lynd Fruit Farm and Market near Pataskala, Ohio, shared marketing stories. Lynd's grandfather was instrumental in forming the Ohio Fruit Growers Marketing Program, a grower-owned marketing cooperative. Students learned about Lynd's farm market firsthand, where they sell apples, pumpkins, and local products like honey and grass-fed beef.



Scott received a follow-up NCR-SARE Research and Education grant to expand the Center for Cooperative's outreach about cooperative business models and improve the school farm's viability. During the COVID-19 pandemic, the Center worked with a local Farm Bureau program to offer online video tours and other materials to continue inspiring students. The "Youth Cooperative Leadership Experience Online" materials help educators teach students about the cooperative business model, co-op history, finance, legislation, and the formation of new cooperatives. Go to <a href="https://go.osu.edu/ycle">https://go.osu.edu/ycle</a>.

#### **Dig Deeper**

To learn more, visit the SARE project reporting website at <a href="https://projects.sare.org/project-reports/yenc19-142">https://projects.sare.org/project-reports/yenc19-142</a> or <a href="https://projects.sare.org/sare\_project/lnc19-428/">https://projects.sare.org/sare\_project/lnc19-428/</a>, or contact the NCR-SARE office.

NCR-SARE's Youth Educator and Research and Education grant programs start accepting proposals in mid-August. Learn more here: <a href="https://northcentral.sare.org/Grants/">https://northcentral.sare.org/Grants/</a>.

### NCR-SARE Welcomes New Team Members

NCR-SARE is pleased to welcome **Emily Proctor** as NCR-SARE's new 1994 Tribal College Coordinator. Proctor will conduct train-the-trainer programs and share information about our grant programs and other sustainable agriculture resources with five Tribal colleges and Tribal communities in Michigan and Wisconsin. As Michigan State University's Tribal Extension Educator, her projects include developing, delivering, and evaluating educational programs in Tribal governance, diversity, facilitation, and youth leadership.

NCR-SARE also welcomes **Andy Larson**, who will be providing support as an Associate Professional Development Program Coordinator. Larson is a Farm Outreach Specialist with the Farm Finance Institute and has previous experience as an NCR-SARE state coordinator and Administrative Council representative.

Katy Dickson and Andrew Stumpf are new NCR-SARE Administrative Council (AC) members. NCR-SARE's Administrative Council sets program priorities and makes granting decisions for NCR-SARE. Dickson has been elected as a farmer or rancher representative on the AC. Dickson and her family run Christensen Farm, a certified organic farm in Browntown, Wisconsin. They directly sell vegetables, fruit, honey, and eggs through farmers' markets and Community Support Agriculture (CSA) shares. Stumpf has been elected as a national or state Geological Survey representative on the AC. Stumpf is a researcher with the Illinois State Geological Survey and studies major events of the most recent geologic period to understand issues like water supply management, mitigation of geologic hazards, and changing climate dynamics.

NCR-SARE would like to thank Katie Nixon and Matthew Streeter, whose terms on the Administrative Council have ended.

#### University of Minnesota



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Send address updates to mart 1817@umn.edu or visit https://northcentral.sare.org/about/join-ourmailing-list/

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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. Follow, like, or friend us!





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#### ABOUT NCR-SARE

NCR-SARE funds cutting-edge projects every year through competitive grant programs, and has awarded more than \$90 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 <a href="https://northcentral.sare.org/grants">https://northcentral.sare.org/grants</a> for more information, or contact the NCR-SARE office at <a href="mailto:ncrsare@umn.edu">ncrsare@umn.edu</a>.

#### NCR-SARE GRANT TIMELINES\*

Farmer Rancher\*
August - Call for Proposals Released
December - Proposals Due
February - Funding Decisions
April/May - Funds Available to Recipients

Graduate Student\*
February - Call for Proposals Released
April - Proposals Due
July - Funding Decisions
September - Funds Available to Recipients

Research and Education\*
August - Call for Preproposals Released
October- Preproposals Due
January - Full Proposals Invited
March - Full Proposals Due
July - Funding Decisions
November - Funds Available to Recipients

Professional Development Program\*
February - Call for Proposals Released
April - Proposals Due
July - Funding Decisions
October - Funds Available to Recipients

Youth Educator\*
August - Call for Proposals Released
November - Proposals Due
February - Funding Decisions
March - Funds Available to Recipients

Partnership\*
August - Call for Proposals Released
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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