

## Sustaining the Sugarbush in a Tribal Community

In the melting snow of a northeastern Minnesota forest, you'll find Eric DuPuis busily tapping maple trees. As a sugarmaker, DuPuis works in a sugarbush, a stand of maple trees used for sugarmaking. Dupuis has been a sugarmaker for more than 15 years with the Nagaajiwanaang band of the Anishinaabe Ojibwe people in Minnesota.

Making maple syrup and sugar is an ancient tradition of the Ojibwe people. Long before colonists arrived, the Ojibwe people set up sugarbush camps in late winter to make maple sugar and syrup. Some of these camps have been in the same families for generations (Native Harvest, 2022).

DuPuis' grandfather had a small sugarbush that DuPuis would visit as a child, and DuPuis started sugarmaking with his dad many years ago. They began with 30 trees and expanded from there. Today, DuPuis runs the sugarbush with about 350 taps to collect sap from the trees (he uses 1-2 taps per tree). Sugarmakers must cook the sap steadily, constantly adding fuel to reduce sap into syrup. 40 gallons of sap yields one gallon of syrup, so the cooking time is significant. DuPuis fuels his sugarmaking equipment using wood he harvests from the surrounding forest. As the size of the sugarbush increased, so did the labor.

In 2019, DuPuis applied for and received a \$9,000 NCR-SARE Farmer Rancher grant to make some lasting improvements to their sugarbush. Working with the University of Minnesota Duluth's Center of Economic Development, DuPuis created a business plan to sustain their sugarbush with improved efficiency and community engagement. Improving efficiency meant increasing production and reducing fuel consumption.

DuPuis documented that he could save time and wood by making changes to his system, including updating his evaporation pans, filter press, and other heating equipment. After implementing these adjustments, he improved

his ratio of sap to syrup from ~20 gallons per cord of wood to ~30 gallons per cord of wood. He was able to make more syrup with less wood. By reducing the amount of wood he needed, he also reduced labor.

"Having a more efficient vaporator means burning less wood, which means less pollutants released from that, and less trips running the ATV back and forth hauling wood," explained DuPuis.

### Community Sugarmaking

As part of the project, DuPuis involved more community members in sugarmaking. Working with Fond du Lac Tribal Community College's Thirteen Moons extension program, he hosted sugarmaking workshops. Community members learned to identify maple trees during winter, practiced tapping trees, and helped install and maintain a tubing system. As they boiled sap together, they became more familiar with the process and one another.

"One family became involved with the sugarbush workshops from the beginning," said Dupuis. "Most participants are single participants. However, this group was a family that included their 11-year-old daughter. Their participation was a great example of community participation."

### Dig Deeper

DuPuis shared his research at the Emerging Farmers Conference in Minnesota in 2021. A recording of the presentation is online at <https://www.youtube.com/watch?v=HiGj42gYUA8>.

For more information on this project, visit <https://projects.sare.org/project-reports/fnc19-1160/> or contact the NCR-SARE office.

NCR-SARE's Farmer Rancher program starts accepting proposals in mid-August. Learn more here: <https://northcentral.sare.org/grants>.

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### Sustaining the Sugar Bush

For more than 15 years, Eric DuPuis has been a sugarmaker with the Nagaajiwanaang band of Anishinaabe Ojibwe people near Cloquet, Minnesota. With SARE support, he made some improvements to his sugarmaking enterprise that have benefited his business and community.

Photos courtesy of Eric DuPuis.



# Farm to Fork: Sustainable Ag for MN Teens

Navreet Mahal (right) shares details about soil health with high school students during a visit to Sam Ziegler's farm (center). Photo courtesy of Navreet Mahal.

Youth Educator grants are a way NCR-SARE helps introduce new and exciting farming and ranching options to youth, families, and community members.

Navreet Mahal grew up in a farming family in India before completing a Ph.D. in Sustainable Agriculture at Iowa State University. While working at South Dakota State University in 2021, Mahal paired up with Mriganka De at Minnesota State University, Mankato, to develop a sustainable agriculture educational program for high school students. Called Farm-to-Fork, the program launched at what Mahal said was a pivotal moment for youth and sustainable agriculture.

"Youth today have limited knowledge about agriculture and are losing interest in considering it as a career option," said Mahal.

Collaborating with the local farmers, Mahal and De introduced 15 high school students at Mankato East/West High School in Minnesota to sustainable agriculture practices.

Students learned about sustainable agricultural production systems and related environmental issues during the Farm-to-Fork program. They participated in class discussions and field tours. They directly interacted with farmers and ranchers and learned about the farm's sustainable production and marketing methods.

During a field visit to Jared Luhman's Grassfed Cattle Co., students learned about their farm-to-table approach to direct production and marketing. At Sam Ziegler's Green Seam Farm, the students learned about corn-soybean rotation, soil erosion

issues, and soil health management practices like cover crops. At both farms, students got hands-on experience collecting soil samples with scientific tools and worked on their data analyses and interpretation skills.

"The Farm-to-Fork program provided opportunities for the youth to learn about agriculture directly from the scientists, farmers, and ranchers that create an awareness of the importance of sustainable agriculture and different career options in this field," said Mahal.

## Dig Deeper

To learn more about this NCR-SARE Youth Educator grant project, visit <https://projects.sare.org/project-reports/yenc21-165/> or contact the NCR-SARE office.

NCR-SARE starts accepting Youth Educator proposals in August and they're due in November. Learn more: <https://northcentral.sare.org/grants>.



SARE's "Sustainable Agriculture Resources and Programs for K-12 Youth" is a 38-

page guide to sustainable agriculture-oriented educational opportunities for schoolchildren. It features more than 85 programs and curricula nationwide. Updated in 2022, the guide includes direct links, contact information, and ideas for integrating lessons into school programs. Find it at <https://northcentral.sare.org/resources/sustainable-agriculture-resources-and-programs-for-k-12-youth/>.

# Apply for a Grant

If you are interested in writing a proposal for an NCR-SARE grant, we are here to help. We can provide grant reports from other projects, lists of funded projects, or other sustainable agriculture information. Visit <https://northcentral.sare.org/grants/apply-for-a-grant/> for more information or contact the NCR-SARE office.

## 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/>.



# Test Your Ideas

"How to Conduct Research on Your Farm or Ranch" is a SARE bulletin that outlines how to conduct research on a farm or ranch at the farm level using practical strategies and peer-reviewed research findings. It describes real-life examples and gives practical tips for both crop and livestock producers. Read it or order a copy for free online at <https://www.sare.org/resources/how-to-conduct-research-on-your-farm-or-ranch/>.



# Black Soldier Fly Composting Takes Flight on Urban Farms

Purdue University graduate student, Caydee Terrell, rears black soldier flies

## Rearing Black Soldier Flies

Terrell got to work developing a BSF-rearing system optimized for urban production using materials commonly available at a hardware store. She tested a variety of food waste streams, including table scraps, manure, and spent grains from a brewery. When the waste streams were pooled and fed to BSFL, the result was a soil conditioner/amendment comparable to traditional compost. She worked with the Purdue Horticulture Research Farm, community gardens in the greater Lafayette area, and three urban farmers to test rearing BSFL and explore using the compost they made. An urban chicken farmer involved with the project was especially impressed with BSFL's ability to break down manure.

"We put our bin right behind the layer coop," said the farmer. "Inside the coop, we have a poop board that gets a layer of pine shavings below the roosts, which collects just about any manure the hens leave in the coop. We usually clean the board twice a week, but if I do it only once a week, the manure is crawling with tiny to small BSFL. There is also much less chicken manure because the larvae actively break it down. That all goes right into my compost pile. Just a bonus and less mucking out the coop for us!"

A community gardener liked how easy it was to set up and use the rearing bin, but separating the compost from the larvae proved challenging. Terrell addressed this

issue in her tests by keeping the larvae rearing bins in mesh cages. She collected the adult flies from the mesh cages surrounding the rearing bins until no more adults emerged, and then she would remove the compost.

## Next Steps

With so much left to explore, Terrell will continue with her Ph.D. and pursue a career in research and extension. She's especially interested in agricultural waste issues.

"My project defined and highlighted agricultural loops we can take advantage of. Right now, most ag systems are linear, which requires a lot of inputs and generates a lot of outputs, also known as agroindustrial wastes," explained Terrell. "But if you could repurpose that waste, it would no longer be considered 'output only waste' and go from having no value to having some. And although my research is one little piece when looking at a system this big, it would be noticeable if it were missing once we had the bigger picture."

## Dig Deeper

For more information on this project, visit <https://projects.sare.org/project-reports/gnc20-311/> or contact NCR-SARE.

## Apply for a Graduate Student Grant

NCR-SARE will start accepting proposals for new Graduate Student grants in February 2023. Learn more about applying here: <https://northcentral.sare.org/grants>.

## Rearing Black Soldier Flies

Black soldier flies can be reared in bins like this 55-gallon version. Plans for making both 18-gallon and 55-gallon rearing bins are available online at <https://projects.sare.org/project-reports/gnc20-311/>.

Photos courtesy of Caydee Terrell.

Black soldier flies (BSF) are attracting attention in agricultural communities. These non-biting flies are about 3/4" long and black; they look more like a wasp than a fly, but they neither sting nor bite. The larvae consume various organic materials, including manure and larvae of more pesky flies. BSF larvae can also be food for animals and birds.

In 2019, BSF became the topic of a meaningful conversation between Purdue University entomology graduate student Caydee Terrell and entomologist Laura Ingwell. From Ingwell, Terrell learned about black soldier fly larvae's (BSFL) ability to break down chemical contaminants in organic material and impact the bioavailability of heavy metals. Terrell noted that this combination of breaking down organic waste while remediating contaminants and generating nutritional feedstuff could benefit the urban farmers in her area. She was curious to know if the compost material left by BSFL would make a good growing substrate.

## Composting with Black Soldier Flies

In 2020, Terrell applied for and received a \$14,832 NCR-SARE Graduate Student grant to study BSF and work with urban farmers who could benefit from a BSF composting system that could recycle organic waste and generate nutrient-dense soil amendments.

"Traditional compost production strategies include aerobic, anaerobic, and vermicomposting," explained Terrell. "Aerobic composting involves the regular turning of the pile, so it is well aerated and only slightly odorous if not kept unturned. Anaerobic is the opposite, with no interference (turning), and is very odorous, making it unsuitable for urban farmers. Almost 70 percent of urban farmers struggle with land access (Oberholtzer 2016) and operate on small, confined lots. Because of this, urban farmers often do not have the space or the authority, due to zoning regulations, to implement traditional composting methods."





# Improving Honeybee Queen Quality and Diversity in Ohio

Hongmei Li-Byarlay is working to improve the quality and quantity of queen bee production in Ohio. Photo courtesy of the Li-Byarlay Lab.

Ohio beekeepers are losing 50-60 percent of their managed bee colonies each year, according to Hongmei Li-Byarlay, Associate Professor of Entomology at Central State University. Li-Byarlay studies the genetics and behavior of honey bees and believes mite-resistant bees could help improve Ohio honeybees. Her research lab focuses on honeybee genetics and behavior, and recently she has been exploring queen bee quality and genetic diversity.

“Promoting mite-resistant bees is one of the most effective ways to mitigate bee decline,” said Li-Byarlay. “We have a collection of bee stocks from feral colonies that are mite resistant with high mite biting behavior. However, the limiting factor is too few queens and nuclei available to fulfill the demand of local beekeepers.”

With support from an NCR-SARE Partnership

Grant, Li-Byarlay’s Lab worked with experienced queen producers in Ohio to improve the queen quality of honeybee stocks in Ohio.

“We want to improve the beekeepers’ understanding of the biology of queen bees and help to transfer and distribute favorable genetics to more bee farmers,” said Li-Byarlay. “The outcome is to improve the quality and quantity of queen production in the region.”

## The Art of Grafting

Commercial queen bees start their lives through an activity that queen rearers call “grafting.” Grafting is when queen bee producers transfer young larvae from breeder queens into cell-building colonies. The traditional grafting process takes ten days and requires specialized knowledge and resources.

For this SARE project, Li-Byarlay successfully used a relatively new 48-hour method of grafting. This abbreviated 48-hour method is promising because it’s faster and requires fewer resources

than traditional queen-rearing.

“For many beekeepers, the bottleneck to diversifying their queen genetics is finding a affordable price for queen purchasing,” said Li-Byarlay. “Our approach is to lower the cost by providing 48-hour queen cells. At the same time, beekeepers can have more diversity in their queen and honeybee colony genetics in their backyard, which will promote more outbreeding and less inbreeding.”

## Feral Vs. Commercial Bees

The team studied feral, Russian, and commercial package bees when looking at the egg-laying behavior/rate of queens from different bee stocks. Queen cells from Russian stock, feral colonies, and commercial queen stock emerged, mated, and were placed into new nuc colonies with the same amount of worker bees. Results showed that the feral bees had a higher egg-laying rate than the commercial bees.

The team hosted field days to demonstrate how to do queen rearing and make 48-hr queen cells. 100 queen cells from their mite-resistant stocks went home with workshop participants. They also held several workshops on how to make and use swarm traps to catch feral bee colonies.

“Overall, we have had a broad impact on the change of knowledge in queen rearing, genetics, and breeding in Ohio, especially in South Western Ohio regions,” said Li-Byarlay.

## Dig Deeper

For more information on this project, visit [https://projects.sare.org/sare\\_project/nc19-062/](https://projects.sare.org/sare_project/nc19-062/) or contact NCR-SARE.

NCR-SARE starts accepting Partnership grant proposals in mid-August. Learn more here: <https://northcentral.sare.org/Grants>.

## Grafting Queen Cells

Xaryn Cleare, an alumnus of the Li-Byarlay Lab, transfers young larvae from breeder queens into cell cups. He will place these in a nutrient-rich starter hive. The queen cells will then hatch into future queen bees. This process is called “grafting.”

Photo courtesy of the Li-Byarlay Lab.





# Building Confidence Around Farm Law Education



Rachel Armstrong never stops asking questions about farm law. While working various jobs at farms, restaurants, and nonprofits, she always had questions about forming businesses and hiring people and rarely found reliable answers. Armstrong took action; she enrolled in law school. Today, her nonprofit organization, Farm Commons, is working to build a solid legal backbone for farmers.

## Building Educator Confidence

Armstrong and Farm Commons knew that most agriculture professionals don't feel confident when guiding farmers to legal resiliency.

"Seventy-one percent of agriculture professionals say legal questions come up at least once per week during their work," said Armstrong. "Agriculture educators and support persons want to help farmers navigate farm business structures, liability, farmland leases/ land issues, and other legal aspects of their farm businesses."

To address the concern, Farm Commons received a \$74,947 NCR-SARE Professional Development Grant (PDP) in 2018 to work with ag professionals and educators to increase their understanding of fundamental farm law.

"The stakes are high: 66 percent of farmers don't have adequate insurance for their farm operation, just 7 percent have a written operating agreement or bylaws," said Armstrong. "Employment law confusion is endemic. We can fix this! With good training, agriculture support persons like Extension agents, agency staff, nonprofit professionals, and technical advisors can provide clear, accurate farm law information that reduces legal risk."

Farm Commons hosted six in-person, day-long workshops during the grant project that oriented non-farming agriculture professionals to the ten things they could do to help farmers reduce legal risk. They also converted the in-person workshop into a 4-part series of online training events.

Of the 232 participants, 58 percent experienced a modest increase in confidence, with an additional 38 percent seeing a significant increase in confidence. With the overall effectiveness of the workshops, Armstrong hopes more educators will participate in future trainings.

"The harsh reality is that it can be quite challenging to attract participants to the workshop itself," said Armstrong. "We struggle because few people want to come to our workshop, but everyone loves it after they leave! We are looking at finding 'average' to motivate attendance at these workshops better."

## Farm Law Resources for Educators

Farm Commons created a series of tip sheets for agriculture educators:

- Communicating with Regulators
- Fence Law Basics
- Insurance Basics
- Farmland Lease Termination Basics
- Sharing responsibilities in a farmland lease
- LLC Basics
- Chemical Drift Prevention Basics
- Chemical Drift Response Basics
- Succession Planning Basics

These tip sheets can be found online in Farm Commons public resource library at <https://farmcommons.org/library/resources/>. Search for the name of the tip sheet to find it. Armstrong believes resources like these can help educators proactively resolve legal vulnerabilities.

"Understanding the basics of farm law is about empowered decision-making," said Armstrong. "People need access to information they can use daily to build a business that reflects their values, including farm law. When sustainable farmers see their values reflected in how they treat risk management and their decisions about how to comply with the law, that's truly fulfilling."

## Dig Deeper

Farm Commons' online "Guiding Resilience" workshop is a legal workshop designed just for



"Guiding Resilience" is a Farm Commons legal workshop series designed for extension agents, nonprofit professionals, lenders, advocates, business advisors, and other agricultural service providers.

The 5-session winter series starts February 1, 2023. Learn more online at <https://farmcommons.org/product/gr-winter-2023/>.

Photo of Rachel Armstrong (above) by Mark Pensiten.

agricultural educators. The next online session starts on February 1, 2023. Learn more online at <https://farmcommons.org/product/gr-winter-2023/>.

Learn more about this SARE grant project at [https://projects.sare.org/sare\\_project/enc18-164/](https://projects.sare.org/sare_project/enc18-164/).

## Apply for a PDP Grant

NCR-SARE will start accepting proposals for new PDP grants in February 2023. Learn more about applying here: <https://northcentral.sare.org/Grants>.



# ¿Qué es la Agricultura Sostenible?

este sitio web: <https://www.sare.org/resources/que-es-la-agricultura-sustentable/>.

How do you make a farm or ranch more sustainable? There is no single answer, but SARE's 8-episode "What is Sustainable Agriculture" animated video series highlights some common practices farmers and ranchers across the country use to improve economic viability, quality of life, and environmental stewardship.

SARE's playlist of videos centered on sustainable agriculture practices are available in Spanish and English. Find the Spanish versions online at <https://www.sare.org/resources/que-es-la-agricultura-sustentable/>. Find the English version online at <https://www.sare.org/resources/what-is-sustainable-agriculture/>.

Qué puede haber para que su finca o rancho sea más sustentable? No hay una respuesta simple, pero la serie de animación de 8 episodios de SARE "¿Qué es la agricultura sostenible" destaca algunas prácticas comunes usadas por productores en todo el país para mejorar la rentabilidad, calidad de vida, y el manejo ambiental. Visite



## Scaling Up Your Vegetable Farm for Wholesale Markets

SARE's new bulletin, "Scaling Up Your Vegetable Farm for Wholesale Markets" guides you through the likely changes you'll need to consider when planning to branch out into wholesale markets. These include business planning, working with wholesale buyers, and production areas ranging from increasing yield and produce quality, to harvest and postharvest handling, food safety, and more.

Download or order a free copy online at <https://www.sare.org/resources/scaling-up-your-vegetable-farm-for-wholesale-markets/>.

For direct market farmers, expanding an operation to capture local and regional wholesale markets can represent an opportunity. But such a shift changes how you run your farm.



## New Sustainable Agriculture Poster

SARE's updated Sustainable Agriculture poster depicts the elements of sustainable agriculture in a visual format easy for younger audiences to understand. Updated in 2022, the free PDF file can be downloaded at <https://northcentral.sare.org/resources/sustainable-ag-poster/>.

## 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:

The Munch Bunch in Wisconsin is testing wireless, virtual fencing for their goats. See SARE project FNC21-1306.



Aaron Hopkins and South Side Family Farms are creating educational opportunities using the heritage of black farming as a motivation and inspiration in Columbus, Ohio. See SARE project FNC22-1328.



Stan Smith and Frank Kutka are working on a multi-state, open-pollinated corn project to increase yields and seed sale opportunities. See SARE project FNC21-1286.



Eleazar Gonzalez with Lincoln University of Missouri is increasing Latino producers' engagement, skills, attitudes, and knowledge of sustainable agriculture and organic production methods, and USDA programs. See SARE project LNC20-434.



Michelle and Mark Brannen have been developing profitable pollinator habitats on their urban farm in Omaha, Nebraska. See SARE project FNC19-1156.







## Review Grants with NCR-SARE

If you live and work in the North Central region and are interested in sustainable agriculture, you could help review NCR-SARE grant proposals. Self-nominations to serve on NCR-SARE grant program review committees are welcome anytime throughout the year.

### Serving on a Grant Review Committee

Donna Pearson McClish (above) is the founder and CEO of Common Ground Mobile Market and Mobile Food Hub. This unique mobile food hub serves both urban and rural families in Wichita, Kansas. She is a multi-generation urban farmer, an NCR-SARE Administrative Council member, and NCR-SARE's Farmer Rancher Grant Review Committee's chairperson.

"I have been reviewing grants for many years, and each opportunity gives me a greater insight into the needs of communities and solutions to those needs," said Pearson McClish. "As a grant reviewer, you learn how to look at the written work of others from a different lens and perspective. The review process is also an opportunity to broaden the reviewer's horizon into other cultures and community systems. It is a lot of work but well worth the learning experience!"

Serving on an NCR-SARE grant review committee can be a rewarding and educational experience. Each review committee has varying requirements, but generally, members review proposals, discuss the proposals, and make recommendations to the Administrative Council. To apply, visit <https://tinyurl.com/NCRSAREReviewCommittee>.

## New Video Series Showcases Grantees

## FARMING MATTERS WITH NCR-SARE

NCR-SARE has launched a new storytelling video series, "Farming Matters," featuring grantees. Join NCR-SARE staff members Erin Schneider and Marie Flanagan as they learn more about what inspires and motivates farmers, researchers, and educators. You'll leave each video with a better understanding of the innovative ways SARE grantees approach challenges.



With this project-sharing series, as with all our outreach efforts, NCR-SARE is working to broaden the narrative about farmers and their communities by sharing stories from various perspectives. Released in November 2022, the first three episodes take us to farms across the region.

### The First Three Episodes



**Danielle Guerin** takes us to Indianapolis' Soul Food Project. With support from a SARE grant, they explored direct marketing and now run a successful community-based "veggie box" program. A subsequent SARE grant bolsters their Youth Grow Indy program, an urban farming experience for youth ages 9-18.

**Beth Neff** takes us to the MARSH Food Cooperative (Materializing and Activating Radical Social Habitus) in Saint Louis, Missouri, where she received SARE support to expand the worker-owned urban farming cooperative. Neff describes MARSH as a grassroots, mutual-benefit food system that operates by principles of environmental justice, healthy food access, labor equity, and sustainability.



**The Glazik brothers** come to us live from Cow Creek Farm in Illinois. They received SARE support to grow five heirloom corn varieties for distillation into spirits. In this video, they share the details of the corn varieties and give us a glimpse of what it was like working with a panel of flavor testers.

### Watch Every Episode

Episodes of "Farming Matters" are released on YouTube twice per month, and will be announced on NCR-SARE's Facebook, Twitter, and Instagram accounts. Subscribe today and never miss an episode.

- **YouTube:** <https://www.youtube.com/NCRSAREvideo>
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# UNIVERSITY OF MINNESOTA



UMN, BioAgEng Building  
1390 Eckles Ave., Suite 120  
Saint Paul, MN 55108  
[www.northcentral.sare.org](http://www.northcentral.sare.org)

Send address updates to  
[mart1817@umn.edu](mailto:mart1817@umn.edu) or visit  
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## ADDRESS SERVICE REQUESTED

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## ABOUT NCR-SARE

NCR-SARE funds cutting-edge projects every year through competitive grant programs, and has awarded more than \$80 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 <https://northcentral.sare.org/grants> for more information, or contact the NCR-SARE office at [ncrsare@umn.edu](mailto:ncrsare@umn.edu).

## NCR-SARE GRANT TIMELINES\*

Farmer Rancher\*  
August - Call for Proposals Released  
December - Proposals Due  
February - Funding Decisions  
March - 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

Phone: 612-626-3113  
Email: [ncrsare@umn.edu](mailto:ncrsare@umn.edu)  
[www.northcentral.sare.org](http://www.northcentral.sare.org)

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