

2022 NCR-SARE Research & Education Projects Recommended for Funding

Project #	Title	PI Name	Primary Grantee	Project State	Amount to Fund	Cumulative	Brief Description
LNC22-475	The Soil Organic Carbon network (SOCnet): Farmers building soil assets to help mitigate and adapt to climate change in the North Central US	Gregg Sanford	University of Wisconsin-Madison	WI	\$ 249,738	\$ 249,738	We will build an on-farm soil organic carbon tracking network (SOCnet) to improve farmer livelihoods, build agricultural resilience, and fight climate change.
LNC22-460	Comparing soil tarping and solarization for early season weed control in vegetable crop systems - a research and demonstration study	Rhoda Burrows	South Dakota State University	SD	\$ 249,935	\$ 499,673	This project will evaluate the efficacy and practicality of using silage tarps to control early season weeds in the Upper Midwest and Great Plains.
LNC22-476	Evaluating virtual fences for cattle in regards to water resources, forage management, invasive weed control, and wildlife systems	Jaymelynn Farney	Kansas State University	KS	\$ 249,999	\$ 749,672	Determine feasibility of virtual fences on cattle operations to reduce labor and infrastructure costs, improve/sustain water and pasture resources, and manage for wildlife habitats with flexible grazing management strategies that can implemented with ever-changing environmental conditions.
LNC22-461	Marketing and Business Skills for Beginning, Refugee, and Immigrant Farmers in Lincoln, Nebraska	Amy Gerdes	Community Crops	NE	\$ 72,446	\$ 822,118	This project offers two years of educational classes for beginning, refugee, and immigrant farmers on business planning and marketing skills utilizing local farmers as expert instructors to build educational knowledge and supporting networks for long-term success.
LNC22-462	Evaluating an under-utilized species for climate resilient forage and cover crop options in North Central Region cropping systems	Krista Isaacs	Michigan State University	MI	\$ 249,932	\$ 1,072,050	Participatory on-farm research to evaluate the potential of a warm season grass (fonio) as a resilient crop for forage, cover, and grain in diverse farming systems. The project will combine field trials, outreach, and surveys to evaluate the socio-ecological implications for production and adoption.
LNC22-463	Exploration of Shredded Cardboard as a Mulch and Compost Resource to Improve Soil Health and Water Management by Urban Growers in the Twin Cities	Nicolas Jelinski	University of Minnesota	MN	\$ 249,852	\$ 1,321,902	This project will assess the performance of using a plentiful waste product, shredded cardboard as mulch, to build soil, plant, and community health in urban gardens and farms in the Twin Cities of Minneapolis/St. Paul together with traditionally underserved audiences.
LNC22-464	Biological control for sustainable management of soybean gall midge, a new pest of soybean in the North Central Region	Robert Koch	University of Minnesota	MN	\$ 239,682	\$ 1,561,584	This multistate research-focused project will generate fundamental knowledge to facilitate biological control of soybean gall midge, a new pest of soybean.
LNC22-465	Collaborative Outreach and Demonstration of Farm-based Tile-Treatment Wetlands for Water Quality Improvement	Jill Kostel	The Wetlands Initiative	IL	\$ 143,480	\$ 1,705,064	The Wetlands Initiative will collaborate with farmers and ag-sector partners on landowner outreach and demonstration, deploying the latest social science research, to disseminate the use of small tile-treatment wetlands for nutrient loss reduction on working row-crop farm properties in Illinois.
LNC22-466	Bimaaji'idiwin Gitigaaning Producer Training Program and Manoomin hull Research	Courtney Kowalczak	Fond du Lac Tribal and Community College	MN	\$ 250,000	\$ 1,955,064	The Producer Training Program provides land, resources and education materials to support Fond du Lac food sovereignty goals and fosters innovative land management techniques like using wild rice hulls as crop mulch. Research on the water conservation impact of rice hulls will be part of the PTP.

LNC22-467	Financial Feasibility and Environmental Implications of Adopting Automatic Milking Systems by Dairy Farms in Wisconsin and Minnesota	Luis Peña-Lévano	University of Wisconsin - River Falls	WI	\$ 249,945	\$ 2,205,009	Our overarching goal is to understand the factors that drive the adoption of robotic milking by dairy farms in Minnesota and Wisconsin. Specifically, we will determine how transitioning from tie-stall or parlor milking to robotic milking affects business viability and environmental sustainability.
LNC22-468	Taking the sting out of honey bee medicine: Training and tools for veterinarians to increase access to care for beekeepers.	Meghan Milbrath	Michigan State University	MI	\$ 114,625	\$ 2,319,634	This project is a training program for beekeepers, veterinarians, and veterinary students focused on improved management of honey bee bacterial diseases and improved antibiotic use.
LNC22-469	Prairie strips for enhanced honey production: Can conservation improve apiculture?	Matthew O'Neal	Iowa State University	IA	\$ 248,659	\$ 2,568,293	Our preliminary data reveals a 24% increase in honey production when bees have access to prairie strips, a new USDA Conservation Reserve Program practice. With collaboration from Iowa beekeepers and farmers, we will explore if this practice (CP43) consistently supports commercial-scale beekeeping.
LNC22-470	Urban Farming Entrepreneurship Program: Providing minority youth entrepreneurship training to increase employment and food access	Kathryn Orvis	Purdue University	IN	\$ 245,116	\$ 2,813,409	This project is built to support & strengthen Indianapolis urban agriculture youth programs for capacity-building to create job opportunities & increase the supply of fresh produce in Martindale-Brightwood neighborhood through workshops, hands-on experience & micro grants for small businesses.
LNC22-471	Planting Green in the Frozen North	Lindsay Pease	University of Minnesota	MN	\$ 249,839	\$ 3,063,248	In small plots and on-farm, this project will evaluate how a rye cover crop affects soil metrics, soybean production and disease, and weed and pest pressure in the Upper Midwest's "Frozen North"
LNC22-472	Black Emancipatory Agriculture Asset Map and Returning Generation Black Farmer mentorship program	Ryan Tenney	Sankara Farm LLC	MO	\$ 249,352	\$ 3,312,600	The BEAAM utilizes emancipatory action research, community-based education and mentorship with Black farmers to develop food sovereignty within historically-underserved communities.
LNC22-473	Novice-to-Producer Agroforestry Education: Linking demonstration farms to online learning, apprenticeships, & communities of practice	Kate Wersan	Savanna Institute	WI	\$ 249,597	\$ 3,562,197	This project builds farmer-led educational content and delivery around a network of four at-scale agroforestry demo farms in Illinois and Wisconsin. We will integrate demo farm content into online courses and on-site capstones, matched with multimodal outreach and educational events.
LNC22-474	Optimizing Agricultural Use of Diverse Soil Landscapes: Small Organic Vegetable Farms in the Driftless Area	Kyungsoo Yoo	University of Minnesota	MN	\$ 249,939	\$ 3,812,136	The Driftless Area is a magnet for small farmers. Rugged topography, together with the complex surficial geology, has imparted the region with diverse soil landscapes. Researchers and organic vegetable farmers will collaboratively seek to optimize the agricultural use of diverse soil landscapes.