

2024 NCR-SARE Farmer Rancher Grant Projects Recommended for Funding

Project #	Title	PI First Name	PI Last Name	Primary Grantee	PI State	\$\$\$ to Fund	Cumulative	Brief Description
FNC24-1401	Food Waste to Bunny Taste: Demonstrating the benefits of rabbit manure in building healthy soil and climate resilience in urban environments.	Mina	Aria	Rad Bunnies	MO	\$ 29,981	\$ 29,981	This project focuses on demonstrating the benefits of converting food waste and organic waste into food for small animals such as rabbits and introducing rabbit manure into soil in building healthy soil and climate resilience in urban environments.
FNC24-1402	Determining Optimal Planting Density Per Acre of Dual-Purpose Industrial Hemp with Cover Crop	Brent	Boman	AST Genetics	KS	\$ 14,840	\$ 44,821	The purpose of this project is to determine the optimal planting density of an industrial hemp variety when planted with a no-till seed drill. The project will take place in a non-irrigated row crop production field in Northeast Kansas. Harvested fiber will be field retted, baled and weighed
FNC24-1403	Demonstrate the Impact of Multi-Species Grazing with Virtual Fencing as Ecologically Beneficial Vegetation Management in Critical Watersheds	Stephanie	Bowers	Glorious Goat Ranch, LLC	WI	\$ 15,000	\$ 59,821	This project demonstrates the impact of multi-species grazing as a chemical-free way to manage vegetation on varying landscapes. Pre and post vegetation inventory, leader-follower grazing, commingled grazing, and virtual fence containment across species (cattle, goat, sheep) are evaluated.
FNC24-1404	Climate Resilient Pastures: Establishing long-lived, multipurpose fodder, fruit and nut trees in an Upper Midwest silvopasture system	Emily	Buehler O'Leary	North Fork Farms MN	MN	\$ 14,887	\$ 74,708	In response to unpredictable temperatures and rainfall, using red mulberry pollards as the backbone of our system, we will plant multi-specie in-pasture tree rows to stockpile alternative feed for livestock via fodder, fruit, and nut masts, and to also improve the overall health of pasture ecology.
FNC24-1405	A More Cost Effective and Sustainable Raceway Design for Indoor Shrimp and Fish Production	Ashtyn	Chen	OceanArc Technologies	OH	\$ 26,295	\$ 101,003	Indoor tanks for shrimp and fish are normally swimming pools (breaks easily), fiberglass tanks (too expensive, difficult to move), or wooden frame tanks (labor-intensive). Building raceways with metal frame panels bolted together with a HDPE liner could be more efficient, durable, and cost-effective

FNC24-1406	Improving and sustaining varroa and disease resistance using your current local honey bee queen stock	Joshua	Combs	Combs Bee Farm	OH	\$ 29,956	\$ 130,959	Varroa destructor is currently the biggest threat to honey bees. With the use of a brand new product on the market called UBeeO, we will take our current honey bee stock and see how high we can raise the varroa and disease resistant traits in our own apiary and surrounding apiaries within 3 miles.
FNC24-1407	Improving vegetable yield, profit, and quality of life on urban farms with a new biobased, compostable weed barrier for narrowly spaced crops	Lachelle	Cunningham	Frogtown Farm	MN	\$ 15,000	\$ 145,959	Hand weeding vegetables is time-consuming, particularly in narrowly spaced crops like leafy greens, carrots and green onions. Our goal is to reduce hand weeding and improve farmer quality of life with a new biobased, compostable weed barrier system designed specifically for these challenging crops.
FNC24-1408	Expanding On-Farm Propagation of Hazelnuts in the Upper Midwest Through Seed-Graft Layering	Colin	Cureton	Midwest Hazelnuts, LLC	MN	\$ 25,221	\$ 171,180	This project will help expand hazelnut production in the Upper Midwest by empowering hazelnut growers to propagate advanced selections of hazelnuts for planting on their own farms and for sale to other growers.
FNC24-1409	Title: Sustainable urban agriculture entrepreneurship incubation for BIPOC and underserved communities in Springfield, Illinois	Yves	Doumen	The Motherland Gardens Community Project	IL	\$ 15,000	\$ 186,180	Training and mentoring BIPOC and underserved communities in sustainable urban agriculture production and promote consumption of fresh healthy food to reduce food insecurity.
FNC24-1410	Establish and Evaluate a Two-Dimensional Peach Training System Using Three Different Peach Rootstocks and Three Different In-Row Spacings	James	Eckert	Eckert orchards	IL	\$ 5,030	\$ 191,210	I will establish a peach tree planting with three rootstocks having three different vigor levels, with in-row tree spacings of 4-5-6 feet. The growing system will be two-dimensional (planar), trained to a three-wire vertical trellis.
FNC24-1411	Potential Application of Hügélkultur to Increase Water Holding Capacity of Central Missouri Farmland	Holly	Evans	Rosy Buck Farm	MO	\$ 11,902	\$ 203,112	Reducing irrigation inputs and water runoff by increasing water retention through the use of Hügélkultur.
FNC24-1412	Indigenous Food and Agriculture Apprenticeship Project	Jennifer	Falck	Kahulahele Farmstead	WI	\$ 30,000	\$ 233,112	The primary intent of this proposal is to expose Oneida community members to indigenous, organic, and heirloom foods produced and raised by each farm involved in this team project. This will be achieved by making these foods available to the community by way of meals and/or meal kits.

FNC24-1413	Evaluating a 'soft pesticide' program for wine grapes in the Great Lakes region for 2024	Andrew	Fles	Shady Lane Cellars	MI	\$ 11,154	\$ 244,266	The purpose of this project is to evaluate the efficacy of a pesticide program that features many new organic and reduced risk fungicide and insecticide products that have entered the market in the last several years, as we look to improve disease control, food and worker safety, and sustainability
FNC24-1414	Is Goat Brush Clearing a viable business for small farmers in Central Indiana?	Sylvester	Friend	Prairie Hills Farm LLC	IN	\$ 14,995	\$ 259,261	This project will research if adding a goat brush clearing services to a small goat farm in Central Indiana is a viable business to reduce the cost of goat livestock ownership.
FNC24-1415	Missouri Dewberry Project	Jeffery	Goss Jr	Ozark Heritage Botanicals	MO	\$ 5,273	\$ 264,534	The applicant will ascertain which cultivars and wild selections of dewberries (Rubus flagellaris et al) are best suited to production in southern Missouri, especially in areas considered marginal for commercial true blackberry production and will collect agronomic, taxonomic, and phenological data.
FNC24-1416	Automating grain feeding in mobile pastured poultry coops.	Michael	Gutschenritter	Three Brothers Farm LLC	WI	\$ 29,956	\$ 294,490	We will design, construct, and refine a solar-powered automated bulk feeding system for hens, pullets, turkeys, and broilers. The goal is to eliminate the strenuous chore of manually feeding poultry with buckets. Results will be shared widely throughout the pastured poultry industry.
FNC24-1417	Non-traditional farm transition planning and value transfer via mentoring and creative lease agreements	Cindy	Hale	Clover Valley Farms, LLC	MN	\$ 29,996	\$ 324,486	Develop mechanisms for value transfer through a variety of pathways that provide young farmers access to land and use of established production capacity along with mentorship by the farm owner, while preserving the ability of retiring farmers to continue living on their farms.
FNC24-1418	Develop sustainable resources to grow Turmeric in Missouri	Ranjana	Hans	Raw Roots Turmeric	MO	\$ 15,000	\$ 339,486	Turmeric cultivation in Missouri is minimal because of inconsistent and harsh weather. We are currently limited in growing capacity. We plan to increase the turmeric production by installing 40 new raised beds at our farm. We will also use different condition to optimize the turmeric growth.

FNC24-1419	Creating a DIY Video Guide on How to Convert a 1950's Gas Powered Weeding Tractor into a Battery Powered Electric Tractor	Pearce	Jensen	StrongHeart Farms	MN	\$ 9,790	\$ 349,276	This project will demonstrate how to convert an 1950s Allis Chalmer Model G gas powered weeding tractor into an electric tractor. Each video will give detailed "step by step" instructions, have clear lists of tools and supplies needed, and give a detailed budget and show where to source supplies.
FNC24-1420	Establishment Best Practices for Trees Producing Edible Pine Nuts in the North Central United States	Abby	Johnson	Ox Heights	MI	\$ 12,134	\$ 361,410	Trees that produce high value edible pine nuts can be costly and difficult to establish. Therefore, we will define scientifically and communicate broadly best practices for pine nut tree establishment in the North Central Region by testing different inoculants and tree shelters.
FNC24-1421	Comparison of Non-herbicide Methods for Control of Invasive Bush Honeysuckle as Preparation for a Prescribed Burn	Shirley	Johnson	Johnson Farm	IL	\$ 15,000	\$ 376,410	Comparison of non-herbicide methods including targeted goat grazing, manual mechanical cutting, and machine shredding for control of invasive bush honeysuckle in degraded oak savannah to prepare for a prescribed burn
FNC24-1422	Demonstration of low impact tractor cultivation in a regenerative farm model to increase production using equipment sharing on multiple farms	Gina	Kerr	Whispering Wild Market Farm	MI	\$ 29,997	\$ 406,407	To demonstrate the effectiveness of equipment such as a compost spreader, a power harrow, and a bed lifter to increase production, profitability, and reduce fatigue and injury to meet the needs of a small, isolated community using the equipment sharing model while improving soil and quality of life.
FNC24-1423	A Comparison of Weed Control Strategies in Christmas Tree Plantations Using Mechanical and Chemical Methods or Shropshire Sheep	Elise	Koning	Sylvanmore	IN	\$ 15,000	\$ 421,407	This project compared the costs of two weed control methods in a Christmas tree plantation: grazing Shropshire sheep versus mechanical and chemical methods. The number of hours involved and the costs of materials were measured to determine the overall cost for each method.
FNC24-1424	Marketing Native, New, and Unfamiliar Culinary Plants: Sample Marketing Plan and Tools for Pineberries, Groundnuts, and Other New and Unique Crops	Darla	Kroft	Green Garden Foraging, LLC	MI	\$ 15,000	\$ 436,407	Marketing uncommon foods such as groundnuts pose challenges not experienced by traditional crop farmers. Using collective wisdom of growers, eaters and retailers, a step-by-step marketing plan and marketing toolbox will be created to expand food choices for the local and distant culinary markets.

FNC24-1425	Summer forage crop options for North-Central Nebraska counties to improve production, forage quality, and soil health	Roger	Licking	LickingAg	NE	\$ 29,978	\$ 466,385	This project will evaluate summer forage mix options for North-Central Nebraska counties for two years to improve current forage production, feed quality, and soil health. Forage production and quality will be measured by biomass sampling before grazing and soil health change by soil sampling test.
FNC24-1426	Investigating the Effects of Basalt Rock Fertilizer on Diversified Market Farmed Crops	Eric	Luu	Zumwalt Acres	IL	\$ 14,172	\$ 480,557	Investigating effects of basalt rock fertilizer on tomatoes, peppers, and eggplants grown under a high tunnel, utilizing enhanced rock weathering (ERW) to sequester carbon, balance pH, and improve yields. This will complement growing ERW research in large-scale conventional commodity crop systems.
FNC24-1427	Empowering the Community with Education to Restore Balance to Life with Regenerative Urban Farming and the Ma'at Urban Farm Network™	STEBO	MA'AT	MA'AT URBAN AGRICULTURE & INDUSTRIES LLC	IN	\$ 14,995	\$ 495,552	MUA & I™ LLC will revolutionize food production by creating the Ma'at Urban Farm Network™. This food production model decentralizes food production by connecting multiple smaller urban gardens and farms to constitute a larger one. This approach emphasizes fewer inputs, less space and higher yields.
FNC24-1428	Hydroponic Fodder Automation: Solving the Labor Problem of Feeding Fodder to Livestock	Joshua	Payne	Payne Farms, Inc.	MO	\$ 30,000	\$ 525,552	Past SARE projects discovered the value of Hydroponic Sprouted Fodder, but determined labor is too much of a constraint to continue the practice. Our project seeks to build a farmer friendly, mechanical BSF machine and compare labor costs with our current, hand operated system.
FNC24-1429	Energy-free Moisture Collection and Utilization System for Irrigating Nut Trees	Reuben	Peterson	Peterson farm	IA	\$ 11,270	\$ 536,822	Clay pots with rain and dew collection systems are applied to irrigate newly planted young trees with goals of reducing required water and labor. Data collected are irrigation rate, soil moisture, and rain and dew collected in a central Iowa setting.

FNC24-1430	Utilizing Beneficial Insects to Eliminate Sprays in Affordable Controlled Environment Systems	Andrew	Petran	Twin Cities Berry Company	MN	\$ 14,835	\$ 551,657	Our project will investigate the use of increasing densities of beneficial insects to manage spider mites and thrips inside caterpillar tunnels used for high-density strawberry production, compared against a control tunnel utilizing a traditional spray regimen.
FNC24-1431	Leaf Pellets as Soil Amendment, Weed Control, and Revenue Stream in Agroforestry.	John	Plescia	Hazel Hill Orchard	IL	\$ 22,276	\$ 573,933	We are going to collect fallen leaves in the autumn from our agroforestry plantings as well as local municipalities. These leaves will be pelletized and used as a soil amendment and weed control mulch at the project farms. Excess pellets can be sold to neighboring farms and homeowners.
FNC24-1432	Strengthening Black farming and food businesses in Dane County	Donale	Richards	Madtown Food Services, LLC	WI	\$ 16,069	\$ 590,002	This project is to support the transition & provide training opportunities for two beginning farmers working with a veteran farmer. All project collaborators are dedicated to improving Black entrepreneurial and collaborative opportunities in Dane County through training and networking engagements.
FNC24-1433	Assessing Effectiveness of Various Methods for Overwintering Dahlias in Zone 6 and Subsequent Effect on Bloom Time	Megan	Rudroff	Rudy Lane Flower Farm LLC	MO	\$ 10,176	\$ 600,178	Study includes multiple methods for attempting to overwinter dahlia plants. If successful in overwintering, the study will also record first bloom dates for dahlias in the various methods, to determine if there is a significant difference in each of the methods versus annually planted dahlias.
FNC24-1434	Integrating Sheep Wool Pellets with Specialty Crop Systems to Enhance Soil Health, Water Storage, Carbon Sequestration, and Plant Production	Whitney	Schlegel	Marble Hill Farm	IN	\$ 17,736	\$ 617,914	This project aims to further understanding of how to integrate animal and plant systems using sheep wool pellets as a soil amendment in specialty crop growing systems. The project will demonstrate waste wool pelletizing and implementation in small farm specialty crop growing systems.
FNC24-1435	Seeds of Sustainability: Cultivating the Future - A Comprehensive Journey into the First Year Farming, from Business Planning to Challenging Stereotyp	Gabriel	Smith	Loading Ranch	WI	\$ 13,160	\$ 631,074	I'm a novice farmer seeking to provide a comprehensive and inclusive narrative of the farming experience, encompassing the wisdom of older farmers, challenges of securing a lease and exploring resources for business development, contributing to a more diverse and informed agricultural community

FNC24-1436	Up or down: Should row cleaners be used when planting green into cereal rye?	James	Stute	Stute Farms	WI	\$ 13,520	\$ 644,594	This project will evaluate use of row cleaners with green-planting of corn and soybean into cereal rye. In field studies we will measure impacts on stand dynamics, slug damage, weed populations, nutrients and yield. We will share results with the no-till community using multiple delivery methods .
FNC24-1437	Hybrid Hickory Variety Recommendations and Propagation Trials	Alex	Tanke	Dispersion Farms	WI	\$ 15,000	\$ 659,594	Provide grower recommendations for multi-purpose, hybrid hickory varieties in zone 4/5 upper midwest and develop epicotyl grafting procedures for hybrid hickories.
FNC24-1438	Empowering our community through education: Making Regenerative Farming Accessible for All	Marty	Thomas	Kakadoodle	IL	\$ 29,067	\$ 688,661	Our project, strives to educate and empower our local community about the profound benefits of regenerative farming. We're creating a collaborative marketplace for year-round access to regenerative products, complemented by a field day, and an educational direct mail campaign.
FNC24-1439	Grains for mushrooms growers	Noreen	Thomas	Doubting Thomas Farms	MN	\$ 30,000	\$ 718,661	Grain is the "baby food" for mushroom spores to grow on. (Usually Rye and white millet). We would increase the use of other grains in specialty mushroom production. The grains would provide smaller farms with the ability to tap into mushroom growers or diversification on farm.
FNC24-1440	Costs & Effects of On-Farm-Made Vermicompost Tea Use in Vegetable Production VS Commercial Organic Inputs	Ionut Lucian	Toma	Sun And Bloom Farms	MO	\$ 14,859	\$ 733,520	This project will compare the total costs and effects on crops and soil of 3 different liquid fertilization sources for market garden vegetables - vermicompost produced on the farm, vermicompost bought commercially, and an array of commercially bought organic liquid fertilizers.
FNC24-1441	Sustainable Greenhouse Heating	Debra	Weiss	Ethereal Gardens	WI	\$ 6,500	\$ 740,020	This project involves using the latest research in thermal batteries to develop an infloor heating system using any renewable electrical power source & the concepts of specific heat and refraction to enable cold weather growing year round in Wisconsin.

FNC24-1442	Kinsman Pollinator Corridor Project: A Study on the Sustainable Benefits of Pollinator Gardens and Bee Therapy in an Urban Community	Ronnie	Williams	Hood Honey	OH	\$ 29,953	\$ 769,973	Team will study the effects of community gardening, beekeeping, and bee bed therapy; promoting the environmental, economic and social sustainability of the Mt. Pleasant, Kinsman, Union-Miles & Buckeye-Woodhill neighborhoods of Cleveland, OH with the installation of pollinator gardens.
FNC24-1443	Increase Farmer Quality of Life and Income Through Mindset Coaching	Dana	Workman	Grass Powered Poultry LLC	OH	\$ 15,000	\$ 784,973	Increase farmer quality of life, sustainability, profitability and overall satisfaction with farming through mindset management coaching.