What is SARE?

Since 1988, the Sustainable Agriculture Research & Education (SARE) program has been the go-to USDA grants and outreach program for farmers, ranchers, researchers and educators who want to develop innovations that improve farm profitability, protect water and land, and revitalize communities. To date, SARE has awarded over $406 million to more than 8,803 initiatives.

SARE is grassroots with far-reaching impact

Four regional councils of expert practitioners set priorities and make grants in every state and island protectorate.

SARE communicates results

SARE shares project results by requiring grantees to conduct outreach and grower engagement; and by maintaining an online library of practical publications, grantee-produced information products and other educational materials.

Sustainable Agriculture Research & Education

www.sare.org

SARE: Advancing the Frontier of Sustainable Agriculture in...

Missouri

Project Highlight: *Urban Farmers Adopt More Efficient Soil Management Practices*

When it comes to keeping their soils healthy and productive, most farmers willingly put in the work. For urban growers like Adam and Melissa Millsap, who operate Urban Roots Farm, an intensive production system on less than one acre near downtown Springfield, Missouri, soil management can come with unique challenges. They say that managing the nutrient cycle on their vegetable beds while maximizing crop outputs was a time-consuming job that led to degraded soil. Instead of letting crop residue decompose gradually on beds after harvest, they had to haul it off to compost piles and return with fresh compost to plant the next crop quickly. They also relied on tillage to incorporate the compost and prepare seedbeds, leading to weed seed emergence, compaction, and poor soil structure.

Interested in ways they could maintain sustainability while improving their efficiency, the Millsaps received a SARE grant to try a completely new approach. They had read about it in a book, but nobody in their area was testing it. After harvest, the first step is to pulverize crop residue with a flail mower and leave it on the bed. Then, cover the bed with an opaque plastic sheet for one to three weeks, which creates a warm, dark and moist environment. During this time, the residue decomposition speeds up, and weed seeds germinate, then die due to a lack of light. Lastly, remove the sheet and plant the next crop.

The Millsaps compared this technique to their typical management over two years during their SARE-funded project. They also used a reduced tillage technique on the test plot to prepare the bed for planting, which resulted in less soil disturbance. The new system was so successful that the Millsaps began using it on their entire farm, except for their control plot, before they had finished their two-year trial.

For more information on this project, see sare.org/projects, and search for project number FNC15-1006.

SARE in Missouri

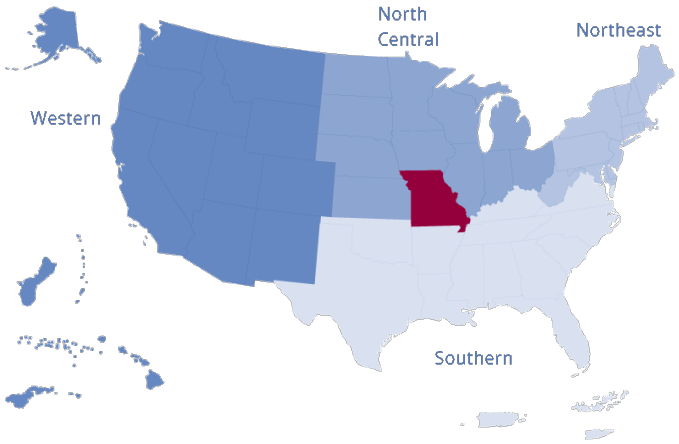
northcentral.sare.org/state-profiles/missouri/

$2,871,412 in total funding

70 grant project

(since 1988)

For a complete list of grant projects state by state, go to www.sare.org/state-summaries



SARE in Missouri

Grants awarded 2019–2024

Total awards: 70 grants

43	Farmer/Rancher
6	Research and Education
4	Professional Development Program
5	On Farm Research/Partnership
5	Graduate Student
7	Youth Educator

Total funding: $2,871,412

$656,992	Farmer/Rancher
$1,492,327	Research and Education
$388,024	Professional Development Program
$226,165	On Farm Research/Partnership
$74,748	Graduate Student
$33,156	Youth Educator

Find a complete list of projects on page 3.

Farmer and rancher impacts 2019–2024

SARE grantees have reported the following impacts from their projects:

7,145 farmers participated in a SARE-funded project

827 farmers reported a change in knowlege, awareness, skills or attitude

318 farmers changed a practice

Learn about local impacts at:
northcentral.sare.org/state-programs/missouri/

Contact Your SARE State Coordinator

SARE sustainable ag coordinators run state-level educational programs for Extension and other ag professionals, and many help grant applicants and recipients with planning and outreach. Visit northcentral.sare.org/state-profiles/missouri/ to learn more.

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For detailed information on SARE projects, go to
www.SARE.org

SARE is funded by the USDA's National Institute of Food and Agriculture (NIFA).

This report includes summaries of competitive grant programs only. Some competitive grant programs that are no longer offered may be included or excluded from the totals in this report depending on the grant program and SARE region.

AGRICULTURE PROJECTS FUNDED IN MISSOURI

by USDA's
Sustainable Agriculture Research and Education (SARE) Program

www.northcentralsare.org

Missouri has been awarded $7,557,910 grants to support 318 projects, including but not limited to, 38 research and/or education projects, 17 professional development projects and 208 producer-led projects. Missouri has also received additional SARE support through multi-state projects.

RESEARCH AND EDUCATION GRANTS

Project #	Project Title	SARE Support	Project Leaders
LNC23-480	Midwest Small Ruminant Educational Program Initiative (Midwest-SREPI)	$249,285	Dr.Homero Salinas Gonzalez Lincoln University
LNC23-490	Improving sustainability of solanaceous crop farming through increased effectiveness of biocontrol methods against Fusarium diseases	$248,459	Dr.Peng Tian The University of Missouri
LNC22-472	Black Emancipatory Agriculture Asset Map and Returning Generation Black Farmer mentorship program	$249,352	Ryan Tenney Sankara Farm LLC
LNC21-458	Improve the safety and health of women farmers by adapting farm tools and equipment	$249,995	Jianfeng Zhou University of Missouri
LNC20-433	Investigating the Potential of Woodland Silvopasture Systems: Prevalence, Practices, Perceptions and Performance	$249,731	Dr.Ashley Conway University of Missouri Center for Agroforestry
LNC20-434	Entrepreneurial Sustainable Agriculture for Latinx and Limited-resource Producers in Missouri	$245,505	Dr.Eleazar Gonzalez Lincoln University Cooperative Extension
LNC17-391	Characterization of winter forage management in North Central Region beef cow-calf operations	$199,732	Allison Meyer University of Missouri
LNC15-368	On-farm and Ranch Education of New and Beginning Latino Producers in Missouri	$163,227	Dr.Eleazar Gonzalez Lincoln University Cooperative Extension

LNC14-363	Detection and Prevention of Footrot Outbreak in Sheep and Goats	$199,000	Dr.Tumen Wuliji Lincoln University of Missouri
LNC11-337	Sustainability of a Short-Rotation Woody Biofuel System Compared to Grass Biofuel and Grain Cropping Systems	$198,321	Dr.Hank Stelzer University of Missouri
LNC10-324	Developing successful marketing strategies for elderberry growers and value added processors: a model for specialty crop development in the U.S. Midwest.	$105,427	Dr.Michael Gold MU Center for Agroforestry
LNC09-309	Using Grazing Wedges to Match Beef Cattle Nutrient Need with Pasture Resources while Reducing Feed and Fertility Costs	$148,137	Dr.William Sexten University of Missouri - Columbia
LNC07-283	Use of Herbs as De-wormers for Sustainable and Profitable Production of Sheep and Goats Under Natural Grazing Conditions	$146,522	Dr.Helen Swartz Lincoln University Arlene Stewart Lincoln University
LNC04-245	Organic Integrated Pest Management in High Tunnel Vegetable, Small Fruit, and Flower Production	$136,451	James Quinn University of Missouri
LNC02-216	Conjugated Linoleic Acid Content of Beef Finished with Pasture	$97,533	Carol Lorenzen University of Missouri
LNC02-218	Planning Your Small Farm for Pleasure and Profit	$98,480	Ronald Macher Sustainable Alternative Farming Institute (SAFI)
LNC01-191	Assessing and Enhancing Conjugated Linoleic Acid (CLA) Concentrations in Foods from Pastured Dairy and Beef Cattle	$81,144	Lora Friest Resource Conservation and Development for Northeast Iowa, Inc
LNC01-193	Improving Agricultural Sustainability through Crop Diversification	$97,800	Robert Myers Jefferson Institute
LNP01-001	Small Farm Today	$5,000	Ronald Macher Sustainable Alternative Farming Institute (SAFI)
LNC00-173	Developing Pasture-based Dairy Systems for Family Farms	$81,463	Robert Kallenbach University of Missouri-Columbia

LNC00-178	Developing Alternative Distribution Networks to Groceries and Food Cooperatives for Sustainably Produced Missouri Grown Food	$97,931	Russell Kremer Missouri Farmers Union
LNP00-001	Small Farm Today	$5,000	Ronald Macher Sustainable Alternative Farming Institute (SAFI)
LNC99-147	A Comprehensive Educational Program to Teach Farmers and Other Agricultural Professionals How to Produce and Market Free-Range Poultry	$60,500	Linda Lee Resilience
LNP99-003	Small Farm Today	$5,800	Ronald Macher Sustainable Alternative Farming Institute (SAFI)
LNC98-125	Feasibility of Agroforestry System using Management Intensive Grazing in Eastern Black Walnut Plantation	$48,487	Sandra Hodge University of Missouri
LNC98-143	Adding Local Value with Community Partnership Strategies	$37,800	Denise Durham Columbia Area Food Circle
LNP98-002	1,000 Ways to Sustain U.S. Agriculture	$19,250	John Ikerd University of Missouri Columbia
LNC97-120	Use of a Vegetative Filter as an Alternative Waste Management System for a Sustainable Seasonal Management-Intensive Grazing Dairy	$29,880	Richard Crawford, Jr. University of Missouri, SW Research Center
LNC96-105	Developing Sustainable Hog Markets and Slaughtering Arrangements for Family Farmers in Missouri	$83,762	Douglas Constance Sam Houston State University
LNC95-087	Fresh-to-Processed: Adding Value for Specialty Markets	$67,000	Deni Durham Missouri Organic Association
ANC94-021	Pasture-Based Beef Finishing Systems	$60,000	Fredric Martz University of Missouri
LNC94-076	Pasture-Based Beef Finishing Systems	$60,000	Fredric Martz University of Missouri

LNC92-048	Evaluating Relative Impacts of Conventional and Sustainable Farming Systems on Rural Communities	$99,244	John Ikerd University of Missouri Columbia
LNC92-049	On-Farm Demonstration and Evaluation of Sustainable Farming Systems	$30,000	John Ikerd University of Missouri Columbia
LNC91-038	Planned Grazing Systems for Sustainable Livestock Production	$142,576	James R. Gerrish University of Missouri-Columbia
LS91-044	SMART–Sustaining and Managing Agricultural Resources for Tomorrow: Training for the Southern Region	$12,500	John Ikerd University of Missouri Columbia
LNC88-005	Low-Input Agriculture and Cover Crop Workshop for Extension and Research Personnel from Nebraska, Iowa, Kansas, and Missouri	$16,500	Tory Shade University of Missouri Extension
LNC88-007	Low-Input (Sustainable Agriculture) Database and Information System	$5,000	Tory Shade University of Missouri Extension

PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

Project #	Project Title	SARE Support	Project Leaders
ENC23-220	Sheep and Goats Master Training Programs in Missouri	$91,926	Dr.Mohan Acharya Lincoln University
ENC23-223	Developing veterinary and extension professionals' capacity to support small-scale poultry farming in Missouri	$119,888	Dr.Tatijana Fisher Lincoln University of Missouri
ENC23-224	Establishing a Professional Agroforestry Certification and Learning Network for Education and Exchange	$119,962	Hannah Hemmelgarn University of Missouri Center for Agroforestry
ENC22-211	More than a Woodlot - Developing Natural Resource Professionals' capacity to support forest farming in Missouri	$56,248	Dr.Sougata Bardhan Lincoln University
ENC16-154	Missouri Agroforestry Summer Institutes: High School Educator Training for Curriculum Delivery	$70,334	Dr.Michael Gold MU Center for Agroforestry Hannah Hemmelgarn University of Missouri Center for Agroforestry

ENC12-129	Increasing Agroforestry Adoption and Networking in the Midwest through Targeted Professional Development	$74,842	Dr.Michael Gold MU Center for Agroforestry
ENC11-122	Alternative Energy Production and Untilization on Farms – A Workshop	$67,878	Robert Broz University of Missouri Extension Dr.Hamed El-Mashad Lincoln University Dr.Majed Dweik Lincoln University
ENC11-124	Fostering Local Foods-Based Economic Development Strategies: Developing New Resources and Networks	$74,999	Sharon Gulick University of Missouri
ENC08-102	Vegetable Grafting Training for Agricultural Professionals	$61,837	Dr.Sanjun Gu Virginia State University
ENC07-099	Integrated Alternative Energy and Livestock Production Systems	$50,000	Michael Seipel Hickory Hollow Farm
ENC04-084	Agroforestry Training for Professionals in Missouri and the Midwest	$47,890	Dusty Walter University of Missouri Center for Agroforestry
ENC00-051	Local Food Systems and Community Food Security in the Midwest	$40,691	Mary Hendrickson University of Missouri Columbia
ENC99-045	Sustainable Agriculture: A Profitable, Ecological, and Socially Sound Strategy for Small Farms	$10,000	John Ikerd University of Missouri Columbia
ENC98-028	Alternative Information Networking to Support Sustainable Agriculture on Small Farms	$32,950	John Ikerd University of Missouri Columbia
ENC97-016.1	New Opportunities for Families on Small Farms	$30,000	John Ikerd University of Missouri Columbia
ENC96-016	Sustaining a Desirable Quality of Life through New Agricultural Opportunities for Farm Families on Small Farms	$30,000	John Ikerd University of Missouri Columbia
ENC95-003B	Developing Educational Materials and Schools for Sustainable and Profitable Grazing Systems	$30,600	James R. Gerrish University of Missouri-Columbia

FARMER/RANCHER GRANTS

Project #	Project Title	SARE Support	Project Leaders

FNC24-1401	Food Waste to Bunny Taste: Demonstrating the benefits of rabbit manure in building healthy soil and climate resilience in urban environments.	$29,981	Mina Aria Rad Bunnies
FNC24-1411	Potential Application of Hügelkultur to Increase Water Holding Capacity of Central Missouri Farmland	$11,902	Holly Evans Rosy Buck Farm
FNC24-1415	Missouri Dewberry Project	$5,273	Jeffery Goss, Jr Ozark Heritage Botanicals
FNC24-1418	Develop sustainable resources to grow Turmeric in Missouri	$15,000	Ranjana Hans Raw Roots Turmeric
FNC24-1428	Hydroponic Fodder Automation: Solving the Labor Problem of Feeding Fodder to Livestock	$30,000	Joshua Payne Payne Farms, Inc.
FNC24-1433	Assessing Effectiveness of Various Methods for Overwintering Dahlias in Zone 6 and Subsequent Effect on Bloom Time	$10,176	Megan Rudroff Rudy Lane Flower Farm LLC
FNC24-1440	Costs & Effects of On-Farm-Made Vermicompost Tea Use in Vegetable Production VS Commercial Organic Inputs	$14,859	Ionut Lucian Toma Sun And Bloom Farms
FNC23-1359	BREEDING A COLD-HARDY, NON-ASTRINGENT HYBRID PERSIMMON CULTIVAR	$14,989	Weston Adams Weston Adams
FNC23-1368	Morel Mushroom Cultivation in an Urban Setting	$14,995	Gladys Davis Cultivating Bliss Farm
FNC23-1377	Farming for Community Apprenticeship and Urban Growers Education and Training Program	$15,000	Katie Houck Urban Harvest STL
FNC23-1384	Investigating best practices for efficient minimal heating of high tunnels with modular heaters and row covers.	$29,784	James Millsap Millsap Farms LLC
FNC23-1385	Economically Viable Method of Raising Surplus Saanen Dairy Goat Billies as Meat Goats by Using Them as Brush Goats	$9,979	Chad Montgomery Cedar Meadow Farms, LLC

FNC23-1386	Regenerate a Fifth Generation Farm for Sustainability and Profitability While Revitalizing an Aging Farming Community	$14,874	Trisha Nieder Nieder Farms
FNC23-1390	Pilot Testing of Raw Elderberry Vinegar Production Feasibility for Small Farms	$14,965	Thomas Ruggieri Fair Share Farm LLC
FNC23-1394	George Washington Carver Farms will transform former vacant lots into a beautiful green landscape that creates space for agriculture and education.	$15,000	Nick Speed Ujima
FNC23-1396	Fashioning Amendments and Seeding Techniques to Rebuild Essential Genera of Endophytes and other soil Nutrient mobilizers (FAST REGEN)	$28,813	Dr.Walton Sumner, II Sumner's Farm, LLC
FNC23-1400	Native Floral and Culinary Perennials : A Guide for Specialty Crop Production, Agroforestry Systems, and Diverse Landscapes	$20,840	Emily Wright Three Creeks Farm + Forest
FNC22-1344	A Workers Cooperative Food System Approach to Climate Resilience	$29,120	Beth Neff MARSH
FNC22-1353	Feeding Families by Farming	$3,790	Anjulette Smith North Kansas City YMCA
FNC22-1356	A Citizen Science Approach to Building Multiple Johnson-Su Bioreactors to Increase Soil Health, Vegetable Nutrient Density and Urban Food Sovereignty	$29,619	Ryan Tenney Sankara Farm LLC
FNC21-1263	GRŌ, a cloud-based management and training system for specialty and lifestyle farmers.	$26,930	Nashad Carrington GRŌ
FNC21-1276	Breeding a C. moschata Grex with Resistance against Squash Bugs in the Ozarks	$3,220	LAUREN HAFFNER Mountain Jewel
FNC21-1281	Natural Fly Control on Rotational Grazing Silvopastures	$5,866	Brian Keeter Harmony Hills Farm

FNC21-1293	Neighborhood-Based Cooperative Market Gardening in Carondelet, St. Louis, MO	$17,996	Beth Neff MARSH
FNC21-1309	Effects of regenerative, organic, and conventional soil management and glyphosate on crops' chemical composition	$9,000	Dr.Walton Sumner, II Sumner's Farm, LLC
FNC21-1310	Improving community outreach and education methods in Sustainable Agriculture	$15,781	Ryan Tenney Sankara Farm LLC
FNC21-1312	Community	$1,640	Julia Thompson Lula B's Community Farm
FNC20-1217	Investigating the Biodynamic Production of American Heritage Grapes	$18,000	Gerard Eisterhold Vox Vineyards, Inc.
FNC20-1223	Biosolarization For Disease and Weed Control For Winter High Tunnels	$9,000	Jason Hirtz Box Turtle Farm LLC
FNC20-1224	Evaluating Pasture Climate Resilience Utilizing Wild Forb and Insect Biodiversity Related to Changing Soil Health	$25,516	Susan Jaster Lincoln University Cooperative Extension-Innovative Small Farmers Outreach Program
FNC20-1227	Agroforestry Based Control for Cedar-Apple Rust Disease and Browsing Deer in Organic Apple Orchards	$8,968	Dan Kelly Blue Heron Orchard
FNC20-1229	Japanese Quail as Organic Pest Control in Trap Cropping System	$7,215	Dan Krull Cultivate K.C.
FNC20-1231	Developing a market for locally-adapted organic fruiting plants in St. Louis	$17,564	Matt Lebon Custom Foodscaping
FNC20-1247	INCREASING UTILITY OF NATIVE STANDS OF PERSIMMONS	$8,335	Matthew Renkoski Southwind Farms
FNC20-1250	Cultivation of Organic Tea in Missouri, With Focus On Low-Cost Overwintering Methods	$8,995	Drew Scott Scott's Baked Goods

FNC20-1257	Producing Ground Cherries with a “Hillside Growing System” to increase production for selling fresh fruit and added value products.	$23,648	Christine Williams Pepper Berries Urban Farm & Agape Grow Education Center
FNC20-1258	Midwest Summer Greens Production - The Effect of Shade on Yield and Quality	$6,565	Emily Wright Three Creeks Farm + Forest
FNC19-1162	North St. Louis Riverfront "GreenCubator"	$25,736	James Forbes Good life Growing
FNC19-1184	Exploration And Demonstration Of Low Pressure Steam For Disease And Weed Control On A Small Scale Vegetable Farm.	$9,000	James Millsap Millsap Farms LLC
FNC19-1167	Development of a Carbon Farming Plan through Assessment of Tree/Shrub Agroforestry Data for Increased Production, Resource Valuation, Carbon Sequestration and Related Ecosystem Benefits	$8,998	Dr.Linda Hezel Prairie Birthday Farm LLC
FNC19-1174	Utilization of Highly Digestible Cover Crop Ensilage by Adult Swine In an Integrated Organic Farming System	$22,060	Russ Kremer Wildwood Farm
FNC19-1176	Developing the Produce Efficacy Analysis and Recording (PEAR) Mobile Application	$9,000	Rachel Levi EarthDance
FNC19-1195	Macro and micronutrient density in staple grains and amaranth grown on conventionally versus sustainably managed silt loam soil	$9,000	Dr.Walton Sumner, II Sumner's Farm, LLC
FNC18-1110	Best Practices for Safe, On-Farm Educational Programming: A Cheesemakers Perspective	$22,100	Veronica Baetje Baetje Farms LLC
FNC18-1125	Backyard Shrimping: An Implementation of Low Carbon Footprint, High-Yield, Tank-based Freshwater Shrimp Cultivation Using Easily Obtainable, Recyclable Materials and Hardware	$5,771	Brent Hood Hood Consulting LLC

FNC18-1127	Investigating the economic sustainability of distribution channels for the urban farmer and consumer in food insecure neighborhoods	$7,498	Jameson Hubbard Dirt Beast Farm LLC
FNC18-1134	In between row mowing: weed control in organic no tillage row crops	$6,650	Pieter Los Wil farm
FNC18-1143	Satellite" Farming of Agaricus Mushrooms with Expandable Growing Pod Prototypes	$14,972	
FNC18-1145	St. Louis Beekeepers Sustainable Stock Apiary: Local Survivor Honey Bee Queen Rearing Project	$20,106	Jane Sueme Saint Louis Beekeepers
FNC18-1147	Training and Research on Compost and Compost Teas to Increase Soil Health and Microbiology on Southwest Missouri Farms	$15,000	Ben Tegeler Ozark Mountain Permaculture
FNC18-1149	Producing and marketing small-batch, savory spirits made with locally-sourced vegetables	$19,462	Jenna Wilkins M&M Gardens
FNC17-1067	Nutrient Density Profiles for Conventional vs Pasture-Raised Pork	$7,183	Holly and John Arbuckle Singing Prairie farm, DBA Singing Pastures
FNC17-1069	Feast in the Forest: Mindful Eating in the Wild! Test Marketing Opportunities for the Rapidly Growing Niche Wellness Tourism Market	$6,001	Penelope Woodhouse Botanical LLC
FNC17-1082	Building the Local Food Economy in Ozark County, Missouri	$7,436	Amelia LaMair Flotsam Farm
FNC17-1083	Farmscaping and Permaculture IPM at an Organic Farm School	$7,500	Rachel Levi EarthDance
FNC17-1087	Growing Organic Blueberries Using Biochar	$7,500	Richard Mareske farm
FNC16-1049	Modeling Efficiency and Safety in a Vegetable Wash and Pack House	$7,360	James Millsap Millsap Farms LLC
FNC16-1051	Berkshire Value Added Meat Product Marketing Coalition	$22,157	James Pierce Of The Earth Farm Distillery, LLC

FNC16-1058	Comparison of Seasonal (High Peak/Summer) Markets for Dairy Farm Product Sales	$7,397	Janet Smith Borgman's Dairy Farm
FNC16-1059	Expanding Warm Season High Tunnel Production Using Solar-Powered Ventilation	$7,330	Ryan Smith The Farm at Kraut Run, LLC.
FNC16-1062	Integrated Pest Management of Mealy Bugs in Commercial High Tunnels Fig Production	$7,400	IVAN STOILOV Ivan’s Fig Farm
FNC16-1065	Growing Produce Vertically instead of Horizontally to get a High Production on a Small Urban Farm	$6,577	Christine Williams Pepper Berries Urban Farm & Agape Grow Education Center
FNC16-1037	Evaluation of Alternative Coverings for Year Long Utilization of Caterpillar Tunnels	$7,488	Jason Hirtz Box Turtle Farm LLC
FNC16-1043	Developing Sustainable, Natural Farming Techniques to Implement a Farmer’s Market and Educate Underserved African American Communities	$7,428	Obiagele Lake Food for PeopleKC
FNC15-1001	Call to Farms	$7,483	Wendy Lombardi Cultivating Veterans and Missouri Ozarks Veterans' Agriculture
FNC15-1006	Evaluation of efficiency and efficacy of a method for managing the nutrient cycle on a bio-intensive micro-farm	$6,344	Adam Millsap Urban Roots Farm
FNC15-1007	Effectiveness of different cover crops for erosion, weed, pest, and disease suppression in pumpkins	$3,818	Matt Moreland Farm
FNC15-1013	Creating a Depository of Local Honey Bee Strains From Feral Swarms and Demonstrating a Sustainable Beekeeping Model Using Horizontal Hives and Bee-Friendly Management	$7,469	Dr.Leo Sharashkin Goods From The Woods
FNC15-1023	Assessing Productivity and Profitability of Vegetable Production in the Central Missouri River Bottomlands: Tools for Farm Transitions	$11,917	Emily Wright Three Creeks Farm + Forest
FNC15-985	Blueberry Field Renovation	$7,496	Earnie Bohner, MSPH Persimmon Hill Farm

FNC15-999	“Greening” a Greenhouse Through Sustainable Energy Solutions	$7,500	Rachel Levi EarthDance
FNC14-944	Pasture Weed Control with Juglone (Black Walnut) Spray	$7,336	Serena Cochrane Stuart Farm, LLC
FNC14-950	A Comparison and Evaluation of Heritage and Broad-Breasted Turkeys on Pasture	$5,933	Wesley Hunter Providence Farm
FNC14-952	Integrated Wildlife Management For Sustainable Agriculture	$7,470	Scott Kelly SCARS Ag, LLC
FNC14-958	Data Management for Marketing Alpaca Products	$22,335	Dr.Mary Licklider Heartfelt LLC
FNC14-970	Growing a Pear Orchard at an Organic Farm School to Increase Supply and Demand for Organic Tree Fruit in St. Louis, MO	$7,500	Rachel Levi EarthDance
FNC14-973	Cover Crop-based Reduced Tillage for Fall Production of Cabbage, Cauliflower and Broccoli Using a Roller-Crimper and No-Till Planting Aid	$7,480	Thomas Ruggieri Fair Share Farm LLC
FNC14-981	Fodder System for Wool Producing Small Ruminants	$7,481	Brian Willsey Rockin' W Alpaca Ranch
FNC13-927	Small Mechanical Harvester for Edamame and Green Bean Production	$7,482	Mary Ellen Raymond Weidner Farm
FNC13-928	Optimizing Year Round Leek Production in the Ozarks	$7,231	Daniel Roth Elixir Farm
FNC13-931	Comparison of Annual Forages for Grazing Lambs on Previously-Cropped Ground	$7,496	Michael Seipel Hickory Hollow Farm
FNC13-938	Chickens and Trap Crops – An Integration of Sustainable Approaches to Insect Pest Control in Vegetable Production	$6,462	Gary Wenig Rocky Creek Valley Farm
FNC13-940	Evaluating the Roller-Crimper for Cover Crop Control in Corn and Soybeans on Terraced Ground	$4,000	Michael Willis Michael Willis

FNC12-844	The Cheapest Way to Produce the Best Egg: Comparing how Different Supplemental Feeds Affect the Cost and Nutrient Density of Eggs from Heritage and Hybrid Pastured Hens	$7,500	Holly and John Arbuckle Singing Prairie farm, DBA Singing Pastures
FNC12-845	Teaching Pastured Poultry Producers On-Farm Processing Best Management Practices for a Safer Product	$4,877	Kevin Backes
FNC12-852	Comparative Analysis of Unpasteurized Organic Milk vs. Organic Fish Emulsion and Kelp as an Organic Fertilizer for Livestock Forages	$14,980	Tom Colonna Organian Farms LLC
FNC12-855	Whey as a Natural Insecticide	$2,568	Debra DeWeese Farmer
FNC12-858	Vertical Oblong Wheel Planter System: Scale Up Yield, Increase Production, Increase Profits, Feed More in the Community, and Improve Worker Ergonomics	$7,380	Lisa Firsick Y Knot Farm
FNC12-866	A Comparison and Evaluation of Heritage Breed Broiler Chickens on Pasture	$6,535	Wesley Hunter Providence Farm
FNC12-867	Reducing Input Costs for Urban Aeroponic and Hydroponic Farming	$6,992	Gibron Jones
FNC12-873	Scaling Up the Use of Trap Crops for Insect Control in Mechanized Squash Production	$7,039	Rusty Lee
FNC12-876	Hoeing Hens	$5,251	Pieter Los Wil farm
FNC12-878	Phase 2: Burgundy Truffle Orchard Establishment – The Burgundy Truffle as a new sustainable agro-forestry crop for Missouri	$7,500	Nicola Hellmuth Ozark Forest Mushrooms, LLC

FNC12-883	Rural Food Network: Growing and Keeping Food in Gasconade County, Missouri	$22,405	Jennifer Miller River Front Produce Lee Miller River Front Produce Betty Nolte Nolte Hills Alan Nolte Nolte Hills Joseph Nolte Truck Patch Farm
FNC12-886	Increasing the Sustainability of Our Farm by Learning how to Best Produce Sorghum Molasses	$7,224	Ron Rushly Little Dixie Family Farm
FNC12-887	Blogging about the Establishment of a Manage Intensive Grazing Farm in Missouri that is Environmentally Friendly	$7,482	Allan Sharrock Farmer
FNC12-888	Introducing Locally Grown Produce to Childcare Centers during Winter While Promoting Sustainable Nutrition through Education and Marketing	$7,500	Jennifer Sikes Farmer Jennifer Sikes Rhodes Mtn Greenhouse
FNC12-891	Nutrition Enhancement of Produce Grown with a Micronutrient Mineral and Trace Element Supplement	$1,264	Robert Teerlinck Sunny Acres Farm
FNC12-893	Formulating a Beneficial Organic Chicken Feed to Produce Soy-Free and Corn-Free Eggs	$7,057	Jeri Villarreal Villarreal Family Farm, LLC.
FNC10-795	Adding value to Missouri family farm by incorporating aquaculture into existing farm operation. Expanding prawn and trout into an existing hybrid bluegill operation in a one-year cycle	$5,985	Joe Gaylord
FNC10-805	Indoor greenhouse trellising system adapted to outdoor use	$5,899	Alan Nolte Nolte Hills
FNC10-810	Winter Raspberry Production in an Earth Contact Solar Greenhouse.	$6,000	Sarah Burnett Pierce
FNC10-811	Extending the vegetable growing season with low cost quick hoops	$6,000	Curtis Millsap Millsap Farm

FNC10-813	Growing On and Under Asphalt	$3,835	Robert Wright Conception Community Farm
FNC10-817	Skip Row Corn Planting Techniques with Cover Crops for Sustainable Grazing	$4,092	Harry Cope
FNC10-833	Field Grafting Improved Chestnut Cultivars to Increase Yield: An Operational Test in an Agroforestry System.	$5,985	Dr.Stephen Shifley Shifley's Nut Farm
FNC10-834	Phase 1: Truffle Orchard Establishment – The Burgundy Truffle as a new sustainable agroforestry crop for the Missouri Ozarks.	$6,000	Nicola Hellmuth Ozark Forest Mushrooms, LLC
FNC10-836	Using Chickens Guineas and Geese to Break the Life Cycle of the Curculio Beetle Through the Bird's Consumption of Dropped Fruit	$5,980	John Baumann Baumann Farm
FNC10-841	Demonstrating the Effectiveness of Sub Surface Drain Tile Installation as an Integrated Planting Practice to Improve Soil Conditions, Tree Establishment, and Productivity of Fruit Trees on Sloping Claypan Soils with Poor Internal Drainage	$6,000	Barry Shortt Wind Ridge Farm
FNC10-843	Integrated Pest Management for Small Hive Beetles	$5,632	John Nenninger Coordinator
FNC09-781	Marketing Edamame Soybeans in Southeast Missouri	$6,000	Monica Goodin
FNC09-784	Rainwater Capture and Reuse Using Gravity and Solar Power	$5,712	Nancy Rasmussen
FNC09-785	Educating from Seed To Market: An Organic Farming Apprenticeship Program in St. Louis, Missouri	$18,000	Molly Rockamann
FNC09-791	Mentoring At Risk Students in Sustainable Fruit and Vegetable Production	$6,000	Tami Fredickson Fredickson Farms
FNC08-701	Peak Performance Splitting of Honeybee Hives	$5,728	Grant Gillard

FNC08-707	Educate alpaca producers on the benefits of grading and sorting fleeces to improve usability and return on investment.	$5,997	April Gibson
FNC08-711	Winter Production of Pastured Broilers Using A Portable Hoophouse and Winter Annual Pastures	$6,000	Curtis Millsap Millsap Farm
FNC08-728	Potential of Heritage Wheat Varieties for Use on Organic Farms: A Variety Trial and Market Survey	$5,991	Carrie Read
FNC08-733	Increasing Diversity of Ozark Adapted Open Pollinated Seed Varieties	$17,513	Daniel Roth Elixir Farm
FNC08-741	Comparison of Coverings Over Permanent Raised Beds to Extend the Growing Season for Year Round Food Production	$6,000	Dr.Linda Hezel Prairie Birthday Farm LLC
FNC07-648	Improving Vineyard Grass and Weed Control through the Incorporation of Babydoll Sheep	$3,736	Colleen Gerke
FNC07-649	Sustainable Production of Tibetan Goji Berry (Lycium barbarum) in Central Missouri	$3,515	Carol Nabelek
FNC07-651	Improving Forests through Better Logging: Why Rob the Bank You Own?	$17,948	Peter Becker
FNC07-656	Ultra High Stock Density Grazing	$6,000	Eric Fuchs
FNC07-659	Regeneration of Black Walnut to Sustain Production on Forested, Deep-Alluvial Soils Along a Creek	$5,170	Craig Koprivica
FNC07-668	Growing and Marketing for a Winter CSA in Central Missouri	$5,588	Jennifer Grabner
FNC07-669	Demonstrating Organic Wild Crop Utilization and Certification as a Profitable Model for Enhancing Overall Farm Sustainability in the Missouri Ozarks	$17,736	Penny Frazier

FNC07-672	Urban Agricultural Youth Program	$6,000	Ericka Wright, Deceased
FNC07-678	Green Beings CSA Urban Farming Education and Outreach	$5,975	Sabrina Hilton
FNC07-680	Sustainable Growing of Algae in High Tunnels for BioFuels	$18,000	IVAN STOILOV Ivan's Fig Farm
FNC07-682	Incredible Crop Yields From Small Urban Spaces	$6,000	Nancy Gordon
FNC07-687	The River Hills Purebred Poultry Marketing Alliance Research Project	$5,987	Michelle Wagstaff Dry Dock Farm Paul and Kelly Harter Back to the Farm Kelly and Phillis Klober Nathan and Sarah Price
FNC07-690	On-Farm Composting: Economics and Effects on Vegetable Produce Yield, Cut Flower Quality, and Soil Physical and Chemical Properties.	$5,962	Dorothy Canote
FNC07-692	Planting and Growing Miscanthus Giganteus as a BioEnergy Crop in Missouri	$5,995	Steve Flick
FNC06-595	Accelerating the Acceptance of Alternative Foundation in Honeybee Frames	$6,000	Grant Gillard
FNC06-598	Chestnut Trees: A Sustainable Alternative Land Use for Small Farms in Jefferson County	$5,996	Grant Glatt
FNC06-599	Alpaca Farm and Fiber Day Camps and Workshops	$2,992	Catherine Stickann Sycamore Creek Farm
FNC06-600	Complete Distillation of Ethanol by Solar Concentrating Method	$6,000	Daniel West
FNC06-614	Designing a Small-Scale Organic Agaricus Mushroom Production System to Provide Additional Income to Family Farms	$6,000	Bob Semyck

FNC06-622	Sustainable Year-Round Growing in High Tunnels Utilizing Waste Vegetable Oil in Conjunction with a Subterranean Geothermal and Solar Heating and Cooling System	$6,000	IVAN STOILOV Ivan's Fig Farm
FNC06-627	Micro Solutions for Urban Agriculture	$5,985	Trish Grim Chris Olliges New Roots Urban Farm
FNC06-630	Bringing a Native Pecan Grove into Commercial Production	$4,770	Catherine Tanksley
FNC06-631	Developing a Public Domain Seed Bank for the Ozark Bioregion	$17,095	Daniel Roth Elixir Farm
FNC06-636	Site-Specific Apple Insect Control Through a Web-Based Application	$12,678	Dan Kelly Blue Heron Orchard
FNC05-554	Growing Tomato, Pepper, Lettuce and Spinach in Summer Under Shade Netting in Kansas City, Missouri	$4,095	John Kaiahua
FNC05-555	A Production and Marketing Assessment of Pacific White Shrimp in Rural Missouri	$6,000	Bill Crites
FNC05-557	Sustainable Solar Irrigation System	$5,633	Dan Kuebler
FNC05-559	Sustainable Fig Farm Using Renewable Solar and Geothermal Energy	$6,000	IVAN STOILOV Ivan's Fig Farm
FNC05-570	Phase II: Ethanol from Waste Fruit	$6,000	Daniel West
FNC05-573	Urban Agricultural Youth Program	$5,965	Ericka Wright, Deceased
FNC05-574	A Feasibility Study for a Sheep and Goat Market	$845	Jamie Root
FNC05-576	Heirloom Vegetable Production Strategies to Improve Family Farm Income	$17,730	Walker Claridge

FNC05-578	Reducing and Eliminating the Reliance on Antibiotic Administration on Sustainable Hog Farms	$16,000	Russell Kremer Missouri Farmers Union
FNC05-588	Dwarf Fruit Tree Management on Marginal Soils	$5,793	Curt Alldredge
FNC05-590	Transition of a Conventional Swine Operation to a Closed-system Freshwater Fish Operation	$6,000	Ellis Dieckhoff
FNC05-599	Alpaca Farm and Fiber Day Camps and Workshops	$2,992	Catherine Stickann Sycamore Creek Farm
FNC04-503	Potential Success of On-Farm Freeze-Dried Products	$6,000	Earnie Bohner, MSPH Persimmon Hill Farm
FNC04-527	Interplanting Ginseng with other Native Shade Plants for Fungal Control, Short and Long-Term Profitability	$6,000	Heather O'Connor
FNC04-534	U-Pick Blueberry Farm Pre-Production Partnership Income	$6,000	Troy Hart
FNC03-443	Crawfish Production in Reestablished Wetlands	$6,000	Ben Hunter
FNC03-464	Ethanol From Waste Fruit	$6,000	Daniel West
FNC03-465	Agroforestry Application, Non-Timber Forest Species Nursery Growers Cooperative	$15,256	Penny Frazier
FNC03-475	Reaching Greater Sustainability Through Value Added Direct Marketing	$6,000	Thomas Craft
FNC03-479	Diversity Increases Profits for Small Livestock Producers	$6,000	Rick Hopkins
FNC03-488	Developing Optimal Shiitake Mushroom Production in a Solar Greenhouse Utilizing Spent Shittake Logs as a Sustainable Heat Source	$5,950	Nicola Hellmuth Ozark Forest Mushrooms, LLC

FNC03-492	Fulfilling a Market Niche, Organically	$17,000	Drew Kimmell Missouri Northern Pecan Growers LLC
FNC03-494	Market Development and Business Analysis for Chili Peppers	$5,777	Jimmy Story
FNC02-395	Utilizing Multi Species Management Intensive Grazing for the Control of Non-Desirable Forbs.	$1,432	Tim Kelley
FNC02-397	Trapping Feral Honeybee Swarms	$17,452	Grant Gillard
FNC02-398	Increase Forage Production and Reduce Soil Erosion Through Rotational Grazing	$5,340	Carroll Raspberry
FNC02-408	Maintaining Pond Integrity Through Limited Watering Access	$1,819	Andy Grant
FNC02-417	Comparing The Market Viability of Two Methods of Shiitake Mushroom Production (Seasonal vs. Year-Round Production on Logs)	$6,000	Earnie Bohner, MSPH Persimmon Hill Farm
FNC01-335	Adding Value, Capacity and Versatility to a Cottage Based Wool Processing Business	$5,000	Carl Ahrens
FNC01-339	Increasing Farm Production by Converting Fenceline Brush to Agroforestry	$6,150	Darren Hoffman
FNC01-349	Natural Fiber Socks - A Value Added Product	$5,000	Nancy Barnett
FNC01-350	Maximize Returns on Marginal Ground Using Silvopastoral Management Practices with Chestnut Trees, Rare Breed Sheep and Guard Llamas	$2,694	Deanna Perera
FNC01-352	The Benefits of Geotextile Fabric and Gravel in Cattle Lanes	$3,250	Eric Bright
FNC01-364	Cover Crops for Organically Grown Corn	$5,000	Kyle Vickers

FNC00-294	Growing Medicinal Mushrooms on Hardwood Stumps and Tops	$4,638	Bruce Holland
FNC00-304	Strategically Thinning a Pecan Orchard and Use of the By-product for Sustainable Management	$5,000	Molly FitzGerald
FNC00-305	Alternative Crop: Roadside Market of Mums and Fall Decoratives	$5,000	Emma Sue Schuerenberg
FNC00-332	Pest Control Through Soil Fertility	$2,490	T Arden Compton
FNC00-333	Direct Marketing of Missouri Katahdin Lamb	$7,989	Michael Seipel
FNC99-262	Artificial Insemination of Queen Honeybees	$5,000	Troy Hart
FNC99-265	Low-input Pasture Finishing of Lambs	$7,310	David Coplen
FNC99-272	Comparing Various Organic Soil Amendments and Mulches	$4,977	Karen Davis WildThang Farms
FNC99-281	Brambles and Sassafras Agroforestry	$1,182	Brian Schweiss
FNC99-284	Overseeding Standing Soybeans with Wheat for Soil Cover and Grazing	$5,000	Gary Linnenbringer
FNC99-287	'Scotco Sand' Agroforestry Demonstration	$4,950	Frances Blissett
FNC98-211	Removal of Infected Fescue with Warm-season Grasses and Introduction of Legumes	$1,738	Von Dole
FNC98-212	Will Rotational Cutting of Clover Increase the Quantity and Quality of Honey in a Specific Habitat?	$3,347	James Harlow
FNC98-215	Chinese Medicinal Herbs as Field Crops in the Ozarks	$5,000	Lavinia McKinney

FNC98-230	Results of Alternate Usage of Apistan Strips and Formic Acid for Mite Control in Honeybee Colonies	$4,951	Kathy Hawthorne
FNC98-238	Honeybee 'Varroa' Mite Control Research and Langstroth versus Top Bar Hive Economics	$4,797	Robert Cessac
FNC98-244	Optimal Amount of Corn Gluten Meal for Weed Control and Soil Amendment Qualities in Organic Production of Strawberries	$4,996	Denice Trimmer-May
FNC97-174	Conversion of a Marginal Row-crop and CRP Farm to a Seasonal Grass-based Dairy	$5,000	Eric Bright
FNC96-132	Management-Intensive Grazing	$5,000	GAry Stump
FNC96-135	Growing Day-neutral Strawberries Using the Sunbelt/Polyacrylamide Gel System	$3,126	Cheryl Compton
FNC96-140	Extending the Grazing Season in a Rotational Grazing System for Dairy	$4,160	Bill Hedges
FNC96-161	Establishment of Rotational Grazing System Utilizing Warm and Cool Season Grasses	$5,000	Terry Bohmont
FNC95-092	On-farm Research to Raise Slaughter Beef on Pasture and Grain	$3,442	Robert Cessac
FNC95-103	Getting Started in Farming through Sustainable Agriculture	$4,996	James Lummus
FNC95-115	Measuring the Rate of Benefit Accrual Due to Adoption of a Management Intensive Grazing System of a North-Missouri Hill Farm	$4,494	Martin Turner
FNC95-116	Sustainable Plum Curculio Control in Apple Orchards	$3,242	Dan Kelly Blue Heron Orchard
FNC94-067	On-Farm Grazing Systems Research and Development of Intensive Grazing Software	$4,993	Robert Cessac

FNC94-081	Pasture-Raised Poultry and Hogs	$1,736	David Schafer Schafer Edinburg Farms Inc
FNC93-036	Model Watering System for Rotational Grazing	$4,832	David Schafer Schafer Edinburg Farms Inc
FNC92-005	Converting to Sustainable Agriculture	$3,120	David Schafer Schafer Edinburg Farms Inc

GRADUATE STUDENT GRANTS

Project #	Project Title	SARE Support	Project Leaders
GNC22-343	SustaiN: A Decision Support System for Sustainable Nitrogen Management in Corn and Sorghum using Satellite Remote Sensing	$14,966	Dr.Vasit Sagan Saint Louis University Dr.Andrea Eveland Donald Danforth Plant Science Center Dr.Todd Mockler Donald Danforth Plant Science Center Dr.Stephen Moose University of Illinois Urbana-Champaign Dr.Nadia Shakoor Donald Danforth Plant Science Center Sourav Bhadra Saint Louis University
GNC22-347	Transition of Wooded Paddocks to Woodland Silvopasture for Integration into Rotational Grazing System	$14,983	Dr.Ashley Conway University of Missouri Center for Agroforestry Kendra Esparza-Harris University of Missouri-Columbia
GNC21-323	Supporting agricultural transformation through elderberry production in rural and urban landscapes	$14,882	Robin Rotman University of Missouri Andria Caruthers University of Missouri
GNC20-314	Managing sericea lespedeza infestation in native warm season grass pastures utilizing goats	$14,973	Dr.Harley Naumann University of Missouri Chrisee Wheeler University of Missouri
GNC19-289	The Establishment of Native Plant Species for Livestock Forage and Wildlife Habitat in Silvopasture Systems	$14,944	Dr.Harley Naumann University of Missouri Amanda Jo Talbot University of Missouri

GNC17-241	Evaluation of early maturing cereal rye / hairy-vetch cover crop varieties and their effects on subsequent cash crop planting date, maturity and yield in organic no-till summer squash production	$11,703	Dr.Freida Eivazi Lincoln University Justin Keay University of Missouri
GNC17-247	Developing an Innovative Approach for Control of Billbug on Sod Farms	$11,154	Dr.Xi Xiong University of Missouri Michael Patterson University of Missouri
GNC16-226	Effect of Cover and Green Manure Crops on Soil Health, Plant Health and Tuber Yield in Organic Sweet Potato Production	$11,956	Dr.Xi Xiong University of Missouri Waana Kaluwasha Lincoln University of Missouri
GNC14-184	The Use of Grape Products as a Natural Anthelmintic in Goats	$9,995	James Caldwell Lincoln University Kimberly Cash Lincoln University
GNC12-154	Soil Microbial Response to Seven Different Organic Transition Strategies	$9,920	Dr.Randall Miles University of Missouri Kerry Clark University of Missouri
GNC12-155	A Comparative Profitability Assessment of Perennial Bioenergy Crops Grown in Missouri	$9,999	Dr.Ray Massey University of Missouri Joseph Dolginow Unviersity of Missouri
GNC10-145	A Survey of Relationships Among Rare Breeds of Pigs	$6,619	Dr.Bill Lamberson University of Missouri Kizzi Roberts University of Missouri
GNC09-109	Development of an Automated Diesel Engine Test Stand for Evaluating Combustion and Exhaust Emission Characteristics of Nanoemulsion Biofuels	$9,942	Dr.Ali Koc University of Missouri Matthew Stock University of Missouri
GNC06-067	Efficacy of compost tea on Septoria leaf spot in field and greenhouse studies	$10,000	Edward Carey Kansas State University Marlin Bates K-State Research and Extension
GNC05-046	Making the Case for Local Food Systems as Economic Development	$9,900	Mary Edwards University of Illinois at Urbana-Champaign Sarah Hultine Massengale University of Missouri Extension
GNC03-014	Enhancing the Sustainability of Producer-Owned Organizations	$10,000	Michael Cook Elaine Krumpelman-Farmer University of Missouri-Columbia

ON FARM RESEARCH/PARTNERSHIP GRANTS

Project #	Project Title	SARE Support	Project Leaders
ONC24-142	Evaluate the sustainability of multiple fungicide applications to corn	$49,991	Mandy Bish University of Missouri
ONC23-116	Fencing in Silvopasture for Sheep and Goat Production Across Missouri	$49,896	Dr.Mohan Acharya Lincoln University
ONC23-125	Seeds of Change: Building Capacity among New Urban Growers with Educational Seed Grants	$48,690	Katie Houck Urban Harvest STL
ONC22-114	St. Louis Sustainable Stock Apiary: Local Queen Breeding Development	$37,675	Jane Sueme Saint Louis Beekeepers
ONC19-066	Develop an efficient fruit handling system for elderberries	$39,913	Jianfeng Zhou University of Missouri
ONC17-028	Tall Fescue Pasture Seed Head Control Methods	$29,039	Rusty Lee University of Missouri Extension
ONC16-014	Use of Irrigation on Pasture-Based Dairies to Determine Forage and Irrigation Type Efficiencies	$29,821	Dr.Stacey Hamilton University of Missouri
ONC15-002	Incorporating Cereal Rye Into a No-Till Corn/Soybean Rotation For Erosion Reduction and Possible Grazing Use	$14,345	Charles Ellis University of Missouri Extension
ONC15-004	Improving Weight Gain in Goats Grazing Cover Crops Selected through Soil Health Samples	$29,755	Susan Jaster Lincoln University Cooperative Extension-Innovative Small Farmers Outreach Program

YOUTH EDUCATOR GRANTS

Project #	Project Title	SARE Support	Project Leaders
YENC24-219	Connecting Youth to Tradition, Land, and Food Sovereignty through Cooperative Sorghum Syrup Production	$5,163	Amelia LaMair Flotsam Farm
YENC22-183	Agri-Culinary Project	$6,000	Rachel Levi EarthDance
YENC22-188	Food and Justice Fellowship	$6,000	Erica Williams A Red Circle

YENC21-170	Engaging Youth in Sustainable Agriculture through Hands-On Experiences	$3,994	Dwayne Morrison Jackson County Extension Council
YENC20-145	Sustainable hydroponic farming as a viable career path for the youth in Butler County Missouri	$4,000	Juan Cabrera-Garcia University of Missouri Extension Brad Coleman University of Missouri Extension in Iron County
YENC20-148	Pathways to Produce: Learning to Maximize Aquaponics Systems for Local Food Production	$4,000	Beth Kastner Saint Louis Science Center Foundation Maddie Earnest Saint Louis Science Center Pattie LaBrott Saint Louis Science Center
YENC19-139	Come and See: Interactive Virtual Field Trips for K-12 classrooms	$3,999	Joshua Payne Payne Farms, Inc.
YENC16-099	Fostering Good Stewardship of Ozarks Forests Through a Sustainable Forestry Field Trip	$1,087	Amelia LaMair Flotsam Farm
YENC15-088	Engaging Youth in Sustainable Agriculture through Hands-on Experience	$1,992	Amelia LaMair Flotsam Farm
YENC15-089	Junior Farm Crew	$1,992	Rachel Levi EarthDance
YENC13-059	Creating Teen Ambassadors	$2,000	Debbie Davis
YENC12-038	Wild Eating: Bringing Food Production Back to Nature	$1,895	Laura Worstell Scattering Fork Outdoor Center
YENC12-039	Rethinking Urban Agriculture: An Aquaponics Approach	$2,000	Michael Dittrich Maplewood Richmond Heights School District
YENC12-051	Farms are for Everyone – Farm Camp	$1,980	Audrey Hollis GSM
YENC12-053	Organic Farm to Summer Camp Table: Opportunities for Youth on an Organic Farm	$2,000	Rachel Levi EarthDance

YENC10-025	Sprouts, Soil, and Worms	$2,000	William Polansky Columbia Center for Urban Agriculture Christopher Murakami Columbia Center for Urban Agriculture
YENC10-037	A Five Part Plan to Bring to Life a More Sustainable School Garden.	$1,200	Sarah Holmes The Barstow School
YENC09-016	Grass Growth Stages and the Feed Value vs height of the Grass	$2,000	Brad Irwin
YENC08-008	Benton Elementary School “Local Harvest of the Month”	$1,370	Jim Ronald University of Missouri Extension

YOUTH GRANTS

Project #	Project Title	SARE Support	Project Leaders
YNC12-072	Making a Sustainable Feed for My Chickens	$389	Miranda Yearington
YNC10-050	A Comparison of a Langstroth Hive vs. a Top Bar Hive in an Ozark Backyard	$400	Ashley Painter
YNC10-051	Cross Breeding Meat Goat Options	$400	Kristy Cox
YNC09-038	Pasture Raised Turkeys and Other Poultry in a Low-Input Orchard	$370	Williams King
YNC09-041	Maintaining Genetic Lines of Heritage Poultry	$185	Sydney Cash
YNC09-043	Intensive Grazing with Water Fowl around Raspberries (Rubus idaeus L.) to Reduce Weeds	$400	Ashley Painter
YNC09-046	Exploring and Developing Markets for Dairy Goat Products	$400	Abigail Fleetwood
YNC08-001	Pasture Raised Heritage Breed Turkeys	$400	Williams King
YNC08-020	Water Containment System for Gardening	$394	Nathan Lane

YNC08-021	Raised Beds Herbal Garden	$400	Cody Lane
YNC08-025	How Composting can be beneficial to the Environment and Your Garden!	$350	Rebekah Callison

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$7,557,910

For further information on projects, contact North Central SARE at (612) 626-3113 or ncrsare@umn.edu.
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