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 $310 million to more than 7,433 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.

SARE
Sustainable Agriculture Research & Education

www.sare.org

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

Ohio

Project Highlight: *Improving Domestic Prawn Production*

The average American eats four pounds of shrimp and prawns per year, making it the country's most popular seafood. Almost all of the shrimp and prawns sold in the country are imported, mostly from Southeast Asia. There are concerns that these countries do not follow best practices in areas such as antibiotic use or sustainable management of fisheries, so an increase in domestically produced freshwater prawns would be appealing.

However, domestic farmers face challenges producing consistently sized prawns and obtaining good yields, which has compelled Ohio shrimp farmer Don Maloney to explore improved practices. Using three SARE grants, he has set out to identify the cause for varying size and yield.

One problem he recognized was with feeding by hand, which meant large areas of his ponds were not being covered by feed. So, he compared hand feeding with a mechanical device that evenly distributed feed, and found that the mechanical device increased yields. The device cost less than $300 and increased yields by 17 percent. These shrimp were also rated highly in taste tests. In follow-up projects, Maloney discovered other best practices, such as to not deviate from the use of commercial aerators and to place substrate in ponds such as bird netting

For more information on these projects, see sare.org/projects, and search for project numbers FNC14-962, FNC15-1003 and FNC16-1045.

SARE in Ohio

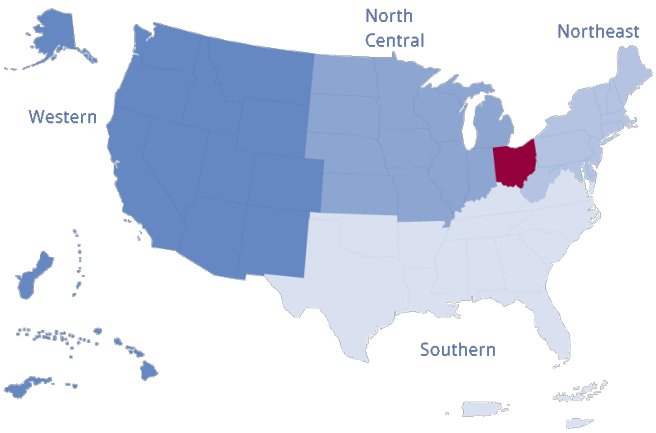
northcentral.sare.org/state-programs/ohio

$7,155,562 in total funding

239 grant projects

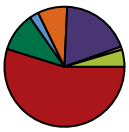
(since 1988)

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



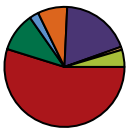
SARE Grants in Ohio

Total awards: 239 grants



131 Farmer/Rancher
25 Graduate Student
6 On Farm Research/Partnership
19 Professional Development Program
45 Research and Education
2 Youth
11 Youth Educator

Total funding: $7,155,562



$1,106,238 Farmer/Rancher
$271,896 Graduate Student
$218,809 On Farm Research/Partnership
$1,123,991 Professional Development Program
$4,411,092 Research and Education
$692 Youth
$22,845 Youth Educator

Find a complete list of projects on page 3.

SARE's Impact

53 percent
of producers report using a new production technique after reading a SARE publication.

79 percent
of producers said they improved soil quality through their SARE project.

64 percent
of producers said their SARE project helped them achieve higher sales.

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

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-pages/ohio 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 offrered may be included or excluded from the totals in this report depending on the grant program and SARE region.

AGRICULTURE PROJECTS FUNDED IN OHIO

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

Ohio has been awarded $7,165,214 grants to support 238 projects, including but not limited to, 43 research and/or education projects, 19 professional development projects and 131 producer-led projects. Ohio has also received additional SARE support through multi-state projects.

RESEARCH AND EDUCATION GRANTS

Project #	Project Title	SARE Support	Project Leaders
LNC20-439	Soil health and water quality nexus in sustainable agroecosystems	$249,932	Margaret Kalcic
LNC19-428	Sustainable production and marketing using the cooperative model for a student-managed school farm cooperative	$161,632	Hannah Scott The Ohio State University College of Food, Agricultural, and Environmental Sciences Center for Cooperatives
LNC19-417	Towards Resilient and Sustainable Grape Production in the North Central Region with Renewable Mulching Systems	$199,971	Dr.Imed Dami Ohio State University
LNC18-401	Assessing Soil Fertility and Soil Health in Midwest Hop Production	$98,561	Dr.Steven Culman Ohio State University
LNC17-393	Optimizing anaerobic soil disinfestation to manage emerging soilborne diseases in tomato protected culture systems in the North Central Region	$149,349	Dr.Sally Miller The Ohio State University, Dept of Plant Pathology
LNC16-380	Resources that Help Sustainable-Organic Vegetable Growers Select, Use, and Evaluate Microbe-containing Crop Stimulants (MCCSs) More Effectively	$198,842	Matthew Kleinhenz The Ohio State University-OARDC
LNC16-384	Creating an Educational and Economic Value Chain for Specialty Dairy Products in Appalachian Ohio	$165,500	Tom Redfern Rural Action
LNC13-351	Neonatal Calf Diarrhea: Reducing Impacts and Antibiotic Use with Natural Therapies	$142,375	Dr.Greg Habing The Ohio State University
LNC11-331	An Integrated Approach to Understanding Food Safety Practices and Attitudes Among Local Food Systems Actors	$128,102	Doug Doohan Ohio State University Dr.Jason Parker The Ohio State University
LNC08-292	Marketing Apple Diversity	$121,200	Dr.Diane Miller OARDC/Ohio State University
LNC08-306	Non-traditional Forages in a Managed Grazing System for Control of Gastrointestinal Parasites in Sheep	$137,150	Dr.William Shulaw College of Veterinary Medicine, Ohio State University

LNC07-288	Growing Organics: Integrating Science, Farmer Indigenous Knowledge, and Experience in Expanding Organic Production in Ohio	$140,416	Mike Anderson Ohio Ecological Food and Farm Association Carol Goland Ohio Ecological Food and Farm Association
LNC06-272	Evaluating Corn Varieties in Pure and Mixed Stands for Organic Crop Production across Three States in the Corn Belt	$138,252	Dr.Peter Thomison Ohio State University
LNC05-252	Wisdom in the Land	$92,560	Sharon Sachs Innovative Farmers of Ohio
LNC05-256	Organic Production and Marketing of Forest Medicinals: Building and Supporting a Learning Community Among Growers	$106,000	Dennis Hosack Rural Action- Appalachian Forest Resource Center
LNC04-240	Weed Management in Organic Conservation Tillage/No Tillage	$146,314	John Cardina Ohio State University
LNC04-243	Collaboration with the arts to communicate the messages of sustainable agriculture to a wider audience: Developing a model project with the Springfield Symphony Orchestra in Clark County, Ohio.	$104,500	Dennis Hall The Ohio State University
LNC03-233	Financial Implications of Non-toxic Endophyte-infected Fescue Pasture: Establishment Costs and Livestock Returns	$149,555	David Barker Ohio State University
LNC03-236	Variety Evaluation, Selection and Management for Organics Vegetable Systems	$98,861	Matthew Kleinhenz The Ohio State University-OARDC
LNC02-221	Ecology and Cultivation of Non-Timber Forest Products in Appalachia	$100,000	Brian McCarthy Ohio University
LNC02-207	Whole Systems Approach to Building a Sustainable Regional Food Economy	$99,596	Brad Masi Ecological Design Innovation Center
LNC02-208	Improving Livestock and Grain Farms' Environmental Quality through Watershed Headwaters Learning Communities	$24,500	Richard Moore Ohio State University
LNC01-183	Integrating cover crop mulches in commercial pumpkin production in the Midwest.	$9,716	Christian A. Wyenandt The Ohio State University
LNC01-189	Building Diverse Markets and Strong Businesses with Limited-Means Farmers	$50,636	Colin Donohue Rural Action
LNC01-199	Improving Livestock and Grain Farms' Contribution to Environmental Quality through Headwaters Learning Communities	$24,500	Richard Moore Ohio State University
LNC00-175	Linking soil quality, plant health, and animal nutrition on dairy farms through energy and nitrogen balance	$110,000	Charlotte Bedet Innovative Farmers of Ohio
LNC98-129	Strengthening Farms on the Edge: Developing Rural/Urban Partnerships	$29,450	Rebecca Cline-Seese

LNC98-141	Biological Control of Bacterial Diseases of Vegetable Crops	$98,000	Dr.Sally Miller The Ohio State University, Dept of Plant Pathology
LNC97-118	Use of Cover Crop Practices to Control Weeds in Integrated Lower-Chemical Input Systems of Vegetable Production	$87,823	Jeff Dickinson Stratford Ecological Society
LNC96-099	Biological Control of Foliar Diseases and Fruit Rots of Tomato	$103,580	Dr.Sally Miller The Ohio State University, Dept of Plant Pathology
LNC95-091	Integrating Quality of Life, Economic, and Environmental Issues: Agroecosystem Analysis of Amish Farming	$40,800	Deborah Stinner Dept. of Entomology, OARDC, Ohio State University
LNC94-070	Economic and Ecological Analyses of Farms and their Component Practices to Promote Crop Rotation and Cover Crop Systems	$117,670	Benjamin Stinner Ohio State University, Ohio Agricultural Research and Development Center (OARDC)
LNC94-047.1	Further Development of Innovative and Practical Education in Sustainable Agriculture in Ohio	$98,094	Clive Edwards Ohio State University, Sustainable Agriculture Program
LNC94-068	Evaluating Soil Organic Matter and Soil Biology for Improving Short- and Long-Term Management of Soil Nitrogen Supplying Capacity	$93,500	Ed Zaborski Ohio State University
LNC94-069	The Role of Soil Management in Crop Nutritional Quality and Susceptibility to Pests	$95,232	Larry Phelan Ohio State University
LNC92-047	Innovative Approaches to Practical Education in Sustainable Agriculture	$112,390	Clive Edwards Ohio State University, Sustainable Agriculture Program
LNC91-033	LISA as Applied to Vegetable Production Systems	$77,279	Mark Bennett Ohio State University
LNC91-037	Comparative Economic and Ecological Analyses of Lower Chemical Input Fruit Farms and Other Fruit Farming Systems	$110,610	Jeff Dickinson Stratford Ecological Society
LNC90-026	Economic, Ecological, and Environmental Analyses of Farms under Long-Term Lower Chemical Input Management	$92,344	Benjamin Stinner Ohio State University, Ohio Agricultural Research and Development Center (OARDC)
LNC89-015.1	An Integrated Research/Extension Program in Low-Input Crop Production in Ohio	$40,000	Donald Eckert Ohio State University
LNC88-003	Low-Input Ridge Tillage System for the Corn Belt	$24,300	Randall Reeder Ohio State University
LNC88-008	Sustainable Agricultural Education Display Systems	$4,000	Clive Edwards Ohio State University, Sustainable Agriculture Program
LNC88-015	A Research/Extension Awareness Program for Low-Input Agriculture in Ohio	$38,000	Donald Eckert Ohio State University

PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

Project #	Project Title	SARE Support	Project Leaders

ENC20-190	Growing the Growers: Leadership Training and the Development of Key Personnel for Engaged Production in the Mansfield Microfarm Project	$89,976	Dr.Kent (Kip) Curtis The Ohio State University
ENC19-185	Professional Development for Ohio Farmers Market Managers and OSU Extension Educators on Creating a Culture of Data Collection for Sustainability Planning for Markets and Farmers	$81,316	Christie Welch The Ohio State University Extension Eric Barrett Ohio State University Extension
ENC18-172	Solar Electric Investment Analysis for Small Farms	$74,364	Eric Romich Ohio State University
ENC13-139	Education for Veterinarians, Extension Educators and Other Agricultural Professionals on Organic Livestock Health	$74,592	Carol Goland Ohio Ecological Food and Farm Association
ENC12-134	Beyond Season Extension: High Tunnels for Season Creation and Economic, Community, and Environmental Sustainability	$75,000	Tom Redfern Rural Action
ENC10-115	Retail Ready & Wholesale Ready	$67,337	Julie Fox The Ohio State University
ENC10-118	Training professionals on sustainable agriculture for enhanced ecosystem service from the ground up	$65,900	Dr.Khandakar Islam The Ohio State University South Centers
ENC10-120	Integrated Sustainable Dairy Program	$59,266	Dr.Gustavo Schuenemann Veterinary Extension
ENC06-093	Grazier Training for Michigan Agricultural Educators from NRCS, Michigan State University Extension and Conservation Districts	$26,883	Betsy Dierberger NRCS, Michigan Lawrence Dyer Olney Friends School
ENC05-085	Creating Capacity to Confront Invasive Plants as Barriers to Economic Productivity and Environmental Sustainability	$75,000	Tom Redfern Rural Action
ENC02-067	Developing Capacity and Nurturing Leadership to Assist Producers in Transitioning to Sustainable Marketing Systems	$62,152	Laura Ann Bergman Innovative Farmers of Ohio
ENC01-056	Forest Meets Farm: Profitable New Crops for Small Farms in Forested Ohio	$47,743	Scott Bagley Rural Action, Inc.
ENC99-040	Transitioning to Sustainable and Organic Grain and Livestock Production Systems: On-Farm Training for Extension Agents (CES) and NRCS Personnel	$46,715	Margaret Huelsman Ohio Ecological Food Farm Assn
ENC98-033	Developing Advanced Grazing Educational Materials and Schools on Sustainable and Profitable Grazing Systems for the North Central Region	$60,000	Henry Bartholomew Ohio State University Extension
ENC98-035	Workshops on Land Use and Farmland Policy	$48,247	Kevin Schmidt American Farmland Trust
ENC97-027	Professional Training in Soil Quality	$15,400	Stephen Baertsche Ohio State University Extension

ENC96-013	Utilizing the Concept of Whole-Farm Planning to Educate Agricultural Professionals and Farm Families in Ohio about Sustainable Agriculture	$32,000	Mike Hogan OSU Extension
ENC95-003	Grazing Systems for Sustainable and Profitable Agriculture	$92,100	Henry Bartholomew Ohio State University Extension
ENC95-003A	Developing Educational Materials and Schools for Sustainable and Profitable Grazing Systems	$30,000	Henry Bartholomew Ohio State University Extension

FARMER/RANCHER GRANTS

Project #	Project Title	SARE Support	Project Leaders
FNC20-1243	Mushroom cultivation as a way to get out of poverty	$9,000	Tom Phillips StarkFresh
FNC20-1207	Improving oxygen transfer in a Recirculating Aquaculture System, to increase production and promote the sustainability of raising tilapia indoors.	$26,990	Traci Bell Ripple Rock Fish Farms LLC
FNC20-1211	Growing Seedlings and Skills for Agroforestry: Integration of woody seedling and annual vegetable production	$8,988	Jessica Burns Kelly's Working Well Farm
FNC20-1239	Improving Accelerated Lambing System through Data Management	$8,489	Christine Morrow Rocky Knob Farms of Ohio
FNC19-1183	Permaculture Pond Restoration	$7,240	Sasha Miller Purplebrown Farmstead
FNC19-1186	Comparing the Effectiveness of Four Advertising Channels: The Case Study of a Young Rural Beef Cooperative	$25,530	Lori Nethero Buckeye Valley Beef Cooperative
FNC19-1191	The use of Bacillus thuringiensis spp. as a Biological Control for Small Hive Beetles (Aethina tumida) and Wax Moths (Galleria mellonella and Achroia grisella) inside Beehives	$9,000	Nadia Ruffin Quiwi Produce
FNC18-1142	Economic Modification of Langstroth to AZ-Style Beehives to Enable Aging or Physically Limited Beekeepers to Begin/Continue Beekeeping and Improve Hive Care, Colony Health, and Production	$14,986	Jeanne Saum Saum's Mini-Farm and Apiary
FNC18-1146	Mad About Saffron: Growing A Valuable Global Seasoning In The Midwest	$14,927	Rachel Tayse Harmonious Homestead LLC
FNC18-1148	Optimal Hop Harvest Timing	$12,005	David Volkman Ohio Valley Hops LLC
FNC18-1135	Figs as a Niche Crop in Northern Ohio	$7,494	Timothy Malinich Hearthstone Berry Farm
FNC18-1139	Viability of Black Soldier Fly Larvae Production for Rabbit Waste Mitigation and as a Gamebird Protein Supplement	$7,151	JERAH PETTIBONE Pettibone Urban Game

FNC17-1071	Evaluation of Semen Extenders for the Preservation and Shipment of Chilled Ram Semen	$7,089	Donald Brown Promised Land & Livestock Co.
FNC17-1077	Efficacy of Horse and Donkey Manure Compost as an Economical Alternative to Commercial Biofungicides for Control of Phytophthora spp. Root Rot in Lavender Plants	$6,888	Dr.Susan Giovengo, DVM PhD Greentan Farm
FNC17-1103	Mobile Hop Dryer	$7,500	David Volkman Ohio Valley Hops LLC
FNC16-1025	Economic Implications of Using Tomato Suckers to Produce Late Season Tomato Plants instead of Starting Late Season Plants from Seed	$5,318	Sandy Ashmore That Guys Family Farm
FNC16-1040	Converting Residual Livestock and Deer Bones into a Locally-Produced Char/Fertilizer Soil Enhancer and Measuring Benefits for Small Farms in Southeast Ohio	$22,500	Richard Jeffers Canaan Valley Farm
FNC16-1044	Field Testing The Mulberry for Commercial Production in the Midwest	$7,481	Weston Lombard Solid Ground Farm
FNC16-1045	Viability of Using a Low Energy Air Pump to Aerate Freshwater Prawn Ponds	$7,477	Don Maloney Don's Prawns & More
FNC16-1056	Formalizing Partnerships to Scale-up Value-added Local Food in Rural Ohio	$7,500	Jeanine Seabrook Glass Rooster Cannery
FNC16-1061	Could Wort Serve as a Viable Soil Amendment?	$7,452	Richard Stewart Carriage House Farm
FNC16-1024	Growing Mealworms as a Fish Feed for Sustainable Aquaponics	$3,467	Barry Adler RainFresh Harvests
FNC15-1016	Mushrooms on Coffee Waste : effectiveness of incorporating locally available coffee chaff for improving the effectiveness of small-scale oyster mushroom production	$921	Alan Susarret Probasco Urban Farm
FNC15-1017	Food Waste For Farms	$21,800	Abbe Turner Lucky Penny Farm
FNC15-984	Let Pigs Eat Waste: Spice Acres to Reduce Landfill Waste and Lower Food Costs by Using Non-Meat Waste from Local Restaurants	$7,492	Shawn Belt Spice Acres Andrea Heim Spice Acres
FNC15-987	North Coast Lamb Co-op: Using Carcass Scanning for Producer Production Criteria	$20,526	Laura DeYoung The Spicy Lamb Farm
FNC15-995	A Model for Mitigating Giant Ragweed on Certified Organic Operations: Ag Engineering and Farm Tours	$7,500	Michelle Gregg Code One Compliance
FNC15-1003	In pond substrate to increase yield and size of freshwater prawns	$7,477	Don Maloney Don's Prawns & More

FNC15-1008	Multi-farm Assessment of the Optimal Yield Performance in Six Hop Cultivars Grown Throughout Ohio	$22,497	Dr.Steve Patterson Hop 'n' Pepper Farms, LLC
FNC14-962	Feeding Freshwater Prawns through Mechanical Means to Increase Yields and Size	$7,477	Don Maloney Don's Prawns & More
FNC13-899	Development of a Cooperative Food Distribution Model for Small Farms	$22,500	Alicia Bongue Muddy Fork Farm LLC
FNC13-901	Training farmers to perform artificial insemination in sheep	$19,980	Don Brown Farmer
FNC13-916	Alley cropping in a hillside terrace system	$2,834	Weston Lombard Solid Ground Farm
FNC13-937	Determining what Multi species (8 or More) cover crop mixes perform well in a corn and soybean crop rotation	$22,500	Matt Vantilburg VTF Inc.
FNC12-884	Proof of Concept and Prototype Development of a Novel Grape Washer Apparatus for the Small Family Farm Vineyard and Winery	$7,500	Stephen Pearce Ohio River Vista Vineyard, Winery & Research Station
FNC12-847	Niche Nut Processing Project: Collaborating To Establish Nut Crop Production, Processing And Marketing In The North Central Region	$22,493	Kurt Belser Project Leader
FNC12-848	Utilizing Homegrown Nitrogen from Legume Cover Crops for Corn Production	$22,500	Jim Hoorman Ohio State University David brandt
FNC12-851	Grazing Corn Plants as an Alternative Summer Annual Forage for Growing Lambs to Reduce Chemical Dependency and Parasite Resistance to Chemicals	$7,500	Curt Cline Cline Family Farms
FNC12-865	Preservation and Diversification of Heirloom and Antique Apple Varieties in Southern Ohio	$4,395	Jo Huff Hillgate Farm
FNC12-869	A Continuing Study of Timing of Tillage/Aeration of Biologically Active Soils Concerning Soil Microbiological Activity, Nutrient Release to the Crop, Soil Vitality Levels and Crop Yield Response	$14,950	Tim Kimpel (deceased) Kimpel Farms
FNC12-871	Sustainable Sweet Corn Production	$5,574	Marissa Kruthaup Kruthaup Family Farm
FNC12-882	Variable Width Vegetative Buffers	$7,482	Tony Murry, Jr. Murry Farms
FNC10-825	Adding Value to Vegetables Through Live Fermentation.	$6,000	Christopher Chmiel Integration Acres Ltd.
FNC10-794	Breeding Strategies for Improving Resistance to Gastrointestinal Nematodes in Wool Breeds of Sheep	$17,640	Kathy Bielek Misty Oaks Farm

FNC10-797	Mulching with wool: opportunities to increase production and plant viability against pest damage while creating new regional markets for kempy (unsalable) wool.	$5,995	Melinda O'Briant Turner Farm Katie Charlton-Perkins Turner Farm
FNC10-818	Livestock heavy use pad made from sawmill byproducts.	$5,780	Brian Welch NA
FNC10-819	Increasing lavender production and oil producers through the use of hoop housing and soil amendments	$6,000	Mike Prell Peaceful Acres Lavender Farm, LLC
FNC10-820	Creating a service center on our farm for expanding the sale of locally grown foods and local products	$5,900	Amanda Hamrick Back to Basics Log Cabin Randy Hamrick Back to Basics Log Cabin
FNC09-786	Using Hydroponic Green Forage to Reduce Feed Costs in Natural Pork Production	$6,000	Jack Donnelly
FNC09-756	Study and develop tillage practices and timing of tillage for incorporation of cover crop plant material that will enhance nutrient availability and yield for the next crop	$5,990	Tim Kimpel (deceased) Kimpel Farms
FNC09-789	Promoting the availability, growing, and processing of healthy, locally produced food using low cost, low tech equipment	$5,340	Julie Kline
FNC09-761	Partnerships in Food Waste Reduction through Vermiculture	$5,740	Jeremy Gedert One20 Farm
FNC09-792	Linking Local Food and Forests: Making the Connection with Bio-Char	$17,983	Jonathan Sowash
FNC09-772	Elderberry Trials for Northern Ohio Growers; Demonstrations and Evaluations to Encourage Diversification	$1,953	Timothy J Malinich The Ohio State University Extension
FNC09-774	Demonstrating Higher Yields and Market Opportunities of Mixed Annual and Perennial Intensive Planting in Appalachian Ohio	$5,910	Michelle Ajamian
FNC09-775	Transitioning to Sustainable Agriculture Using Continuous No-Till and Cover Crops	$18,000	Jeff Rasawehr
FNC09-780	Ohio Sheep Milk and Cheese Initiative	$16,885	Abbe Turner Lucky Penny Farm
FNC09-783	Testing the Feasibility of Maple Syrup Production on Southern Ohio Family Farms	$5,970	Christine Tailer
FNC08-744	Community Orchards and Fruit Diversity and Proliferation Project	$5,990	Michael St. Amour
FNC08-700	A sustainable approach for replacing winter honey bee colony losses using locally produced nucleus bee hives overwintered in polystyrene boxes	$1,606	Joseph Latshaw

FNC08-708	Using Oilseed as Biological Plow to Reduce Soil Compaction and Recycle Nutrients	$6,000	David brandt
FNC08-730	A Cooperative Small Farm Effort to meet Local Demand for Staple Seed Crops in the Appalachian Ohio Region	$18,000	Brandon Jaeger
FNC08-743	Non-traditional Vineyard Canopy Management for Increased Crop Yield and Improved Fruit Quality	$6,000	Stephen Pearce Ohio River Vista Vineyard, Winery & Research Station
FNC07-675	Late Blooming-Disease Resistant Apple Breeding	$8,760	John Lynd
FNC07-684	Sustainable Concrete Post Construction for Fencing and Trellising of Organic Crops	$4,300	Stephen Pearce Ohio River Vista Vineyard, Winery & Research Station
FNC07-689	Building on Parasite Resistance Selection in Sheep	$14,215	Kathy Bielek Misty Oaks Farm
FNC07-695	Evaluation of Production Efficiencies and Market Season Extension Options for RainFresh Harvests Year-Round Production of Herbs and Specialty Vegetables	$5,750	Barry Adler RainFresh Harvests
FNC07-652	Early Lamb Weaning in a Pasture System to Reduce Summer Parasites and Chemical Dewormer Use	$5,990	Curt Cline Cline Family Farms
FNC07-663	Growing Highly Nutritious Staple Food Crops Using Intensive and Sustainable Agriculture Systems	$5,730	Brandon Jaeger
FNC07-670	Field study of technique for combining low-cost, herbicide-free control of woody invasives, in particular Ailanthus altissima, with production of edible mushrooms	$5,218	Janell Baran
FNC07-673	Agroforestry: Transforming Unproductive Woodlots Into Productive Livestock Operations.	$5,709	Ralph and Dawn McNerney Rockin' M Ranch
FNC06-613	The Next Step for yourfarms.com- A Local Marketing Cooperative Promoting Local Foods and Local Farms	$18,000	Bill Harra
FNC06-621	Harvesting Honey For Direct Marketing	$6,000	Lori McDole
FNC06-638	Freshwater Shrimp: Improved Nursery Technology Project	$6,000	Bob Calala Calala's Water Haven
FNC06-640	Season Extension of Hay-Mulched Potatoes Using High Tunnels	$5,990	Scott Salvage
FNC06-602	Marketing Bison as a Healthier Red Meat Alternative	$5,985	Lyle Keller
FNC06-608	Organic Control of Fungus in Vineyards, Eliminating Chemical Sprays	$6,000	Stephen Pearce Ohio River Vista Vineyard, Winery & Research Station

FNC05-558	Two-Queen System within a Colony of Honeybees to Increase Honey Production, Protect Hive Health and Increase Revenues	$6,000	James Kerns
FNC05-564	Grazing Forages High in Condensed Tannins and its Effect on Fecal Egg Counts in Meat Goats	$6,000	Mark Scarpitti
FNC05-571	Black Walnut Hulls: Turning Trash into Treasure	$5,847	Christopher Chmiel Integration Acres Ltd.
FNC05-581	Evaluating Winter Cover Crops for the Environment and for Profit	$14,132	Steve Ellerbrock
FNC05-583	Selecting Sheep for Parasite Resistance	$17,950	Kathy Bielek Misty Oaks Farm
FNC05-586	Development of Notropis spilopterus (spotfin shiner) Aquaculture Propagation Methods and Techniques	$6,000	Steven C. Snyder
FNC05-547	Reducing Dependence on Non-Renewable Energy by Using Biodiesel Instead of Petrol-Diesel	$6,000	Micheal Roberts
FNC05-553	Measuring and Comparing the Impacts of Various Weed Control Methods on Field Restoration	$4,611	Eric Johnson
FNC04-510	RainFresh Harvests Year-Round Food Production System for Central Ohio	$5,850	Barry Adler RainFresh Harvests
FNC04-512	Use of Acid Reclaimed Mine Land for Commercial Blueberry Production	$6,000	Patricia Tillis Tillis Highlands Farm
FNC04-522	Development of a Sustainable Hazel Nut Production Industry for Noble County, Ohio	$4,590	C. Linda Slater
FNC04-523	Sustainable Internal Parasite Control for Sheep in a Forage Based System	$5,580	Kathy Bielek Misty Oaks Farm
FNC04-528	Organic Food Trail	$5,624	Tim Patrick
FNC03-490	Developing a Large-Scale Rotational Grazing System to Improve the Sustainability of and Profitability of a Cow-Calf Operation in Appalachia	$6,000	John Lehman Washington Farms, Ltd
FNC03-456	Culinary and Ornamental Herbs-Adding to a Grain and Livestock Family Farming Operation	$5,500	Jody Rauch
FNC03-466	Sustainable Adapted Year-Round Production of Chemical-Free Strawberries	$5,600	Mike Neeley
FNC03-468	Development and Testing of a Mycorrhizal Inoculum for Ericaceous Ornamental and Small Fruit Crops	$5,100	Richard Poruban The Poruban Nursery
FNC02-413	Sustainable Blueberry Production Using Geotextile Fabric and Gravel Mulch for Weed/Water Management	$5,475	WIlliam Nose

FNC02-414	Chinese Medicinal Plant Project	$15,000	Cindy Riviere
FNC02-416	Country Living Field Day: A Method to Educate Farmers About Sustainable Agriculture Alternatives	$18,000	Bob Givens
FNC02-420	Testing Food Grade Soybeans for Japanese Market	$3,000	Perry Clutts
FNC02-388	Southern Ohio Shrimp Project	$4,579	Polly Creech Polly's Prawns
FNC02-425	Research and Development of a Small Farm Maple Syrup Operation in Jefferson Township, Montgomery County, Ohio	$4,368	Clifton Williams
FNC02-394	Agroforestry Practices of Ginseng and Goldenseal in Natural Stand of Hardwood Forest Trees	$5,788	Jack Oxenrider
FNC02-403	Planning for Profitable and Sustainable Fiber Markets in Northeast Ohio	$2,709	Fred Maier
FNC02-406	Northeastern Ohio Local Warehouse Distribution and Marketing Initiative	$17,700	Dean McIlvaine
FNC01-371	Using Animals to Manage Pawpaw Patches	$4,960	Christopher Chmiel Integration Acres Ltd.
FNC01-372	Extending the Fall and Winter Grazing Period Using Turnips, Grazing Corn, and Rye	$4,955	Jim Hoorman Ohio State University
FNC01-373	Building a High Value Market for the Whole Lamb	$8,310	James Anderson
FNC01-381	Vermicompost of Agricultural Wastes into an Efficient Plant Growth Media in Order to Create a Sustainable Production System	$2,310	Andrzej Kazek
FNC01-336	Culinary Herbs for Direct Marketing	$4,996	Jamey Rauch
FNC01-370	Micro Bakery	$5,000	Carol Busson
FNC00-310	Maximizing Profits by Grazing a Winter Cover Crop and Monitoring Nutrient Availability for the Subsequent Corn Crop	$4,250	Christine Howard
FNC00-315	Increasing Production in Native Stands of Pawpaws	$4,999	Christopher Chmiel Integration Acres Ltd.
FNC00-316	Best Cultivation Practices for At-Risk Medicinal Herbs	$11,138	Charlie Hamber

FNC00-317	Cooperation Approach, of Farmer and Chef, to Create a Profitable Niche Market for the Small Farm that Would Increase the Variety and Use of Specialty Potatoes	$2,398	Alicia Bongue Muddy Fork Farm LLC
FNC00-318	Low Input, Energy Efficient Greenhouse Construction Workshop Suitable for Northeastern Ohio	$4,635	Ted Bartlett Silver Creek Farm
FNC00-330	Developing a Farm Marketing Association to Support Sustainable Agricultural Enterprises	$3,860	Tom Puch
FNC00-298	Winter Speaker Series for the Homerville Wholesale Produce Auction Growers	$4,900	F W Owen
FNC99-247	Evaluating Corn Varieties for Ohio Organic Farmers	$12,025	Charlie Eselgroth Innovative Farmers of Ohio
FNC99-269	Cereal Rye Cover Crop for Control of Onion Grasses (Allium spp.)	$2,777	Trevor Polley Long Branch Farm
FNC99-274	Evaluating Sustainable Ag Products in Relationship to Cation Exchange Capacity and Base Saturation	$5,000	Philip Price
FNC99-276	Producing White Asparagus	$2,290	Rich Tomsu
FNC98-214	Alternate Vegetable Crop Irrigation System for Remote Areas	$2,110	Kevin Smyth
FNC98-241	Sustainable Viticulture for Midwestern Fruit Growers	$5,000	Gene Sigel Chalet Debonne Vineyards
FNC97-197	Linking Sustainable Agriculture Production with Low-income Consumer and Minorities	$9,195	Eric Stewart
FNC96-136	Multiple-site Evaluation of Cover Crops Established in Wheat Stubble	$9,613	Rich Bennett
FNC96-141	Alternative Management Strategies for European Red Mite in North Central Ohio Apple Orchards	$9,722	Richard Eshleman
FNC95-105	Building Community in CSAs: A Canning Project	$4,963	Ted Bartlett Silver Creek Farm
FNC95-108	Measuring Benefits of Hairy Vetch Cover Crop for Corn Production and Evaluating a Portable Soil Nitrate Test Kit	$1,815	Rich Bennett
FNC95-118	Free-range Poultry: Production and Marketing	$4,690	Linda Lee
FNC95-104	Protecting Beneficial Arthropods in Ohio Orchards	$4,995	Bradley Phillips
FNC94-062	Utilizing Chopped Waste Paper for Bedding in a Hog Operation	$1,200	Daryl Bridenbaugh

FNC92-026	Evolution of Rotary Spader as Primary Tillage Tool in Various Soils	$2,430	Christopher Werronen The Lake-Geauga CSA Project (1992) SOLDIERS TO SAWYERS LLC 501C19 PUBLIC CHARITY (2013-2019)

GRADUATE STUDENT GRANTS

Project #	Project Title	SARE Support	Project Leaders
GNC20-299	"How are you really doing?": Social Sustainability of Beginning Farmers	$14,797	The Ohio State University College of Social Work Fiona Doherty The Ohio State University College of Social Work
GNC20-308	The Use of Nematodes and Enzyme Activities For On-Farm Soil Biological Health Tests	$10,875	Dr.Christine Sprunger The Ohio State University Tvisha Martin The Ohio State University
GNC20-309	Effect of recurring flooding on greenhouse gas emissions, soil C and N contents and forage quality in grazing and hay fields.	$13,488	Marilia Chiavegato Ohio State University Marina Miquilini Ohio State University
GNC19-278	Evaluation of Biological Control Agents as a Sustainable Disease Management Strategy for Fire Blight Control in Apples in Ohio	$14,813	Melanie Ivey The Ohio State University Alejandra Jimenez Madrid The Ohio State University
GNC18-259	Prevention of Avian Pathogenic Escherichia coli (APEC) Infections in Poultry Using Novel Probiotics	$11,817	Gireesh Rajashekara Dipak Kathayat The Ohio State University
GNC18-260	Combined Effects of Inundative Biocontrol and Anaerobic Soil Disinfestation (ASD) Using Non-Host Cover Crops as Carbon Sources for Clubroot Management in Cruciferous Crops	$11,995	Dr.Sally Miller The Ohio State University, Dept of Plant Pathology Ram Khadka The Ohio State University, Department of Plant Pathology
GNC18-272	I Do Not Think It Means What You Think It Means: Explorations of Mental Models of Soil Health	$11,810	Dr.Steven Culman Ohio State University Jordon Wade University of Illinois, Urbana-Champaign
GNC17-246	Lady beetle in the city: Does diet overlap explain patterns of Native Lady Beetle Abundance in urban farms and greenspaces?	$11,924	Mary Gardiner The Ohio State University Denisha Parker The Ohio State University
GNC17-248	Entomopathogenic Nematode Control of the Asiatic Garden Beetle, Maladera castanea, in Corn	$11,995	Dr.Kelley Tilmon The Ohio State University Adrian Pekarcik The Ohio State University
GNC16-233	Next Generation Bees: Determining the Floral Resources that Support Wild Bee Reproduction and Pollination Services in Urban Agriculture	$11,930	Mary Gardiner The Ohio State University Katherine Turo The Ohio State University Rodney Richardson York University
GNC16-230	Augmentative Biological Control of Spider Mites on Hops	$11,432	Celeste Wetly Ohio State University Susan Ndiaye The Ohio State University
GNC13-180	Pesticide Contamination of Bees: Determing the Diversity and Concentration of Compounds found in Hives Located across Ohio Agricultural Landscapes	$9,980	Mary Gardiner The Ohio State University Larry Phelan Ohio State University Scott Prajzner The Ohio State University - OARDC

GNC12-161	Efficacy of Naturally Occurring Anthelmintics in Fruit By-Products to Control Intestinal Parasites in Small Ruminants	$9,900	Dr.Maurice Eastridge The Ohio State University Shirron LeShure The Ohio State University
GNC10-143	Measuring the Ecological and Economic Costs & Benefits of Native Perennial Floral Strip Addition on Beneficial Insect Abundance & Arthropod-mediated Ecosystem Services within Ohio	$9,527	Mary Gardiner The Ohio State University Ben Phillips Ohio State University
GNC08-093	Recycling Nutrients with Cover Crops to Decrease Hypoxia/Eutrophication while Promoting Sustainable Crop Production	$10,000	Dr.Khandakar Islam The Ohio State University South Centers Jim Hoorman Ohio State University
GNC07-073	Land Management Strategies for Watershed Restoration: An Integration of Spatial Modeling with Dynamic Programming	$9,004	Brent Sohngen The Ohio State University Dr.Sujithkumar Surendran Nair Post Doctoral Researcher
GNC07-084	The Impact of Beauveria bassiana, Trichogramma, Bt Sprays, and Spinosad on the Lepiodpteran (Crambidae) Cereal Stalk Borer- The European Corn Borer (Ostrinia nubilalis)	$10,000	Daniel Pavuk Bowling Green State University Rostern Tembo Bowling Green State University
GNC06-070	Sustaining the Family Farm at the Rural Urban Interface: Farm Succession Processes of Alternative Food and Agricultural Enterprises and Traditional Commodity Farmers.	$9,995	Jeff Sharp Ohio State University Shoshanah Inwood Ohio State University
GNC05-052	Expanding local participation in conservation programs: Examining factors affecting conservation adoption among Old Order Amish in the Sugar Creek Watershed	$9,823	Richard Moore Ohio State University Dr.Jason Parker The Ohio State University
GNC04-030	Assessing Agricultural Soil Health and Sustainability of Different Management Practices Using Profiles of Bacterial Communities	$9,912	Warren Dick The Ohio State University-OARDC Sougata Bardhan The Ohio State University-OARDC
GNC04-035	Control of adult striped cucumber beetle with a natural enemy parasitoid and an insect parasitic nematode	$8,564	Celeste Wetly Ohio State University Stephanie Miller The Ohio State University
GNC04-025	Factors associated with support for local food systems: The significance of class position	$8,315	Jeff Sharp Ohio State University Molly Bean The Ohio State University, Rural Sociology Program
GNC03-015	Comparative Strategies for Accelerated Wetland Restoration on Agricultural Land	$10,000	Martin Quigley Joshua Smith Ohio State University
GNC03-016	Comparing Antimicrobial Usage in Commercially-Raised and Organically-Raised Chickens and Turkeys and the Development of Antimicrobial Resistance in Campylobacter jejuni	$10,000	Teresa Morishita Taradon Luangtongkum The Ohio State University
GNC02-008	Meat Goat Production from Traditional and Non-Traditional Forage Species Mixtures	$10,000	David Barker Ohio State University Megan Burgess The Ohio State University

ON FARM RESEARCH/PARTNERSHIP GRANTS

Project #	Project Title	SARE Support	Project Leaders

ONC20-075	Low Spray Rosé: Alternative Fruits for Rosé Cider Production	$39,922	Andrew Kirk Ohio State University-Ashtabula ARS
ONC20-079	Expanding Appalachia Ohio's Artisanal Meat Production	$39,407	Leslie Schaller ACEnet
ONC19-061	Early Leaf Removal Strategies for Bunch Rot Reduction in Pinot Noir Clones	$39,977	Andrew Kirk Ohio State University-Ashtabula ARS
ONC19-062	Improving the Honeybee Queen Qualities and Genetic Diversity by Transferring Selected Queen Cells	$40,000	Dr.Hongmei Li-Byarlay general office
ONC18-041	Supporting Grape IPM Implementation in Ohio Vineyards Using the Network for Environment and Weather Applications (NEWA)	$29,523	Melanie Ivey The Ohio State University
ONC18-047	Making sense of Soil Health Reports – A partnership to develop recommendations for soil health testing, interpretation	$29,980	Margaret Kalcic Dr.VINAYAK SHEDEKAR THE OHIO STATE UNIVERSITY

SUSTAINABLE COMMUNITY INNOVATION GRANTS

Project #	Project Title	SARE Support	Project Leaders
CNE07-035	Southern Ohio alternative energy development	$9,652	John Hemmings Ohio Valley Regional Development Commission

YOUTH EDUCATOR GRANTS

Project #	Project Title	SARE Support	Project Leaders
YENC19-142	Cooperative Student Leadership Experience Pilot	$3,946	Hannah Scott The Ohio State University College of Food, Agricultural, and Environmental Sciences Center for Cooperatives
YENC18-121	SIMBA/SIMSA Youth Urban Farming	$2,000	Rev. Dr.Norman Brown J. Jireh Development Corp.
YENC17-115	Pioneer Pollinators	$969	Jennifer Johnston Zane Trace HS
YENC16-107	Foodbanking and Farming with Dayton’s Youth	$2,000	Lee Lauren Truesdale The Foodbank, Inc.
YENC15-083	Healthy Growing, Healthy Eating: Youth gardening program	$2,000	Kathrine Morris Famicos Foundation
YENC14-070	Scioto River Valley Sustainable Agriculture Youth Day	$2,000	Brad Bergefurd OSU Extension
YENC14-072	Community Giving Garden	$1,978	April Hoy Stratford Ecological Center
YENC13-062	Advocating for Sustainable Agriculture in Grades K-12	$2,000	Stephanie Jolliff Ridgemont FFA
YENC13-067	Sustainable Agriculture: Instruction, Application, and Community Outreach Utilizing Recirculating Aquaponics Systems	$2,000	Dr.Kevin Savage Cincinnati Hills Christian Academy

YENC10-027	Direct Marketing Raspberries for a Healthy Community	$1,977	Rodney Throckmorton Lighthouse Youth Center
YENC09-018	Youth Driven Community Service Garden	$1,975	April Hoy Stratford Ecological Center

YOUTH GRANTS

Project #	Project Title	SARE Support	Project Leaders
YNC10-056	Hatching Heritage Breed Turkeys and Raising Pasture Poultry	$367	JoAnn Grum youth
YNC10-061	Raising Bobwhite Quail	$325	Steve Groff Individual

Total funding from the USDA SARE program to Ohio
$7,165,214

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

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