



AGRICULTURE PROJECTS FUNDED IN INDIANA

by USDA's
Sustainable Agriculture Research and Education (SARE) Program
1988-2019

Indiana has been awarded \$4,216,767 grants to support 138 projects, including but not limited to, 20 research and/or education projects, 8 professional development projects and 69 producer-led projects. Indiana has also received additional SARE support through multi-state projects.

RESEARCH AND EDUCATION GRANTS

Project #	Project Title	SARE support	Project Leaders
LNC18-399	Increasing the Sustainable Production and Access of Fresh Produce in Urban Areas of NW Indiana	\$199,676	Dr.Tamara Benjamin Purdue University
LNC18-408	Biological Approaches to Sustainable Mint Production	\$199,994	Dr.Petrus Langenhoven Purdue University
LNC17-390	Improving Seedless Cucumber Production to Diversify High Tunnel Crops in the North Central Region	\$200,000	Wenjing Guan Purdue University
LNC17-397	Organic Transition and Certification: Supporting Indiana Grain Farmers' Capacity to Meet Market Demand	\$194,663	Dr.Tamara Benjamin Purdue University Michael O'Donnell Purdue Extension
LNC16-377	Transitioning farm and ranch land from one family to another: Evaluating new strategies for profitable transfers and sustainable agriculture partnerships	\$199,566	Dr.James Farmer Indiana University Dr.Julia Valliant Indiana University
LNC15-374	Economic Viability of Shared-Use Kitchens in the North Central Region	\$135,819	Dr.Rhonda Phillips Purdue University Jodee Ellett Purdue University Cooperative Extension Service
LNC14-359	Evaluating the Impact of Biochar on Soil Fertility and Crop Productivity through Farmer Participatory Research and a Student Internship Program	\$194,732	Kevin Gibson Purdue University
LNC08-295	Improving honey Bee Health and Pollination Sustainability with Mite-Resistant Bees	\$117,861	Dr.Greg Hunt Purdue University
LNC06-266	Research and Education Project, Region: North Central. The management of watermelon vine decline through sustainable management practices	\$98,500	Dr.dan Egel Purdue University
LNC03-225	Microbial Processes Underlying the Natural Weed Suppressiveness of Soils	\$103,623	Steven Hallet Purdue University

<u>LNC02-220</u>	Weed Community Shifts and Management Options in the Conversion to Organic Production Systems	\$93,375	Kevin Gibson Purdue University
<u>LNC99-154</u>	Optimum Genetic Selection of Cattle for Pasture-Based Dairies	\$55,881	Michael Schutz Purdue University, Dept of Animal Sciences
<u>LNC98-131</u>	Traveling Food Processing/Educational Trailer	\$41,138	Susan Houghton Michigan Organic Food and Farm Alliance
<u>LNC98-140</u>	Soil Quality Improvement with Cover Crop Mixtures	\$93,256	Kladivko Eileen Purdue University
<u>LNC97-122</u>	Development of Market Infrastructure to Support Local and Regional Food Systems	\$86,200	Steve Bonney Sustainable Earth Inc
<u>LNC96-095</u>	Multiple-Use Borderlands: An Educational and Demonstration Project	\$83,832	Bruno Moser Dept of Horticulture and Landscape Architecture, Purdue University
<u>LNC96-100</u>	Evaluation of Composted Manure as a Growth and Delivery Substrate for the Biological Weed Control Agent <i>Gliocladium virens</i> in Sustainable Vegetable Production Systems	\$70,000	Stephen Weller Dept of Horticulture and Landscape Architecture, Purdue University
<u>LNC94-072</u>	Sustaining Row Crop and Fine Hardwood Productivity through Alley Cropping: On-Farm Demonstration, Research, and Economic Evaluation of an Integrated System	\$123,948	Andrew Gillespie Purdue University
<u>LNC90-029</u>	Sustainable Production Systems for Vegetables	\$78,321	Stephen Weller Dept of Horticulture and Landscape Architecture, Purdue University
<u>LNC89-024</u>	Crop Rotation, Legume Intercropping, and Cultural Pest Control as Substitutes for Purchased Inputs in a Cash Grain Cropping System	\$53,000	David Mengel Purdue University

PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

Project #	Project Title	SARE support	Project Leaders
<u>ENC19-183</u>	Increasing Extension Expertise to Assist Agriculture Adaptation to a Changing Climate	\$89,959	Hans Schmitz Purdue Extension
<u>ENC18-167</u>	Adapting Soil Health Curriculum to Ag Retailer Training	\$74,875	Lisa Holscher Indiana Association of Soil and Water Conservation Districts
<u>ENC17-159</u>	Midwest Cover Crops Council – Cover Crop Decision Tool	\$74,680	Kladivko Eileen Purdue University Anna Morrow Purdue University
<u>ENC16-152</u>	Soil Health Education Resources for Teachers	\$72,701	Dr.Natalie Carroll Purdue University
<u>ENC08-106</u>	Indiana High Tunnel Initiative:	\$74,981.68	Amy Thompson

	Developing Extension-Farmer Partnerships for Education		Purdue Extension
ENC04-079	Indiana Agritourism Training Initiative	\$70,000	Jerry Nelson Purdue University Cooperative Extension Service
ENC97-021	Combining Holistic Resource Management and Strategic Planning to Improve Farm Resource Planning	\$9,500	Craig Dobbins Dept of Agricultural Economics, Purdue University
ENC95-007	Experiential Co-Learning for Professional Development in Sustainable Agriculture	\$60,400	Craig Dobbins Dept of Agricultural Economics, Purdue University

FARMER/RANCHER GRANTS

Project #	Project Title	SARE support	Project Leaders
FNC19-1168	A Comprehensive Exploration Of Targeted Grazing With Goats	\$8,943	Kaitlin Hossom Second Planet Farmstead
FNC19-1169	Legacy's United Farmers, Communities and Urban Food deserts	\$26,827	john jamerson Legacy Taste of the Garden LLC
FNC19-1180	No Waste Mushroom Cultivation: Viability Comparison of Spent Grain and Coffee Grounds for Small-scale and Urban farmers	\$5,445	Lauren E McCalister Three Flock Farm
FNC19-1196	Varroa mite and Small Hive Beetle management: Single brood chamber hive versus double brood chamber hive	\$7,965	Mikael Thompson Thompson's Prairie Honey
FNC19-1159	Holistic Forestry, Vegetables, and Small Livestock Production that Eradicates Invasive Species and Exposes Consumers to Sustainable Agriculture.	\$8,233	Nick Carter Mud Creek Farm
FNC18-1115	Planning for a Farmer-to-Farmer Butcher Shop	\$15,000	Liz Brownlee Nightfall Farm
FNC18-1116	Increasing yields, plant vigor and soil health with the use of woodchips	\$7,493	Karen Carlisle small farm
FNC18-1117	Pasture-Crop Tests without Chemical Termination	\$3,300	Timothy Carter Honey Creek Farm
FNC18-1120	Creating a Micro Farm: Using Everything, Wasting Nothing, and Inspiring Young People to Do the Same	\$6,499	Brevan DeWeese Country Boy Farm & Garden
FNC18-1129	Designing a Cost-Efficient Salad Greens Wash Area for Small-Scale Growers	\$6,210	Matthew Jose Mad Farmers Collective
FNC18-1150	The Hoosier Harvest 365 Hospital Delivery Program	\$22,500	Linda Woodbury Nature's Gift, LLC
FNC18-1111	Improving Worker Welfare and Grower Profitability in Small-scale Strawberry	\$22,474	Richard Barnes Tanglewood Berry Farm

Production

<u>FNC17-1073</u>	Measure the Effectiveness of Interseeded Cover Crops for Proactive Weed prevention in a Chemical-free, Low-till Vegetable Market Garden Operation	\$7,500	James Catron Hallelujah Acres Farm LLC
<u>FNC17-1086</u>	Investigating the Possibilities of Cooperative Sorghum Syrup Production and Marketing for Strengthening Small Farm Sustainability in Northern Indiana	\$22,477	Jane Loomis Old Loon Farm
<u>FNC17-1088</u>	Differential Impacts of Growing Medium on Micro Greens Productivity	\$7,458	Thomas McEvilly McEvilly Gardens LLC
<u>FNC17-1089</u>	Hoosier Young Farmer Coalition	\$6,244	Genesis McKiernan-Allen Hoosier Young Farmer Coalition
<u>FNC17-1095</u>	Success with Stockdogs: Herding Workshops and Continuing Skills Development for Livestock Producers	\$21,714	Denice Rackley Clearfield Stockdogs and Lamb
<u>FNC16-1030</u>	Improving Small Garden Farm Productivity by Extending the Growing Season and Avoiding the Uncertainty of the Weather Conditions	\$7,392	Karen Carlisle small farm
<u>FNC16-1054</u>	Benefiting the Symbiotic Relationship Between Farmers, Ranchers and Honeybees through Consumer Education with an Emphasis on Beekeeping and Pollinators	\$7,500	Megan Ryan Southwest Honey Co.
<u>FNC15-1010</u>	On-Farm Recipe Trials and Yield Impact from fermented compost (bochasi) for vegetables	\$5,680	Daniel Perkins Perkins' Good Earth Farm
<u>FNC15-1015</u>	Investigation into a year round complimentary broiler and vegetable farm enterprise using mobile high tunnels	\$7,476	Amy Surburg Berry Goods Farm LLC
<u>FNC15-990</u>	Selecting a New Array of Crisp Apples for Increased Consumer Demand and Grower Profit	\$21,735	Dr.Steven Doud Doud Orchards
<u>FNC15-997</u>	The Economic Impact of Fall Planting vs Spring Planting Hops	\$7,397	Stephen Howe Howe Farms
<u>FNC14-957</u>	Improving Honey Bee Survival and long-term Sustainability in Indiana by Using Three Deep Brood Boxes vs. Traditional Two Deep Boxes	\$14,771	Steven Lesniak Peace Bees, LLC
<u>FNC14-967</u>	Development of Cost and Labor Effective Produce Sanitation Methods for Small Farms	\$7,300	Dr.Carolyn Orr Strawridge Farm
<u>FNC14-954</u>	Economics of Growing Hops In Indiana: Planting Rhizomes versus Fully Rooted Plants	\$7,465	Justin Kratoska Hoosier Hops Farm LLC
<u>FNC14-956</u>	The Economic Value of Grazing and Harvesting Cover Crops for Livestock	\$19,826	Jennifer Lattire Lattire Farms

	Forage in Between Grain Crops		
FNC13-902	Hydroponic Fodder in an Organic Pastured Poultry System: Can feed costs be reduced?	\$7,500	Lisa Burke Farming Engineers LLC
FNC13-904	Promoting sustainable beekeeping and genetic diversity through drone comb trapping	\$7,480.39	Ginger Davidson Geez Beez
FNC12-856	Sustainable Beekeeping in Indiana - Challenging the Old Paradigm of Buying Bees in the Early Spring	\$14,824.80	James Steven Doty Indiana Beekeepers Association
FNC12-868	Urban Farmers Marketing Cooperative	\$21,070	Matthew Jose Mad Farmers Collective
FNC12-880	Alternative Feeds for Mid- to Large-size Pasture Raised Layer Operations	\$7,203	Isaac Moody Moody Farm
FNC12-896	An Internship Curriculum for Food Farmers in the North Central Region	\$22,319	Therese Zimmerman-Niemier Bertrand Farm Inc
FNC12-850	Commercial Meat Rabbitry Feasibility Study	\$13,246	Nick Carter Meat The Rabbit, LLC
FNC10-799	Scaling Up Production by Improving Worker Comfort and Efficiency in No-till Organic Seed Garlic Production System	\$3,705	Daniel Perkins Perkins' Good Earth Farm
FNC09-767	Seeding Cover Crops into Standing Corn Using Highboy Air Seeder	\$18,000	Gary Ambriole Blake Hitzfield Andy Ambriole
FNC08-724	Evaluating weed control strategies in organic vegetable production	\$6,000	Dale Rhoads Rhoads Farm
FNC08-726	Evaluation of the declining honey bee health and education of participating beekeepers	\$17,810	James Steven Doty Indiana Beekeepers Association
FNC07-655	Enhancing Year-Round Sales of Quality Farm Product through the Use of On-Farm Geothermal Climate Controlled Storage Facilities	\$6,000	Anna Welch
FNC07-696	Marketing an Organic CSA	\$6,000	Michael Hollcraft
FNC06-645	Developing Sound Financial Data for the GrassRoots Discussion Group	\$3,840	Steve Hooley
FNC06-609	Field Trials of Organic Herbicides in Vegetable Production	\$17,600	Dale Rhoads Rhoads Farm
FNC06-620	Developing Direct Marketing and Educational Campaigns to Promote Locally Grown Products to Consumers	\$18,000	Earl Smith

FNC06-644	Analyzing the Effectiveness and Decreasing the Use of Dewormers in Meat Goats by Using FAMACHA and Fecal Samples to Implement Integrated Pest Management	\$6,000	Steven Osborne
FNC05-549	Value-added Sustainable Animal Production with Natural and Organic Leathers	\$5,500	Brent Ladd
FNC05-568	Innovative Field to Market Processes for Small Produce Farms	\$5,901	Kevin Cooley
FNC05-582	Development of Organic Weed Control Strategies	\$17,896	Dale Rhoads Rhoads Farm
FNC04-517	Benefits & Evaluation of the Application of Compost Tea in Growing Organic Vegetables	\$5,297	Dan Flotow Country Garden & Farm Market
FNC03-476	Investigating the Use of Compost Tea for Rapid Restoration of Soil Ecology on Four Indiana Farms	\$17,959	Jim Tarnowski
FNC02-389	Reasibility and Effect of Grass-Based Dairying on the Family Farm	\$5,970	Roger Garland
FNC02-402	Vaporizer for Mite Control in Beehives	\$3,441	Kenny Schneider
FNC02-419	Low-Tech Season Extended Production: Yield and Marketability of Salad Greens Varieties	\$5,132	Ivor Chodkowski
FNC01-367	Clearspring Produce Auction	\$15,000	Harvey Bontrager
FNC01-380	Advancing Organic Orcharding Through the Use of Kaolin Clay	\$4,860	Dale Rhoads Rhoads Farm
FNC00-291	White Violet Farm Fiber Research Project	\$5,000	Ann Sullivan White Violet Center
FNC00-308	Clearspring Produce Auction	\$14,595	Harvey Bontrager
FNC99-271	Jacksonville Vineyard	\$3,432	Steve Crabtree
FNC99-286	Lettuce Season Extension Trials	\$3,450	Dale Rhoads Rhoads Farm
FNC98-206	Alternative Use for Small Tobacco Acreage in Southeastern Indiana	\$3,270	Denise Dailey

FNC97-191	Great Circle FA, CSA/Permaculture Demonstration Site	\$5,000	Beth Neff
FNC97-195	Ornamental Bittersweet Production for Small Woodland Farms	\$2,915	Clueh John
FNC96-129	Community Farm Project	\$5,000	Emily Schabacker
FNC96-151	Matted Mulch as an Alternative to Herbicide in Strawberries, Melons and Tomatoes	\$4,393	Steve Fouts
FNC96-160	Livestock Re-establishment Research Project at White Violet Farm	\$5,000	Ann Sullivan White Violet Center
FNC95-093	Composting Poultry and Swine Carcasses	\$4,926	Mark Hart
FNC95-112	On-Farm Food Waste Composting	\$5,000	Larry Whinery
FNC94-058	Growing Better Crops with IPM	\$3,175	Brian Churchill
FNC93-047	Transition from Confinement to Grazing in Beef Cattle Production	\$4,970	Frances Leuken, Jr
FNC92-014	Hairy Vetch as Weed Control Cover Crop in Vegetable Production	\$3,620	James Rose

GRADUATE STUDENT GRANTS

Project #	Project Title	SARE support	Project Leaders
GNC19-277	Sulfur Use for Northern Fowl Mite Control in Poultry Systems	\$10,409	Rachel Jarrett Purdue University Dr.Darrin Karcher Purdue University
GNC19-287	Using high-frequency, real-time nitrate data to understand the potential for cover crops to improve storm resiliency in the face of a changing climate	\$13,351	Shannon Speir University of Notre Dame Jennifer Tank University of Notre Dame
GNC18-264	Springtails as Bioindicators of Soil Health	\$11,988	Jeffrey Holland Eoghan McCroskey
GNC18-269	Understanding Cereal Rye Nitrogen Decomposition and its Transition into Inorganic and Organic Soil Nitrogen Pools	\$11,999	Dr.Shalamar Armstrong Purdue University Richard Roth Purdue University
GNC18-256	Developing Educational Resources on Sustainable Food Systems for High School Students	\$11,354	Neil Knobloch University of Illinois Mingla Charoenmuang

			Purdue University
<u>GNC18-262</u>	Developing Financial and Risk Management Tools for Organic Grain Farmers	\$12,000	Brady Brewer Nathan Delay Nicholas Lancaster Purdue University
<u>GNC16-231</u>	Understanding the Influence of Soil Microbial Diversity on the Synchronization of Cover Crop Residue Nitrogen Mineralization at Critical Growth Stages of Corn and Soybean Cash Crops	\$11,154	Dr.Shalamar Armstrong Purdue University Clayton Nevins Purdue University
<u>GNC15-199</u>	Functional Role of Native Mice in Midwestern Agroecosystems: Unwanted Pests or Friendly Neighbors?	\$9,879	Dr.Robert Swihart Purdue University Dr.Jacob Berl Purdue University
<u>GNC15-203</u>	Quantifying the Impacts of Planting Cover Crops as a Conservation Tool to Reduce Nutrient Loss from Midwestern Farms	\$9,999	Jennifer Tank University of Notre Dame Brittany Hanrahan University of Notre Dame
<u>GNC14-183</u>	Economic Based Decision Support for Sustainable Horse Drawn Farming Enterprises	\$9,538	Nicole Olynk Widmar Purdue University Elizabeth Byrd Purdue University
<u>GNC12-151</u>	Comparing the Effects of Spring and Fall Tillage on Larval Populations of a Beneficial Insect	\$9,916	Dr.Ian Kaplan Purdue University Carmen Blubaugh Purdue University
<u>GNC10-125</u>	Farmer Access to Regional Meat Processing Capacity in the North Central Region	\$9,997	Dr.Raymond Florax Purdue University Peter Mitchell Purdue University
<u>GNC10-129</u>	Growing Grain, Forage and/or Ethanol Feedstock	\$10,000	Dr.Dennis Buckmaster Purdue University Craig Dobbins Dr.Herbert Ohm Purdue University Dr.Lori Snyder Purdue University Dr.Tony Vyn Purdue University Samantha Shoaf Samantha Shoaf Purdue University
<u>GNC10-133</u>	Economic Based Decision Support to Promote Sustainable Livestock Enterprises	\$10,000	Joan Fulton Purdue University Anna Allcorn Purdue University
<u>GNC10-140</u>	Engaging Farmers to Improve Communication and Model Representation of Agricultural Ecosystem Services	\$9,997	Dr.Indrajeet Chaubey Purdue University Dr.Jane Frankenberger Purdue University Rebecca Logsdon Purdue University Margaret Kalcic Elizabeth Trybula
<u>GNC10-122</u>	Evaluation of Grain Amaranth and Quinoa as Forage Crops to Improve the Sustainability and Profitability of Small Livestock Operations	\$9,800	Keith Johnson Purdue University Dr.Tamilee Nennich Purdue University

			John McMillan Purdue University
GNC06-066	Improving Agricultural Sustainability through Drainage Water Management Practices	\$10,000	Dr.Jane Frankenberger Purdue University Roxanne Adeuya Agricultural and Biological Engineering
GNC05-045	Using farmer input to develop research projects and outreach activities for organic agriculture	\$10,000	Kevin Gibson Purdue University David Hillger Purdue University
GNC03-020	Development of Appropriate Participatory On-Farm Trial Designs for Sustainable Precision Agriculture Systems	\$10,000	James Lowenberg-DeBoer Purdue University Terry Griffin Purdue University
GNC02-009	The Role of School Gardens in Influencing Attitudes of Students Toward Agriculture, Science, and the Environment while Fostering Academic Achievement in Classrooms	\$10,000	Kathryn Orvis Purdue University Amy Robinson-Dirks Purdue University

ON FARM RESEARCH/PARTNERSHIP GRANTS

Project #	Project Title	SARE support	Project Leaders
ONC18-044	Making the Most of Mulch: Strategic Systems for Small Organic Tomato Growers	\$28,394	Dr.Heather Reynolds Indiana University
ONC17-023	Indy Urban Mushrooms: Growing Revenue Through Collaborative Exploration of Mushroom Production	\$29,865	Dr.Julia Angstmann Center for Urban Ecology, Butler University
ONC17-027	Using Grafting Technology to Enhance Greenhouse Cucumber Production in High Tunnels	\$29,791	Wenjing Guan Purdue University
ONC15-008	Scheduling Vegetable Planting for Winter Protected Production in the Midwest	\$29,994	Elizabeth Maynard Purdue University

YOUTH EDUCATOR GRANTS

Project #	Project Title	SARE support	Project Leaders
YENC19-134	STEM and Sustainable Agriculture: Modeling an Interdisciplinary Approach in the High School Setting.	\$3,954	Kelly Hladek
YENC19-143	Teter Farm Camp	\$4,000	MaryEllen St.Angelo Teter Organic Farm
YENC17-113	Edible Schoolyard Bedford	\$1,998	Jamie Hooten Lincoln Elementary School/Lincoln Green Thumbs
YENC17-117	School-Farm Partnerships: Creating Natural Systems of Education for Food Production and Environmental Stewardship	\$2,000	Dr.Eric Oglesbee Good Shepherd Montessori School
YENC17-112	The Garbage to Garden Project: Providing Composting Services and Education	\$1,320	Kathy Haste Johnson County Soil & Water Conservation District

<u>YENC16-098</u>	Growing Places Indy High School Supervised Agricultural Experience	\$2,000	Tyler Henderson Growing Places Indy
<u>YENC14-071</u>	Youth Conservation Field Day	\$2,000	Janel Meyer Steuben County Soil and Water Conservation District
<u>YENC14-073</u>	Sustainable Agriculture Through Home Composting	\$2,000	Virginia Roberts Purdue University - Marion County Extension Jeffrey Jones Purdue Extension
<u>YENC14-076</u>	Watching Food Grow: a small organic apple orchard at a rural elementary school	\$1,934	Dr.Perry Kirkham Wea Creek Orchard Mike Pinto James A Cole Elementary
<u>YENC14-081</u>	Northeast Indiana sustainable agriculture field day to increase youth interest in sustainable agriculture concepts and careers	\$1,967	Jonathon Zirkle Merry Lea Environmental Learning Center of Goshen College
<u>YENC09-012</u>	Exploring Sustainability through Conventional Row Crop Farm	\$2,000	Leslie Fairchilde Columbus High School
<u>YENC09-014</u>	Harvest Learning Initiative	\$520	Roberta Jannsen Shawnash Institute, Inc. Clara Clark New Prairie High School

YOUTH GRANTS

Project #	Project Title	SARE support	Project Leaders
<u>YNC09-032</u>	Testing Fly Control Methods to Encourage Urban Poultry	\$395.50	Libby Beetem
<u>YNC08-008</u>	The Efficiency of Jerusalem Artichokes (Sunchoke) as a Part of a Diversified Pasture Plan for My Free Range Feed Pigs	\$384.50	Andrew Rider
<u>YNC08-007</u>	Impact of Rotational Grazing on Species Composition in a Square Foot Plot During a 21 Day Rotational Grazing Cycle – May through September, 2009	\$263	Graham Rider Thistle Byre Farm

PDP STATE PROGRAM GRANTS

Project #	Project Title	SARE support	Project Leaders
<u>NCIN19-001</u>	Indiana 19-20 Plan of Work	\$130,000	Dr.Tamara Benjamin Purdue University
<u>NCIN17-001</u>	Indiana Annual State Report	\$110,000	Roy Ballard Purdue Extension Dr.Tamara Benjamin Purdue University

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

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