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 $312 million to more than 7,507 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: Advancing the Frontier of Sustainable Agriculture in...

Indiana

Project Highlight: Online Budgeting Tools for Small-Scale Livestock Producers

There are many decisions to make before pursuing a small-scale livestock operation, and having realistic budget and profitability expectations are a critical part of that decision-making process. To assist potential producers in making informed choices about their operations, Anna Lee Allcorn, then a graduate student at Purdue University, received a 2010 SARE grant to evaluate the economic returns and business opportunities for alternative sustainable livestock enterprises, and to develop a decision-support tool.

“When decision-makers are able to make better investment decisions, there is a greater chance they will be successful, which in turn has a positive long-term impact on the quality of life of the participants, the economies of the rural communities where they live and the livestock industry overall,” said Allcorn.

The resulting Comparative Decision Support toolkit includes a spreadsheet that allows users to create an operating budget based on their own fixed and variable costs, cash flow and expected revenue. The profit/loss analysis function uses cost and price information to calculate potential earnings from multiple livestock enterprises, including cow-calf, dairy steers, sheep, goats and turkeys. After completing the mini-module, users across the region will have evaluated multiple objectives to make a small-scale livestock enterprise entry decision.

For more information on this project, see sare.org/projects, and search for project number GNC10-133.

SARE in Indiana

northcentral.sare.org/state-programs/indiana

$5,245,878 in total funding

161 grant projects

(since 1988)

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

Total awards: 161 grants
- 80 Farmer/Rancher
- 24 Graduate Student
- 7 On Farm Research/Partnership
- 10 Professional Development Program
- 24 Research and Education
- 3 Youth
- 13 Youth Educator

Total funding: $5,245,878
- $857,818 Farmer/Rancher
- $269,601 Graduate Student
- $235,849 On Farm Research/Partnership
- $692,056 Professional Development Program
- $3,159,990 Research and Education
- $1,043 Youth
- $29,521 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/indiana

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/indiana to learn more.

Lais McCartney
Purdue Extension, Hancock County
(317) 919-2691
lmccartn@purdue.edu

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.
Indiana has been awarded $5,245,878 grants to support 160 projects, including but not limited to, 23 research and/or education projects, 10 professional development projects and 80 producer-led projects. Indiana has also received additional SARE support through multi-state projects.

### RESEARCH AND EDUCATION GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
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</thead>
<tbody>
<tr>
<td>LNC20-438</td>
<td>Improving two spotted spider mite management in high tunnel cucumber production</td>
<td>$249,919</td>
<td>Dr. Laura Ingwell Purdue University</td>
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<tr>
<td>LNC20-443</td>
<td>Identifying and Expanding Integrated Disease Management Resources to include Organic Grains in Support of Organic and Transitional North Central Farms</td>
<td>$249,984</td>
<td>Dr. Darcy Telenko Purdue University</td>
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<td>LNC20-444</td>
<td>Participatory Farmer Monitoring on Nitrate Loss: Using Farm-Scale Data to Improve Nutrient Management and Water Quality</td>
<td>$236,702</td>
<td>Dr. Landon Yoder Indiana University</td>
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<td>LNC18-399</td>
<td>Increasing the Sustainable Production and Access of Fresh Produce in Urban Areas of NW Indiana</td>
<td>$199,676</td>
<td>Dr. Tamara Benjamin Purdue University</td>
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<td>LNC18-408</td>
<td>Biological Approaches to Sustainable Mint Production</td>
<td>$199,994</td>
<td>Dr. Petrus Langenhoven Purdue University</td>
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<td>LNC17-390</td>
<td>Improving Seedless Cucumber Production to Diversify High Tunnel Crops in the North Central Region</td>
<td>$200,000</td>
<td>Wenjing Guan Purdue University</td>
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<td>LNC17-397</td>
<td>Organic Transition and Certification: Supporting Indiana Grain Farmers’ Capacity to Meet Market Demand</td>
<td>$194,663</td>
<td>Dr. Tamara Benjamin Purdue University Michael O’Donnell J F Farms / Living Prairie Family Farms</td>
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<tr>
<td>LNC16-377</td>
<td>Transitioning farm and ranch land from one family to another: Evaluating new strategies for profitable transfers and sustainable agriculture partnerships</td>
<td>$199,566</td>
<td>Dr. James Farmer Indiana University Dr. Julia Valliant Indiana University</td>
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<td>LNC15-374</td>
<td>Economic Viability of Shared-Use Kitchens in the North Central Region</td>
<td>$135,819</td>
<td>Dr. Rhonda Phillips Purdue University Jodee Ellett Purdue University Cooperative Extension Service</td>
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<td>LNC14-359</td>
<td>Evaluating the Impact of Biochar on Soil Fertility and Crop Productivity through Farmer Participatory Research and a Student Internship Program</td>
<td>$194,732</td>
<td>Kevin Gibson Purdue University</td>
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<td>LNC08-295</td>
<td>Improving honey Bee Health and Pollination Sustainability with Mite-Resistant Bees</td>
<td>$117,861</td>
<td>Dr. Greg Hunt Purdue University</td>
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### Project Listings

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<tr>
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<tr>
<td>LNC06-266</td>
<td>Research and Education Project, Region: North Central. The management of watermelon vine decline through sustainable management practices</td>
<td>$98,500</td>
<td>Dr. Dan Egel Purdue University</td>
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<td>LNC03-225</td>
<td>Microbial Processes Underlying the Natural Weed Suppressiveness of Soils</td>
<td>$103,623</td>
<td>Steven Hallet Purdue University</td>
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<td>LNC02-220</td>
<td>Weed Community Shifts and Management Options in the Conversion to Organic Production Systems</td>
<td>$93,375</td>
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<td>LNC99-154</td>
<td>Optimum Genetic Selection of Cattle for Pasture-Based Dairies</td>
<td>$55,881</td>
<td>Michael Schutz Purdue University, Dept of Animal Sciences</td>
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<td>LNC98-131</td>
<td>Traveling Food Processing/Educational Trailer</td>
<td>$41,138</td>
<td>Susan Houghton Michigan Organic Food and Farm Alliance</td>
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<td>LNC98-140</td>
<td>Soil Quality Improvement with Cover Crop Mixtures</td>
<td>$93,256</td>
<td>Kladivko Eileen Purdue University</td>
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<td>LNC97-122</td>
<td>Development of Market Infrastructure to Support Local and Regional Food Systems</td>
<td>$86,200</td>
<td>Steve Bonney Sustainable Earth Inc</td>
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<td>LNC96-100</td>
<td>Evaluation of Composted Manure as a Growth and Delivery Substrate for the Biological Weed Control Agent Gliocladium virens in Sustainable Vegetable Production Systems</td>
<td>$70,000</td>
<td>Stephen Weller Dept of Horticulture and Landscape Architecture, Purdue University</td>
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<tr>
<td>LNC96-095</td>
<td>Multiple-Use Borderlands: An Educational and Demonstration Project</td>
<td>$83,832</td>
<td>Bruno Moser Dept of Horticulture and Landscape Architecture, Purdue University</td>
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<tr>
<td>LNC94-072</td>
<td>Sustaining Row Crop and Fine Hardwood Productivity through Alley Cropping: On-Farm Demonstration, Research, and Economic Evaluation of an Integrated System</td>
<td>$123,948</td>
<td>Andrew Gillespie Purdue University</td>
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<td>LNC90-029</td>
<td>Sustainable Production Systems for Vegetables</td>
<td>$78,321</td>
<td>Stephen Weller Dept of Horticulture and Landscape Architecture, Purdue University</td>
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<tr>
<td>LNC89-024</td>
<td>Crop Rotation, Legume Intercropping, and Cultural Pest Control as Substitutes for Purchased Inputs in a Cash Grain Cropping System</td>
<td>$53,000</td>
<td>David Mengel Purdue University</td>
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### Professional Development Program Grants

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<td>ENC20-193</td>
<td>Enhancing Cover Crop Training in the North Central Region</td>
<td>$90,000</td>
<td>Kladivko Eileen Purdue University</td>
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<tr>
<td>ENC19-183</td>
<td>Increasing Extension Expertise to Assist Agriculture Adaptation to a Changing Climate</td>
<td>$89,959</td>
<td>Hans Schmitz Purdue Extension</td>
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<tr>
<td>ENC18-175</td>
<td>Enhancing professional development opportunities to improve technical capacity of Indiana conservation delivery professionals</td>
<td>$74,959</td>
<td>Mike Smith Conservation Technology Information Center</td>
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<td>ENC18-167</td>
<td>Adapting Soil Health Curriculum to Ag Retailer Training</td>
<td>$74,875</td>
<td>Lisa Holscher&lt;br&gt;Indiana Association of Soil and Water Conservation Districts</td>
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<tr>
<td>ENC17-159</td>
<td>Midwest Cover Crops Council - Cover Crop Decision Tool</td>
<td>$74,680</td>
<td>Kladivko Eileen&lt;br&gt;Purdue University&lt;br&gt;Anna Morrow&lt;br&gt;Purdue University</td>
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<tr>
<td>ENC16-152</td>
<td>Soil Health Education Resources for Teachers</td>
<td>$72,701</td>
<td>Dr. Natalie Carroll&lt;br&gt;Purdue University</td>
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<td>ENC08-106</td>
<td>Indiana High Tunnel Initiative: Developing Extension-Farmer Partnerships for Education</td>
<td>$74,982</td>
<td>Amy Thompson&lt;br&gt;Purdue Extension</td>
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<tr>
<td>ENC04-079</td>
<td>Indiana Agritourism Training Initiative</td>
<td>$70,000</td>
<td>Jerry Nelson&lt;br&gt;Purdue University Cooperative Extension Service</td>
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<tr>
<td>ENC97-021</td>
<td>Combining Holistic Resource Management and Strategic Planning to Improve Farm Resource Planning</td>
<td>$9,500</td>
<td>Craig Dobbins&lt;br&gt;Dept of Agricultural Economics, Purdue University</td>
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<tr>
<td>ENC95-007</td>
<td>Experiential Co-Learning for Professional Development in Sustainable Agriculture</td>
<td>$60,400</td>
<td>Craig Dobbins&lt;br&gt;Dept of Agricultural Economics, Purdue University</td>
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**FARMER/RANCHER GRANTS**

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<tr>
<td>FNC21-1260</td>
<td>Goats and Pigs on Pasture, a Comparison of How the Two Types of Animals Contribute to Soil Fertility.</td>
<td>$8,969</td>
<td>Henry Guyver&lt;br&gt;Guyver Growers LLC</td>
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<td>FNC21-1262</td>
<td>Leveraging Biodiversity to Improve Profitability on a Small-scale Vegetable Farm</td>
<td>$17,425</td>
<td>Ann Carnes&lt;br&gt;Wild Pansy Farm</td>
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<td>FNC21-1268</td>
<td>To evaluate the use of SuperDFM on the improving of the winter survival rate of honey bees.</td>
<td>$25,320</td>
<td>James Steven Doty&lt;br&gt;ECIBA</td>
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<tr>
<td>FNC21-1271</td>
<td>Conversion of Row Crop Acreage to Beef Cattle Pasture Using Sorghum-Sudangrass</td>
<td>$9,000</td>
<td>Dave Fischer&lt;br&gt;Fischer Farms</td>
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<td>FNC21-1295</td>
<td>Heritage Corn: Planting, Challenges and Educating from the Family Plot Perspective</td>
<td>$26,993</td>
<td>Zuleyja Prieto&lt;br&gt;Zuleyja Prieto</td>
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<tr>
<td>FNC20-1220</td>
<td>Near Northeast Community Supported Agriculture Program</td>
<td>$7,525</td>
<td>Danielle Guerin&lt;br&gt;Soul Food Project</td>
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<tr>
<td>FNC20-1241</td>
<td>Revisiting Farm Diversification through Trout and Walleye Food Fish Production</td>
<td>$8,932</td>
<td>Dr. Carolyn Orr&lt;br&gt;Strawridge Farm</td>
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<td>FNC20-1244</td>
<td>Low Stress Livestock Management Hands-On Skill Building workshops</td>
<td>$25,275</td>
<td>Denice Rackley&lt;br&gt;Clearfield Stockdogs and Lamb</td>
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<tr>
<td>FNC20-1245</td>
<td>Creative Solutions to Reverse Indianapolis' Healthy Food Accessibility Trends</td>
<td>$23,648</td>
<td>Joyce Randolph&lt;br&gt;The Elephant Gardens</td>
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<td>FNC20-1252</td>
<td>Understanding the willingness of farms to utilize lung scanning in their cattle operations</td>
<td>$26,745</td>
<td>Tabitha Steckler Hurst&lt;br&gt;Hunley Creek Heifer Farm</td>
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<tr>
<td>Project ID</td>
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<td>Amount</td>
<td>Principal Investigator</td>
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<td>FNC20-1214</td>
<td>Utilizing living mulch in organic corn production</td>
<td>$7,862</td>
<td>Jared Crum, Rick and Peggy Crum</td>
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<td>FNC19-1196</td>
<td>Varroa mite and Small Hive Beetle management: Single brood chamber hive versus double brood chamber hive</td>
<td>$7,965</td>
<td>Mikael Thompson, Thompson’s Prairie Honey</td>
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<td>FNC19-1159</td>
<td>Holistic Forestry, Vegetables, and Small Livestock Production that Eradicates Invasive Species and Exposes Consumers to Sustainable Agriculture.</td>
<td>$8,233</td>
<td>Nick Carter, Mud Creek Farm</td>
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<tr>
<td>FNC19-1168</td>
<td>A Comprehensive Exploration Of Targeted Grazing With Goats</td>
<td>$8,943</td>
<td>Kaitlin Hossom, Second Planet Farmstead</td>
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<tr>
<td>FNC19-1169</td>
<td>Legacy’s United Farmers, Communities and Urban Food deserts</td>
<td>$26,827</td>
<td>John Jamerson, Legacy Taste of the Garden LLC</td>
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<td>FNC19-1180</td>
<td>No Waste Mushroom Cultivation: Viability Comparison of Spent Grain and Coffee Grounds for Small-scale and Urban farmers</td>
<td>$5,445</td>
<td>Lauren E McCalister, Three Flock Farm</td>
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<tr>
<td>FNC18-1120</td>
<td>Creating a Micro Farm: Using Everything, Wasting Nothing, and Inspiring Young People to Do the Same</td>
<td>$6,499</td>
<td>Brevan DeWeese, Country Boy Farm &amp; Garden</td>
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<td>FNC18-1129</td>
<td>Designing a Cost-Efficient Salad Greens Wash Area for Small-Scale Growers</td>
<td>$6,210</td>
<td>Matthew Jose, Mad Farmers Collective</td>
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<td>FNC18-1150</td>
<td>The Hoosier Harvest 365 Hospital Delivery Program</td>
<td>$22,500</td>
<td>Linda Woodbury, Nature's Gift, LLC</td>
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<td>FNC18-1111</td>
<td>Improving Worker Welfare and Grower Profitability in Small-scale Strawberry Production</td>
<td>$22,474</td>
<td>Richard Barnes, Tanglewood Berry Farm</td>
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<td>FNC18-1115</td>
<td>Planning for a Farmer-to-Farmer Butcher Shop</td>
<td>$15,000</td>
<td>Liz Brownlee, Nightfall Farm</td>
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<td>FNC18-1116</td>
<td>Increasing yields, plant vigor and soil health with the use of woodchips</td>
<td>$7,493</td>
<td>Karen Carisle, small farm</td>
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<td>FNC18-1117</td>
<td>Pasture-Crop Tests without Chemical Termination</td>
<td>$3,300</td>
<td>Timothy Carter, Honey Creek Farm</td>
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<td>FNC17-1086</td>
<td>Investigating the Possibilities of Cooperative Sorghum Syrup Production and Marketing for Strengthening Small Farm Sustainability in Northern Indiana</td>
<td>$22,477</td>
<td>Jane Loomis, Old Loon Farm</td>
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<td>FNC17-1089</td>
<td>Hoosier Young Farmer Coalition</td>
<td>$6,244</td>
<td>Genesis McKiernan-Allen, Hoosier Young Farmer Coalition</td>
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<td>FNC17-1095</td>
<td>Success with Stockdogs: Herding Workshops and Continuing Skills Development for Livestock Producers</td>
<td>$21,714</td>
<td>Denice Rackley, Clearfield Stockdogs and Lamb</td>
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<td>FNC17-1073</td>
<td>Measure the Effectiveness of Interseeded Cover Crops for Proactive Weed prevention in a Chemical-free, Low-till Vegetable Market Garden Operation</td>
<td>$7,500</td>
<td>James Catron</td>
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<td>FNC16-1054</td>
<td>Benefiting the Symbiotic Relationship Between Farmers, Ranchers and Honeybees through Consumer Education with an Emphasis on Beekeeping and Pollinators</td>
<td>$7,500</td>
<td>Megan Ryan</td>
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<td>FNC16-1030</td>
<td>Improving Small Garden Farm Productivity by Extending the Growing Season and Avoiding the Uncertainty of the Weather Conditions</td>
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<td>Karen Carlisle</td>
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<td>FNC15-1010</td>
<td>On-Farm Recipe Trials and Yield Impact from fermented compost (bochasi) for vegetables</td>
<td>$5,680</td>
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<td>FNC15-1015</td>
<td>Investigation into a year round complimentary broiler and vegetable farm enterprise using mobile high tunnels</td>
<td>$7,476</td>
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<td>FNC15-990</td>
<td>Selecting a New Array of Crisp Apples for Increased Consumer Demand and Grower Profit</td>
<td>$21,735</td>
<td>Dr. Steven Doud</td>
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<td>FNC15-997</td>
<td>The Economic Impact of Fall Planting vs Spring Planting Hops</td>
<td>$7,397</td>
<td>Stephen Howe</td>
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<td>FNC14-954</td>
<td>Economics of Growing Hops In Indiana: Planting Rhizomes versus Fully Rooted Plants</td>
<td>$7,465</td>
<td>Justin Kratoska</td>
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<td>FNC14-956</td>
<td>The Economic Value of Grazing and Harvesting Cover Crops for Livestock Forage in Between Grain Crops</td>
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<td>Jennifer Lattire</td>
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<td>FNC14-957</td>
<td>Improving Honey Bee Survival and long-term Sustainability in Indiana by Using Three Deep Brood Boxes vs. Traditional Two Deep Boxes</td>
<td>$14,771</td>
<td>Steven Lesniak</td>
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<td>FNC14-967</td>
<td>Development of Cost and Labor Effective Produce Sanitation Methods for Small Farms</td>
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<td>Dr. Carolyn Orr</td>
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<td>FNC13-902</td>
<td>Hydroponic Fodder in an Organic Pastured Poultry System: Can feed costs be reduced?</td>
<td>$7,500</td>
<td>Lisa Burke</td>
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<td>FNC13-904</td>
<td>Promoting sustainable beekeeping and genetic diversity through drone comb trapping</td>
<td>$7,480</td>
<td>Ginger Davidson</td>
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<td>FNC12-880</td>
<td>Alternative Feeds for Mid- to Large-size Pasture Raised Layer Operations</td>
<td>$7,203</td>
<td>Isaac Moody</td>
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<td>FNC12-896</td>
<td>An Internship Curriculum for Food Farmers in the North Central Region</td>
<td>$22,319</td>
<td>Therese Zimmerman-Niemier</td>
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<td>FNC12-850</td>
<td>Commercial Meat Rabbitry Feasibility Study</td>
<td>$13,246</td>
<td>Nick Carter</td>
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<td>FNC12-856</td>
<td>Sustainable Beekeeping in Indiana - Challenging the Old Paradigm of Buying Bees in the Early Spring</td>
<td>$14,825</td>
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<td>Urban Farmers Marketing Cooperative</td>
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<td>FNC10-799</td>
<td>Scaling Up Production by Improving Worker Comfort and Efficiency in No-till Organic Seed Garlic Production System</td>
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<td>Perkins’ Good Earth Farm</td>
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<td>FNC09-767</td>
<td>Seeding Cover Crops into Standing Corn Using Highboy Air Seeder</td>
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<td>Blake Hitzfield</td>
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<td>Andy Ambriole</td>
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<tr>
<td>FNC08-724</td>
<td>Evaluating weed control strategies in organic vegetable production</td>
<td>$6,000</td>
<td>Dale Rhoads</td>
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<tr>
<td>FNC08-726</td>
<td>Evaluation of the declining honey bee health and education of participating beekeepers</td>
<td>$17,810</td>
<td>James Steven Doty</td>
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<td>FNC07-696</td>
<td>Marketing an Organic CSA</td>
<td>$6,000</td>
<td>Michael Hollcraft</td>
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<td>FNC07-655</td>
<td>Enhancing Year-Round Sales of Quality Farm Product through the Use of On-Farm Geothermal Climate Controlled Storage Facilities</td>
<td>$6,000</td>
<td>Anna Welch</td>
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<td>FNC06-609</td>
<td>Field Trials of Organic Herbicides in Vegetable Production</td>
<td>$17,600</td>
<td>Dale Rhoads</td>
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<tr>
<td>FNC06-620</td>
<td>Developing Direct Marketing and Educational Campaigns to Promote Locally Grown Products to Consumers</td>
<td>$18,000</td>
<td>Earl Smith</td>
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<tr>
<td>FNC06-644</td>
<td>Analyzing the Effectiveness and Decreasing the Use of Dewormers in Meat Goats by Using FAMACHA and Fecal Samples to Implement Integrated Pest Management</td>
<td>$6,000</td>
<td>Steven Osborne</td>
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<td>FNC06-645</td>
<td>Developing Sound Financial Data for the GrassRoots Discussion Group</td>
<td>$3,840</td>
<td>Steve Hooley</td>
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<td>FNC05-549</td>
<td>Value-added Sustainable Animal Production with Natural and Organic Leathers</td>
<td>$5,500</td>
<td>Brent Ladd</td>
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<td>FNC05-568</td>
<td>Innovative Field to Market Processes for Small Produce Farms</td>
<td>$5,901</td>
<td>Kevin Cooley</td>
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<td>FNC05-582</td>
<td>Development of Organic Weed Control Strategies</td>
<td>$17,896</td>
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<td>FNC04-517</td>
<td>Benefits &amp; Evaluation of the Application of Compost Tea in Growing Organic Vegetables</td>
<td>$5,297</td>
<td>Dan Flotow</td>
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<td>Country Garden &amp; Farm Market</td>
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<td>FNC03-476</td>
<td>Investigating the Use of Compost Tea for Rapid Restoration of Soil Ecology on Four Indiana Farms</td>
<td>$17,959</td>
<td>Jim Tarnowski</td>
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<td>FNC02-389</td>
<td>Reasibility and Effect of Grass-Based Dairying on the Family Farm</td>
<td>$5,970</td>
<td>Roger Garland</td>
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<td>FNC02-402</td>
<td>Vaporizer for Mite Control in Beehives</td>
<td>$3,441</td>
<td>Kenny Schneider</td>
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<td>FNC02-419</td>
<td>Low-Tech Season Extended Production: Yield and Marketability of Salad Greens Varieties</td>
<td>$5,132</td>
<td>Ivor Chodkowski</td>
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<td>FNC01-367</td>
<td>Clearspring Produce Auction</td>
<td>$15,000</td>
<td>Harvey Bontrager</td>
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<td>FNC01-380</td>
<td>Advancing Organic Orcharding Through the Use of Kaolin Clay</td>
<td>$4,860</td>
<td>Dale Rhoads Rhoads Farm</td>
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<td>FNC00-308</td>
<td>Clearspring Produce Auction</td>
<td>$14,595</td>
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<td>FNC00-291</td>
<td>White Violet Farm Fiber Research Project</td>
<td>$5,000</td>
<td>Ann Sullivan White Violet Center</td>
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<td>FNC99-286</td>
<td>Lettuce Season Extension Trials</td>
<td>$3,450</td>
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<td>FNC99-271</td>
<td>Jacksonville Vineyard</td>
<td>$3,432</td>
<td>Steve Crabtree</td>
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<td>FNC98-206</td>
<td>Alternative Use for Small Tobacco Acreage in Southeastern Indiana</td>
<td>$3,270</td>
<td>Denise Dailey</td>
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<tr>
<td>FNC97-191</td>
<td>Great Circle FAr, CSA/Permaculture Demonstration Site</td>
<td>$5,000</td>
<td>Beth Neff</td>
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<td>FNC97-195</td>
<td>Ornamental Bittersweet Production for Small Woodland Farms</td>
<td>$2,915</td>
<td>Klueh John</td>
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<td>FNC96-129</td>
<td>Community Farm Project</td>
<td>$5,000</td>
<td>Emily Schabacker</td>
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<td>FNC96-151</td>
<td>Matted Mulch as an Alternative to Herbicide in Strawberries, Melons and Tomatoes</td>
<td>$4,393</td>
<td>Steve Fouts</td>
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<td>FNC96-160</td>
<td>Livestock Re-establishment Research Project at White Violet Farm</td>
<td>$5,000</td>
<td>Ann Sullivan White Violet Center</td>
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<td>FNC95-112</td>
<td>On-Farm Food Waste Composting</td>
<td>$5,000</td>
<td>Larry Whinery</td>
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<td>FNC95-093</td>
<td>Composting Poultry and Swine Carcasses</td>
<td>$4,926</td>
<td>Mark Hart</td>
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<td>FNC94-058</td>
<td>Growing Better Crops with IPM</td>
<td>$3,175</td>
<td>Brian Churchill</td>
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<td>FNC93-047</td>
<td>Transition from Confinement to Grazing in Beef Cattle Production</td>
<td>$4,970</td>
<td>Frances Leuken, Jr</td>
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<td>GNC20-304</td>
<td>Assessing growers’ knowledge of and interest in implementing insect resistant varieties as a part of an integrated pest management plan</td>
<td>$13,588</td>
<td>Elizabeth Long, Purdue University, Emily Justus, Purdue University</td>
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<td>GNC20-311</td>
<td>Examining the utility of black soldier fly larvae composting on urban farms</td>
<td>$14,832</td>
<td>Dr. Laura Ingwell, Purdue University, Caydee Terrell, Purdue University</td>
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<td>GNC20-315</td>
<td>Design and Management of On-Farm Wetlands for Water Quality and Climate Regulation</td>
<td>$14,838</td>
<td>Sara McMillan, Purdue University, Danielle Winter, Purdue University</td>
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<td>GNC20-294</td>
<td>Establishing Pullet Welfare Measurements and Guidelines for Growers and Managers on Commercial Poultry Farms</td>
<td>$14,962</td>
<td>Darrin Karcher, Ph.D., Purdue University, Meagan Abraham, DVM, Purdue University</td>
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<td>GNC19-277</td>
<td>Sulfur Use for Northern Fowl Mite Control in Poultry Systems</td>
<td>$10,409</td>
<td>Darrin Karcher, Ph.D., Purdue University, Rachel Jarrett, Purdue University</td>
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<td>GNC19-287</td>
<td>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</td>
<td>$13,351</td>
<td>Jennifer Tank, University of Notre Dame, Shannon Speir, University of Notre Dame</td>
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<td>GNC18-256</td>
<td>Developing Educational Resources on Sustainable Food Systems for High School Students</td>
<td>$11,354</td>
<td>Neil Knobloch, University of Illinois, Mingla Charoenmuang, Purdue University</td>
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<td>GNC18-262</td>
<td>Developing Financial and Risk Management Tools for Organic Grain Farmers</td>
<td>$12,000</td>
<td>Brady Brewer, Purdue University, Nathan Delay, Purdue University, Nicholas Lancaster, Purdue University</td>
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<td>GNC18-264</td>
<td>Springtails as Bioindicators of Soil Health</td>
<td>$11,988</td>
<td>Dr. Jeffrey Holland, Purdue University, Eoghan McCroskey, Purdue University</td>
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<td>GNC18-269</td>
<td>Understanding Cereal Rye Nitrogen Decomposition and its Transition into Inorganic and Organic Soil Nitrogen Pools</td>
<td>$11,999</td>
<td>Dr. Shalamar Armstrong, Purdue University, Richard Roth, Purdue University</td>
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<td>GNC16-231</td>
<td>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</td>
<td>$11,154</td>
<td>Dr. Shalamar Armstrong, Purdue University, Clayton Nevins, Purdue University</td>
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<td>GNC15-199</td>
<td>Functional Role of Native Mice in Midwestern Agroecosystems: Unwanted Pests or Friendly Neighbors?</td>
<td>$9,879</td>
<td>Dr. Robert Swihart, Purdue University, Dr. Jacob Berl, Purdue University</td>
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<td>GNC15-203</td>
<td>Quantifying the Impacts of Planting Cover Crops as a Conservation Tool to Reduce Nutrient Loss from Midwestern Farms</td>
<td>$9,999</td>
<td>Jennifer Tank, University of Notre Dame, Brittany Hanrahan, University of Notre Dame</td>
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<td>Grant Number</td>
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<td>Principal Investigator(s)</td>
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<td>GNC14-183</td>
<td>Economic Based Decision Support for Sustainable Horse Drawn Farming Enterprises</td>
<td>$9,538</td>
<td>Nicole Olynk Widmar Purdue University, Elizabeth Byrd Purdue University</td>
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<td>GNC12-151</td>
<td>Comparing the Effects of Spring and Fall Tillage on Larval Populations of a Beneficial Insect</td>
<td>$9,916</td>
<td>Dr. Ian Kaplan Purdue University, Carmen Blubaugh Purdue University</td>
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<tr>
<td>GNC10-133</td>
<td>Economic Based Decision Support to Promote Sustainable Livestock Enterprises</td>
<td>$10,000</td>
<td>Joan Fulton Purdue University, Anna Allcorn Purdue University</td>
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<tr>
<td>GNC10-140</td>
<td>Engaging Farmers to Improve Communication and Model Representation of Agricultural Ecosystem Services</td>
<td>$9,997</td>
<td>Dr. Indrajeet Chaubey Purdue University, Dr. Jane Frankenberger Purdue University, Rebecca Logsdon Purdue University, Margaret Kalcic Purdue University, Elizabeth Trybula Purdue University</td>
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<td>GNC10-122</td>
<td>Evaluation of Grain Amaranth and Quinoa as Forage Crops to Improve the Sustainability and Profitability of Small Livestock Operations</td>
<td>$9,800</td>
<td>Keith Johnson Purdue University, Dr. Tamilee Nennich Purdue University, John McMillan Purdue University</td>
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<td>GNC10-125</td>
<td>Farmer Access to Regional Meat Processing Capacity in the North Central Region</td>
<td>$9,997</td>
<td>Dr. Raymond Florax Purdue University, Peter Mitchell Purdue University</td>
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<td>GNC10-129</td>
<td>Growing Grain, Forage and/or Ethanol Feedstock</td>
<td>$10,000</td>
<td>Dr. Dennis Buckmaster Purdue University, Craig Dobbins Purdue University, Dr. Herbert Ohm Purdue University, Dr. Lori Snyder Purdue University, Dr. Tony Vyn Purdue University, Samantha Shoaf Purdue University, Samantha Shoaf Purdue University</td>
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<tr>
<td>GNC06-066</td>
<td>Improving Agricultural Sustainability through Drainage Water Management Practices</td>
<td>$10,000</td>
<td>Dr. Jane Frankenberger Purdue University, Roxanne Adeuya Agricultural and Biological Engineering</td>
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<td>GNC05-045</td>
<td>Using farmer input to develop research projects and outreach activities for organic agriculture</td>
<td>$10,000</td>
<td>Kevin Gibson Purdue University, David Hillger Purdue University</td>
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<td>GNC03-020</td>
<td>Development of Appropriate Participatory On-Farm Trial Designs for Sustainable Precision Agriculture Systems</td>
<td>$10,000</td>
<td>James Lowenberg-DeBoer Purdue University, Terry Griffin Purdue University</td>
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<tr>
<td>GNC02-009</td>
<td>The Role of School Gardens in Influencing Attitudes of Students Toward Agriculture, Science, and the Environment while Fostering Academic Achievement in Classrooms</td>
<td>$10,000</td>
<td>Kathryn Orvis Purdue University, Amy Robinson-Dirks Purdue University</td>
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**Project #** | **Project Title** | **SARE Support** | **Project Leaders**
--- | --- | --- | ---
ONC21-097 | Farm Education for Core Curriculum: Teachers and Farmers Partnering for the Future of Food Security | $39,999 | Therese Zimmerman Good Shepherd Montessori School
ONC20-068 | Stories that Sell: A Robust Communications Toolkit for Sustainable Ag Farmers and Ranchers | $39,806 | Ahna Kruzic
ONC20-080 | Hoosier Harvest 365 Hospital Delivery Program Expansion | $38,000 | Amy Surburg Hoosier Harvest Market
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**
--- | --- | --- | ---
YENC20-152 | Creating Youth Leaders Using Sustainable Urban Agricultural Practices | $3,828 | Alexandria Pettigrew Purdue Extension Nathan Shoaf Purdue Extension Beth Siple Purdue University
YENC19-134 | STEM and Sustainable Agriculture: Modeling an Interdisciplinary Approach in the High School Setting. | $3,954 | Kelly Hladek Munster High School
YENC19-143 | Teter Farm Camp | $4,000 | MaryEllen St.Angelo Teter Organic Farm
YENC17-112 | The Garbage to Garden Project: Providing Composting Services and Education | $1,320 | Kathy Haste Johnson County Soil & Water Conservation District
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
YENC16-098 | Growing Places Indy High School Supervised Agricultural Experience | $2,000 | Tyler Henderson Growing Places Indy
YENC14-071 | Youth Conservation Field Day | $2,000 | Janel Meyer Steuben County Soil and Water Conservation District
YENC14-073 | Sustainable Agriculture Through Home Composting | $2,000 | Virginia Roberts Purdue University - Marion County Extension Jeffrey Jones Purdue Extension
YENC14-076  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

YENC14-081  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

YENC09-012  Exploring Sustainability through Conventional Row Crop Farm  $2,000  Leslie Fairchilde  Columbus High School

YENC09-014  Harvest Learning Initiative  $520  Roberta Janssen  Shawnash Institute, Inc.  Clara Clark  New Prairie High School

### YOUTH GRANTS

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<tr>
<td>YNC09-032</td>
<td>Testing Fly Control Methods to Encourage Urban Poultry</td>
<td>$396</td>
<td>Libby Beetem</td>
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<td>YNC08-007</td>
<td>Impact of Rotational Grazing on Species Composition in a Square Foot Plot During a 21 Day Rotational Grazing Cycle – May through September, 2009</td>
<td>$263</td>
<td>Graham Rider  Thistle Byre Farm</td>
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<td>YNC08-008</td>
<td>The Efficiency of Jerusalem Artichokes (Sunchokes) as a Part of a Diversified Pasture Plan for My Free Range Feed Pigs</td>
<td>$385</td>
<td>Andrew Rider</td>
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Total funding from the USDA SARE program to Indiana

$5,245,878

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).