



# AGRICULTURE PROJECTS FUNDED IN MARYLAND

by USDA's  
Sustainable Agriculture Research and Education (SARE) Program  
1988-2018

Maryland has been awarded \$4,894,847 grants to support 125 projects, including but not limited to, 30 research and/or education projects, 8 professional development projects and 44 producer-led projects. Maryland has also received additional SARE support through multi-state projects.

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## RESEARCH AND EDUCATION GRANTS

Project #	Project Title	SARE support	Project Leaders
<a href="#">LNE18-366</a>	Optimization of Starter Nitrogen Fertilizer Application for Corn Planted into a Cereal Rye Cover Crop	\$199,790	Katherine Tully University of Maryland
<a href="#">LNE15-341</a>	Quantifying and demonstrating scrubbing H <sub>2</sub> S from farm-based anaerobic digestion systems	\$216,879	Stephanie Lansing University of Maryland
<a href="#">LNE14-338</a>	Deep soil nitrogen: A resource for sustainability in the mid-Atlantic using early cover crops	\$249,576	Dr. Raymond Weil University of Maryland Sarah Hirsh University of Maryland
<a href="#">LNE11-312</a>	No-till, No-herbicide Planting of Spring Vegetables Using Low Residue Winter Killed Cover Crops	\$154,405	Dr. Raymond Weil University of Maryland Natalie Lounsbury University of New Hampshire
<a href="#">LNE08-274</a>	Cover Crops for Sustainable Pest Management and Soil Quality in Production Nurseries	\$175,920	Dr. Paula Shrewsbury University of Maryland
<a href="#">LNE06-241</a>	An integrated approach to developing a day neutral strawberry production industry	\$88,700	Willie Lantz University of Maryland Extension
<a href="#">LNE05-224</a>	Increasing economic and environmental sustainability of aquaculture production systems through aquatic plant culture	\$159,309	Andrew Lazur University of Maryland Ctr. for Environmental Sci.
<a href="#">LNE05-232</a>	High tannin grain sorghum as a possible natural anthelmintic for sheep and goats	\$100,000	Niki Whitley UMES - Maryland Cooperative Extension
<a href="#">LNE04-206</a>	Season Extension and Cultivar Evaluations for Increasing Farmer Profitability Using High Tunnels in the	\$94,650	Mark Davis Future Harvest-CASA

Baltimore/Washington Metropolitan Marketing Area			
<a href="#">LNE04-211</a>	Mid-Atlantic Sheep & Goat Marketing Project	\$31,000	Susan Schoenian Maryland Cooperative Extension
<a href="#">LNE04-213</a>	Environmental and Economic Effects of Management-Intensive Grazing on Dairy Farms – Phase II	\$16,963	Dr.Raymond Weil University of Maryland
<a href="#">LNE04-201</a>	Optimizing Environmental Benefits From Riparian Buffers in Maryland	\$123,977	Galen P. Dively Department of Entomology
<a href="#">LNE03-180</a>	Optimization of cover crop strategies for pumpkin production in the mid-Atlantic	\$99,613	Caragh Fitzgerald Maryland Cooperative Extension Kathryne Everts University of Delaware, Dept. of Plant and Soil
<a href="#">LNE03-190</a>	Small Ruminant Integrated Parasite Management (IPM)	\$49,830	Susan Schoenian Maryland Cooperative Extension
<a href="#">LNE03-192</a>	Multipurpose Brassica cover crops for sustaining Northeast farmers	\$158,570	Dr.Raymond Weil University of Maryland
<a href="#">LNE03-193</a>	Sustainable pasture lamb production	\$147,495	Niki Whitley UMES - Maryland Cooperative Extension
<a href="#">LNE02-167</a>	Enhancement, Implementation & Evaluation of Biologically Based Pest Management Tactic for Three Key Pests in Production Nurseries	\$138,636	Dr.Paula Shrewsbury University of Maryland
<a href="#">LNE01-145</a>	Improving Sustainable Enterprise Selection & Marketing Skills through Business Skills Training	\$4,230	Ginger Myers Howard County Economic Development Authority
<a href="#">LNE01-152</a>	Environmental & Economic Impacts of Management-Intensive Grazing on Dairy Farms	\$131,795	Dr.Raymond Weil University of Maryland
<a href="#">LNE00-131</a>	Development and Evaluation of Management Alternatives for Root Knot Nematodes and Volunteer Potatoes	\$128,900	Kathryne Everts University of Delaware, Dept. of Plant and Soil
<a href="#">LNE00-140</a>	Microdairy: Creating a Profitable Five-Cow Dairy	\$168,590	Frank Kipe Old Springhouse Farm
<a href="#">LNE97-084</a>	Design and Implementation of a Searchable Database on Compost Production and Use for Internet Users	\$20,000	Patricia D. Millner USDA-ARS
<a href="#">LNE96-069</a>	Soil Test for Active Organic Matter: A Tool to Help Assess Soil Quality	\$100,000	Dr.Raymond Weil University of Maryland
<a href="#">LNE95-062</a>	Managing Dairy Waste Using Constructed Wetlands & Composting	\$110,305	Leslie Cooperband University of Maryland

<a href="#">LNE95-052</a>	Fescue Endophyte Research Study	\$9,632	Craig Hartsock Allegany Soil Conservation District
<a href="#">LNE95-055</a>	Control of Gastrointestinal Nematodes in Dairy Cattle Under Intensive Rotational Grazing Management	\$45,000	Louis Gasbarre USDA-ARS
<a href="#">LNE95-061</a>	Resource Conservation & Environmental Stewardship in the "Maryland Ag in the Classroom" Curriculum Guide	\$70,000	Richard R. Leader Chesapeake Audubon Society/Pickering Creek Environmental Center
<a href="#">LNE91-027</a>	An Integrated Response to Pollination-Related Problems Resulting from Parasitic Honey-Bee Mites, the Africanized Honey Bee, and honey-bee pathogens	\$100,000	Nicholas Calderone ARS Bee Research Laboratory
<a href="#">LNE89-013</a>	Winter Cover Crops for Corn Production in the Northeast: N Balance and Soil Moisture Status	\$105,000	Morris Decker University of Maryland
<a href="#">LNE88-003</a>	Role of Cereal Grain Cover Crops in Nitrogen Management for the Chesapeake Bay Region	\$150,000	Russell Brinfield University of Maryland

#### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

Project #	Project Title	SARE support	Project Leaders
<a href="#">ENE18-151</a>	Agricultural Conservation Leasing Guide Education Series	\$159,380	Sarah Everhart University of Maryland Francis K. Carey School of Law
<a href="#">ENE16-144</a>	The Northeast Cover Crops Council: Building the network and online decision support tools	\$144,859	Katherine Tully University of Maryland
<a href="#">ENE98-038</a>	Organic Grain Production Another Way	\$90,100	John Hall University of Maryland
<a href="#">ENE98-044</a>	Locally Led Farmer Groups for Sustainable Agriculture: The Study Circle Approach	\$6,500	Jim Hanson Department of Ag Resource Economics
<a href="#">ENE98-046</a>	Conducting On-Farm Research: Enabling Farmers to Implement Sustainable Change in Agriculture	\$50,000	Kathryne Everts University of Delaware, Dept. of Plant and Soil
<a href="#">ENE97-033</a>	Riparian Buffer Training (Enhancement, Installation, and Management of Riparian Buffer Systems)	\$20,500	Robert Tjaden Univ. of MD Cooperative Ext. Service
<a href="#">ENE96-022</a>	Video Training on Improving Water Quality Featuring Farmers and Their Practices in the German Branch Watershed	\$24,351	Jim Hanson Department of Ag Resource Economics
<a href="#">ENE96-024</a>	Training, Networking and Demonstrating Whole Farm Forage Grazing Systems	\$60,000	Elmer M. Dengler USDA -- NRCS

#### FARMER/RANCHER GRANTS

Project #	Project Title	SARE support	Project Leaders
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<a href="#">FNE18-900</a>	Use of Rate-of-Gain and Dry Lot to Maintain Parasite Anthelmintic Susceptibility in Bluefaced Leicester Maryland Lambs	\$13,658	Andrew Keller Vista View Farms
<a href="#">FNE17-875</a>	Using real-time generated rate-of-gain to determine anthelmintic need in pastured Blue Faced Leicester Maryland lambs	\$9,104	Andrew Keller Vista View Farms
<a href="#">FNE16-843</a>	Methods for improving quality and conditions of ground cherry production–part II	\$5,652	Lisa Garfield Calliope Farm
<a href="#">FNE15-828</a>	Methods for improving quality and conditions of ground cherry production	\$6,889	Lisa Garfield Calliope Farm
<a href="#">FNE15-832</a>	Exploring dryland rice production in the mid-Atlantic	\$11,405	Heinz Thomet Next Step Produce
<a href="#">FNE14-803</a>	Effectiveness of Aerated Static Pile to Windrow Composting on Small-Scale Farms	\$6,237	Emma Jagoz Moon Valley Farm
<a href="#">FNE13-789</a>	Exploring low-tech food dehydration to increase profits on small farms	\$14,915	Tanya Tolchin Jug Bay Market Garden
<a href="#">FNE12-768</a>	Water Hyacinth Project	\$8,687	Larry Ward Ward Farms
<a href="#">FNE10-682</a>	Big Flip Floats for Commercial Oyster Aquaculture	\$11,384	Christine Power Great Eastern Shellfish Company David Chamberlain Great Eastern Shellfish Company, LLC
<a href="#">FNE10-693</a>	Economical Climate Control for extended Production in High Tunnel Vertical Growing Systems	\$7,651	Allen Lilly Ryan's Glade Farm
<a href="#">FNE08-647</a>	Propagating day-neutral strawberry plugs for fall planting	\$3,395	Jim Strawser Brook View Farm
<a href="#">FNE08-630</a>	Increasing profitability: Building consumer preference for chevon through education and outreach	\$10,000	Jeanne Dietz-Band Many Rocks Farm
<a href="#">FNE08-631</a>	Testing Two Selection Assays' Efficacy for Varroa-mite-tolerant Bee Production	\$4,347	Adam Finkelstein VP Queen Bees
<a href="#">FNE07-620</a>	Assess and quantify the benefit of alternative and renewable energy for greenhouse operations	\$8,800	John Shepley Emory Knoll Farms, Inc.
<a href="#">FNE06-594</a>	Sustainable livestock farming: A promotional video and teaching tool	\$5,770	Robin Way Rumbleway Farm
<a href="#">FNE05-546</a>	Using ultrasound scanning and performance testing technology to increase loin eye area in lamb	\$5,785	John Hall Hall Suffolks

<a href="#">FNE04-517</a>	Enhancing the Maryland Nursery Industry's Ability to Improve Water Quality and Increase Profit	\$9,900	Leslie Hunter-Cario Environmental Concern, Inc.
<a href="#">FNE04-532</a>	Verifying New Sustainable Methods for Small Ruminant Parasite Control	\$3,300	Karen Taylor
<a href="#">FNE03-497</a>	Sustainable Methods for Small Ruminant Parasite Control	\$1,892	Karen Taylor
<a href="#">FNE03-477</a>	Farrow to Finish Premium Pastured Pork	\$1,555	Errol Mattox
<a href="#">FNE03-492</a>	Raising Goats on Pasture Alone or with Grain Supplementation	\$2,907	Kurt Schuster
<a href="#">FNE02-402</a>	Use of Corn Gluten Meal to Reduce Weeds in Beet Fields	\$2,356	David Barylski
<a href="#">FNE02-424</a>	Effect of Straw, Leguminous and Non-Leguminous Cover Crops on Productivity and Weed Suppression in Organically Managed Asparagus Beds	\$864	Michael Klein
<a href="#">FNE02-426</a>	Production of Strawberries in November and December	\$9,927	David Lankford
<a href="#">FNE02-427</a>	Indoor Raspberry Production	\$7,633	Wayne Lockwood
<a href="#">FNE02-447</a>	Determination of Omega-3 Fatty Acid in Pastured Raised Meat Rabbits	\$5,937	Robin Way Rumbleway Farm
<a href="#">FNE01-382</a>	Effect of Wood Chip Mulch, Leguminous & Non-Leguminous Cover Crops on Productivity & Weed Suppression in Organically Managed Asparagus Beds	\$3,583	Michael Klein
<a href="#">FNE01-376</a>	Maximizing Nitrogen & Phosphorus Efficiency in a Managed-Intensive-Grazing Dairy	\$4,481	Judy Gifford St. Brigid's Farm
<a href="#">FNE00-296</a>	On-site demonstration for replacing broadcast herbicides with cultivation and banded herbicides in corn.	\$5,426	Roy Crow
<a href="#">FNE00-305</a>	Wine grape production in Harford County: the use of canines as a deterrent to deer damage.	\$822	Robert Halman Ole 9 Vineyard
<a href="#">FNE00-311</a>	The use of the predacious Phytoselid mite, Amblyseius cucumeris, and the entomopathogenic fungus, Beauveria bassiana, for control of western flower thrips in commercial bedding plant production.	\$2,874	Gary Magnum
<a href="#">FNE99-267</a>	Amending Soils to Produce Blueberries	\$1,523	Guy & Lynn Moore

in Maryland

<a href="#">FNE99-268</a>	Improving Protein Utilization in Grazing Dairy Cows by Supplementing the Diet with Liquid Molasses	\$4,175	Ginger Myers
<a href="#">FNE99-269</a>	Evaluating a No-till Transplanter for Organic Vegetable Production	\$3,072	Drew Norman
<a href="#">FNE99-278</a>	Warm-Season Grass Demonstration for Dairy Farms	\$2,520	Harry Strite
<a href="#">FNE99-287</a>	Ginseng Dead-Heading: Determining the Effects of Removing Seed-Producing Flowers from Woods-Grown Ginseng	\$2,363	Steve & Karen Galloway
<a href="#">FNE99-257</a>	Dairying in Harford County, Maryland: Transition to Intensive Grazing	\$6,050	David Keyes
<a href="#">FNE99-263</a>	No-till Transplanted Watermelons in Rye Cover Crop	\$5,308	Mike Malone
<a href="#">FNE99-265</a>	Mulching with Black Plastic Drainage Pipe	\$2,390	Lawrence MacDonald
<a href="#">FNE98-202</a>	Evaluating Raised Beds and Various Mulches for Vegetable Production	\$3,120	Ed Armacost
<a href="#">FNE97-187</a>	Mixed Field Forage	\$2,230	Darryl Walker
<a href="#">FNE96-148</a>	Improving Aquaculture Productivity & Safety with Dockside Elevator Systems	\$3,869	Richard Pelz
<a href="#">FNE95-104</a>	Season Extension Through Annual Organic Strawberry Production & Fall Vegetable Production	\$4,705	Eric Rice
<a href="#">FNE93-012</a>	Bio-Control of Corn Earworm and European Corn Borer in Sweet Corn	\$1,510	Nicholas C. Maravell Nick's Organic Farm

**GRADUATE STUDENT GRANTS**

<b>Project #</b>	<b>Project Title</b>	<b>SARE support</b>	<b>Project Leaders</b>
<a href="#">GNE18-167</a>	Evaluation of Biochar as an Additive for Biogas Desulfurization in Dairy Manure Digesters	\$14,950	Stephanie Lansing University of Maryland Abhinav Choudhury University of Maryland, College Park
<a href="#">GNE18-177</a>	Movement of Spiders from Drainage Ditches to Agricultural Fields to Enhance Conservation Biocontrol	\$13,684	William Lamp Dr. Dylan Kutz University of Maryland
<a href="#">GNE18-178</a>	Understanding Spotted Wing	\$14,994	Kelly Hamby

	Drosophila's Role as a Vector for Fruit Rot Fungi in Fall Red Raspberries		University of Maryland College Park Margaret Lewis University of Maryland
<a href="#">GNE18-185</a>	Getting Legume Cover Crops to Work in Mid-Atlantic Field Crop Rotations	\$14,811	Katherine Tully University of Maryland Cara Peterson
<a href="#">GNE18-187</a>	Evaluating the Effect of Potato Leafhopper Feeding on Biological Nitrogen Fixation in Alfalfa	\$8,804	William Lamp Dr. Morgan Thompson University of Maryland, College Park
<a href="#">GNE17-148</a>	The Maryland Winter Cover Crop Program: assessing performance	\$14,800	Dr.Brian Needelman University of Maryland Brian Davis University of Maryland
<a href="#">GNE17-150</a>	Integrating sustainability & food safety: assessing Salmonella serovar fitness in irrigation water & transfer onto crops	\$14,958	Dr.Shirley Micallef University of Maryland Angela Ferelli University of Maryland
<a href="#">GNE17-160</a>	Effect of winter cover crops on soil nitrogen dynamics in no-till corn systems	\$14,998	Katherine Tully University of Maryland Resham Thapa Department of Plant Science and Landscape Architecture, University of Maryland
<a href="#">GNE16-116</a>	Evaluations of economic benefits and long-term sustainability of neonicotinoid seed treatment use in the mid-Atlantic	\$14,978	Kelly Hamby University of Maryland College Park Aditi Dubey University of Maryland College Park
<a href="#">GNE15-096</a>	Evaluating the effects of green manure and biofertilizers on pak choi yield, minerals, and phytonutrient contents	\$14,994	Corrie Cotton UMES Nadine Burton University of Maryland Eastern Shore
<a href="#">GNE15-099</a>	The effect of cover crops on the abundance and survival of beneficial stink bugs	\$11,916	Dr.Cerruti R. R. Hooks University of Maryland Peter Coffey University of Maryland
<a href="#">GNE15-104</a>	Cold tolerance of the invasive kudzu bug and its potential impact on soybean production in the Northeast	\$14,423	William Lamp Dr. Jessica Grant University of Maryland
<a href="#">GNE15-106</a>	On-farm and isotopic evaluation of deep soil nitrogen capture and cycling by cover crop mixtures	\$14,945	Dr.Raymond Weil University of Maryland Sarah Hirsh University of Maryland
<a href="#">GNE14-089</a>	Reduction of environmental risks and improving livestock productivity in Mixed Crop-Livestock Systems with cheap byproducts of berry fruits	\$14,983	Dr.Debabrata Biswas University of Maryland-College Park Serajus Salaheen University of Maryland-College Park
<a href="#">GNE12-047</a>	Spatial pattern of infestation risk and management of the invasive brown marmorated stink bug in soybeans	\$14,956	Galen Dively University of Maryland College Park William Lamp Dr. Dilip Venugopal Dept. of Entomology, Univ. of Maryland
<a href="#">GNE12-032</a>	Quantification and persistence of ionophore antimicrobials associated with poultry litter	\$14,754	Dr.Joshua M. McGrath University of Maryland Dr.Amir Sapkota

			University of Maryland Saptashati Biswas University of Maryland
<a href="#">GNE11-025</a>	Cover crop selection and manure placement for weed suppression and nitrogen use efficiency in a no-till organic corn system	\$14,986	Dr.Raymond Weil University of Maryland Hanna Poffenbarger University of Maryland
<a href="#">GNE11-030</a>	Developing Inoculum to Increase Anaerobic Digestion Efficiency in Winter Months	\$14,974	Stephanie Lansing University of Maryland Freddy Witorsa University of Maryland
<b>ON FARM RESEARCH/PARTNERSHIP GRANTS</b>			
<b>Project #</b>	<b>Project Title</b>	<b>SARE support</b>	<b>Project Leaders</b>
<a href="#">ONE18-313</a>	Relationship Marketing in the Digital Age: Helping Farmers Grow Their Businesses Through Online Marketing	\$14,495	Juliet Glass Maryland Farmers Market Association
<a href="#">ONE18-315</a>	Evaluation of Hops Production in Maryland as a Sustainable Agricultural Enterprise	\$12,214	Andrew Kness University of Maryland Extension
<a href="#">ONE17-295</a>	On-farm food safety trainings for community supported agriculture, on-farm markets, and agritourism operations	\$14,974	Paul Goeringer Department of Agricultural and Resource Economics, College of Ag and Natural Resources, University of Maryland
<a href="#">ONE16-282c</a>	Changing the mindset of Maryland cover crop farmers through delayed spring burn-down	\$11,102	Nevin Dawson University of Maryland Extension
<a href="#">ONE16-266</a>	Increasing profitability of tomato production in high tunnels	\$14,800	Willie Lantz University of Maryland Extension
<a href="#">ONE16-269</a>	A Maryland cheesemakers guild: Supporting producers, connecting with consumers	\$14,435	Ginger Myers University of Maryland Extension
<a href="#">ONE15-251</a>	Priming for production: A podcast on soil health	\$14,818	Natalie Lounsbury University of New Hampshire Dr.Raymond Weil University of Maryland
<a href="#">ONE14-216</a>	Am I making a profit? Using calculators to develop profitable prices for farm-raised meats	\$13,452	Ginger Myers University of Maryland Extension
<a href="#">ONE12-163</a>	Sustainable management tools for the redheaded flea beetle in nurseries	\$14,999	Brian Kunkel University of Delaware
<a href="#">ONE12-167</a>	Launching a Maryland small farms poultry processing and marketing group	\$14,760	Ginger Myers University of Maryland Extension
<a href="#">ONE09-104</a>	Developing a Cost Effective, Energy Efficient Greenhouse Using Solar Heating to Extend the Growing Season	\$6,960	Willie Lantz University of Maryland Extension
<a href="#">ONE08-086</a>	Organic Dried Bean Production in Mid-Atlantic	\$7,395	Laura Hunsberger University of Maryland Cooperative Extension



<a href="#">ONE06-060</a>	Short cycling as an approach to successful organic strawberry production	\$4,654	Willie Lantz University of Maryland Extension
<a href="#">ONE05-045</a>	Promoting Pollinators on Maryland's Working Landscapes	\$9,535	Annette Meredith University of Maryland
<a href="#">ONE03-015</a>	Double-crop forage systems for dairy farms	\$9,970	Don Schwartz Maryland Cooperative Extension

### SUSTAINABLE COMMUNITY INNOVATION GRANTS

Project #	Project Title	SARE support	Project Leaders
<a href="#">CNE12-096</a>	Baltimore City Urban Agriculture Alliance	\$14,530	Maya Kosok Civic Works
<a href="#">CNE11-090</a>	Producer Inventory Management for Fresh Fruit and Vegetable Sales to Retail Outlets	\$15,000	Willie Lantz University of Maryland Extension
<a href="#">CNE10-077</a>	Stimulating Maryland Agricultural Entrepreneurship through Curbside Roundtables and Individual Planning	\$12,008	Ginger Myers University of Maryland Extension
<a href="#">CNE09-063</a>	Mid-Atlantic Small Black Farmers Food Distribution Project	\$21,395	Berran Rogers Maryland Cooperative Extension Program Gladys McMichael Help Ourselves Project, Inc.
<a href="#">CNE08-047</a>	Expanding and strengthening a network of farmers to support a local foodshed	\$5,660	Laura Hunsberger University of Maryland Cooperative Extension
<a href="#">CNE08-056</a>	Leveraging community financing for farm and farmland protection	\$10,000	Dr.Lynda Brushett Cooperative Development I Michael Speltz Society for Protection of

### YOUTH GRANTS

Project #	Project Title	SARE support	Project Leaders
<a href="#">YNC09-031</a>	Hunting for Farmers	\$398.03	Chandler Trout

### PDP STATE PROGRAM GRANTS

Project #	Project Title	SARE support	Project Leaders
<a href="#">NEUMES17-001</a>	Demonstration of Successful Apple Orchard Establishment on the Eastern Shore of Maryland	\$16,666	Dr.Fnu Naveen Kumar University of Maryland Eastern Shore
<a href="#">NEUMD17-001</a>	Building Soil Health in Maryland through Agricultural Service Provider Education	\$83,850	Nevin Dawson University of Maryland Extension
<a href="#">NEUMD14-001</a>	Building Soil Health in Maryland Through Agricultural Service Provider	\$134,443	Nevin Dawson University of Maryland Extension

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\$4,894,847**

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For further information on projects, contact Deb Heleba, Northeast SARE communications specialist, at 802-651-8335, ext 552 or [debra.heleba@uvm.edu](mailto:debra.heleba@uvm.edu).

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