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 $308 million to more than 7,395 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...

New Jersey

Project Highlight: Programming Supports Northeast Agritourism

Northeast farmers are relying increasingly on agritourism to expand farm income, create employment for family members and strengthen relationships in the local community. But agritourism also increases a farm’s liability, as farm visitors may be exposed to risks they are not familiar with. Some farmers also lack the experience to market their operation to visitors, make the transition to a retail and hospitality enterprise, and manage the associated risks and liabilities.

In response to these issues, a multistate team of Cooperative Extension faculty, led by Brian Schilling from Rutgers University, used SARE funding to develop a train-the-trainer curriculum on agritourism. Its aim was to equip farm service providers with the knowledge, skills and tools needed to help Northeast farmers minimize risk and liability associated with farm visits, mitigate financial risk, and improve marketing strategies.

The project goal was to train 60 Extension educators and other agricultural service professionals, with at least 30 going on to share information with 200 farmers. But in fact, more than 690 educators and 760 farmers came to this project’s workshops, classroom-style training, webinars and small-group farm assessments throughout New Jersey, Vermont, Delaware, and Maine, surpassing the expected level of participation several times over.

For more information on this project, see sare.org/projects, and search for project number ENE11-121.

SARE in New Jersey

northeast.sare.org/sare-in-your-state/new-jersey

$3,789,289 in total funding

104 grant projects

(since 1988)

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

Total awards: **104 grants**
- 31 Farmer/Rancher
- 15 Graduate Student
- 20 On Farm Research/Partnership
- 14 Professional Development Program
- 22 Research and Education
- 2 Research Only

Total funding: **$3,789,289**
- $277,764 Farmer/Rancher
- $204,509 Graduate Student
- $260,899 On Farm Research/Partnership
- $978,720 Professional Development Program
- $1,875,983 Research and Education
- $191,414 Research Only

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: [northeast.sare.org/sare-in-your-state/new-jersey](http://northeast.sare.org/sare-in-your-state/new-jersey)

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 [northeast.sare.org/state-pages/new-jersey](http://northeast.sare.org/state-pages/new-jersey) to learn more.

Michelle Infante-Casella
Rutgers Cooperative Extension of Gloucester County
(856) 224-8040
mindante@njaes.rutgers.edu

For detailed information on SARE projects, go to [www.SARE.org](http://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.
New Jersey has been awarded $3,814,105 grants to support 104 projects, including but not limited to, 20 research and/or education projects, 14 professional development projects and 31 producer-led projects. New Jersey 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>
</tr>
</thead>
<tbody>
<tr>
<td>LNE20-395</td>
<td>Empowering Northeastern Strawberry Growers With Flower Mapping</td>
<td>$137,819</td>
<td>Edward Durner&lt;br&gt;Dept. of Plant Biology, Rutgers University</td>
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<tr>
<td>LNE18-362</td>
<td>Goldenberries (Physalis peruviana): A New Fruit for CSA Farms and Farmers Markets</td>
<td>$102,122</td>
<td>Edward Durner&lt;br&gt;Dept. of Plant Biology, Rutgers University</td>
</tr>
<tr>
<td>LNE18-364</td>
<td>An Area-Wide Pest Management Program to Improve Honey Bee Health in Blueberry and Cranberry Pollination Services</td>
<td>$199,975</td>
<td>Dean Polk&lt;br&gt;Rutgers University</td>
</tr>
<tr>
<td>LNE08-273</td>
<td>Spatially Based Whole-Farm Integrated Crop Management (ICM) Systems for Northeast Highbush Blueberry Production</td>
<td>$180,000</td>
<td>Dr. Cesar Rodriguez-Saona&lt;br&gt;Rutgers University</td>
</tr>
<tr>
<td>LNE07-253</td>
<td>Mating disruption for the management of oriental beetle in ornamental nurseries: A research and extension effort</td>
<td>$106,876</td>
<td>Dr. James Lashomb&lt;br&gt;Rutgers University</td>
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<tr>
<td>LNE07-265</td>
<td>An integrated approach to developing nutrient management schemes for container-grown nursery crops</td>
<td>$106,562</td>
<td>Dr. John Dighton&lt;br&gt;Rutgers University, Gladis Zinati&lt;br&gt;Rutgers, The State University</td>
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<tr>
<td>LNE00-132</td>
<td>Alternate Bed Renovation System for Cranberry Production</td>
<td>$157,506</td>
<td>Nicholi Vorsa&lt;br&gt;Marucci Center for Blueberry &amp; Cranberry Research</td>
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<tr>
<td>LNE99-128</td>
<td>The Green House Project: Sustainable Agriculture in Urban Areas</td>
<td>$122,315</td>
<td>Ralph Coolman&lt;br&gt;Rutgers University</td>
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<tr>
<td>LNE99-129</td>
<td>Utilization of Community Leaves for Improving Orchard Soil Quality</td>
<td>$95,535</td>
<td>Robert Belding&lt;br&gt;Rutgers Cooperative Extension, Rutgers University</td>
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<tr>
<td>LNE97-093</td>
<td>Sustainable Phosphorous Fertilizer Recommendations for Corn Production in the Northeast USA</td>
<td>$92,780</td>
<td>Joseph R. Heckman&lt;br&gt;Rutgers University, Dept of Plant Science</td>
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<tr>
<td>LNE97-095</td>
<td>Flowering Plants to Enhance Biological Control in Landscapes</td>
<td>$80,344</td>
<td>Paula M. Shrewsbury&lt;br&gt;Rutgers University</td>
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<tr>
<td>LNE97-085</td>
<td>Integration of Behavioral, Biological, and Reduced-Risk Chemical Approaches into a Sustainable Insect Management Program for Cranberries</td>
<td>$133,179</td>
<td>Sridhar Polavarapu&lt;br&gt;Dept. of Entomology, Rutgers University</td>
</tr>
</tbody>
</table>
At-Harvest Stalk Nitrate Testing for Sweet Corn $4,710 Joseph R. Heckman Rutgers University, Dept of Plant Science

Peach Orchard Ground Cover Management to Reduce Arthropod Damage $55,000 Peter Shearer Rutgers University

Presidedress Soil Nitrate Test for Fall Cabbage $45,000 Joseph R. Heckman Rutgers University, Dept of Plant Science

Improving the Profitability & Adaptation of the High-Density Strawberry Production System for the Northeast $96,204 Joseph Fiola Rutgers University, Rutgers Fruit Research and Education Center

Implementation of a Disease Forecasting System for Tomatoes in Northern New Jersey $54,210 Winfred Cowgill Rutgers University

Develop Crop Rotational Budgets For Three Cropping Systems in the Northeast $60,846 Robin G. Brumfield Ag'l Economics & Marketing, Cook College, Rutgers State U

Marketability of Low-input Agricultural Produce $20,000 Clair S. Liptak Rutgers

Eggplant: A model system for integrating biological control of Colorado potato beetle and Verticillium wilt $25,000 Dr. James Lashomb Rutgers University

**RESEARCH ONLY GRANTS**

**Project #** | **Project Title** | **SARE Support** | **Project Leaders**
---|---|---|---
LNE20-407 | Reducing water and fertilizer inputs by incorporating native beneficial bacteria in sustainable turfgrass sod production | $149,910 | Dr. Bingru Huang, PhD Rutgers University
LNE18-369R | Extend and Maximize Postharvest Quality of Strawberry | $41,504 | Thomas Gianfagna Rutgers University

**PROFESSIONAL DEVELOPMENT PROGRAM GRANTS**

**Project #** | **Project Title** | **SARE Support** | **Project Leaders**
---|---|---|---
ENE19-157 | Training Agriculture Service Providers on the Nitty-Gritty Details of No-Till and Cover Crop Practices for Greater Implementation | $148,966 | Bridgett Hilshey North Jersey RC&D
ENE11-121 | Development of Extension Programming to Support the Advancement of Agritourism in the Northeast | $112,616 | Dr. Brian Schilling Rutgers University
ENE09-111 | Organic vegetable production weed control strategies: Integrating precision cultivation, weed biology and OMRI herbicides | $89,211 | Dr. John Grande Rutgers University
ENE06-096 | Matching small-farm crop sprayer application technology with OMRI and traditional agricultural products | $48,386 | Dr. John Grande Rutgers University
ENE04-088 | Sustainable Pasture Management for Horses | $79,100 | Dr. Carey Williams Rutgers University Department of Animal Sciences
ENE03-079  An advanced school addressing integrated crop management of highbush blueberries  $16,550  James Barry  Marucci Center for Blueberry and Cranberry Research


ENE01-064  Development of Ethnic & Specialty Vegetable Production & Marketing Resources  $122,731  Richard VanVranken  Rutgers Cooperative Extension - Atlantic County

ENE97-031  Multi-Media Aids and In-Service Training Program for Using Insecticidal Nematodes  $59,163  Sridhar Polavarapu  Dept. of Entomology, Rutgers University

ENE97-035  Review and Evaluation of Educational and Reference Materials Pertaining to Nutrient Management and Soil Health for Sustainable Agriculture Production.  $7,000  Michelle Infante-Casella  Rutgers New Jersey Agricultural Experiment Station Cooperative Extension

ENE96-017  Teaching to Achieve Sustainable Management of Phytophthora Diseases on Horticultural Crops  $46,500  Jack Rabin  Rutgers Cooperative Extension

ENE96-023  Communication and Outreach for Sustainable Agriculture: A Video Training Program for Extension  $49,998  Billie Jo Hance  Center for Env. Comm., Cook College, Rutgers Univ.

ENE95-007  Information Management Training for Integrated Crop and Pest Management  $59,508  Jack Rabin  Rutgers Cooperative Extension

ENE95-014  Promoting Sustainable Agriculture Through a Systems Approach to Consensus Building and Public Policy Education  $27,098  Edmund Tavernier  Dept of Agriculture

<table>
<thead>
<tr>
<th>Project #</th>
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</thead>
<tbody>
<tr>
<td>FNE20-952</td>
<td>Chemical-Free Vineyards</td>
<td>$14,813</td>
<td>Steve and Audrey Gambino Villa Milagro Vineyards</td>
</tr>
<tr>
<td>FNE19-931</td>
<td>Cold Storage of Eastern Oysters, Crassostrea virginica, to Reduce Winter Mortality in an Increasingly Variable Environment</td>
<td>$14,845</td>
<td>Betsy Haskin Betsy's Cape Shore Salts</td>
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<tr>
<td>FNE18-885</td>
<td>Comparison of Five Methods of Crop Thinning in Pinot Noir and their Effects on Fruit Composition and Wine Quality</td>
<td>$14,871</td>
<td>Michael Beneduce Beneduce Vineyards</td>
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<tr>
<td>FNE18-888</td>
<td>Optimization and Demonstration of Field Nursery Practices for Oyster Seed Cultivation in the Delaware Bay, NJ</td>
<td>$14,240</td>
<td>Lisa Calvo Sweet Amalia Oyster Farm</td>
</tr>
<tr>
<td>FNE18-892</td>
<td>Analyzing the Profitability of Seasonal Wreath Production</td>
<td>$5,223</td>
<td>Monica Drazba Chickadee Creek Farm</td>
</tr>
<tr>
<td>FNE16-853</td>
<td>Examining varieties of alternative grain crop: Malt barley and its efficacy in a double-grain cropping system in New Jersey</td>
<td>$14,543</td>
<td>Henry Muehlbauer Swampy Vale Farm</td>
</tr>
</tbody>
</table>
Design and construction of a low-impact amphibious vehicle for efficient and sustainable oyster farming

A honeybee IPM program for pollinator health in blueberry production

Evolving cage design for floating oyster farms in Barnegat Bay, NJ

Methods to control bio-fouling of cultured eastern oysters, Crassostrea virginica, by the tube-building polychaete worm, Polydora cornuta

Improvement and demonstration of subtidal cage culture methods to cultivate oysters in Delaware Bay, New Jersey

Raising fig trees in high tunnels in the Northeast

Improving the Quality of Queen Honey Bees produced in the Northeast by Modifying Standard 10-Frame High Body Boxes

Improving Growing Practices for Processing Tomatoes Using Rodale Roller Crimper

The effect of two levels of cluster thinning on crop yield and quality for Cabernet Sauvignon and Cabernet Franc grown in the Eastern US

Adaptation and integration of remote setting, selective breeding and triploid production technologies to revitalize oyster culture in Delaware Bay

A Middle Entrance for Beehives II

A middle entrance for beehives

Pre-sidedress Nitrate Test in Pumpkins

An Improved System for Moving and Storing Small Rectangular Bales

Event Marketing

Mobile Poultry Processing Unit

Creating No-Till Cover in Newly Established Organic Blueberry Blocks
<table>
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<tr>
<th>Project #</th>
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<tbody>
<tr>
<td>GNE19-212</td>
<td>Increasing Consumer Acceptance of Baby Leafy Greens Grown in a Controlled Environment</td>
<td>$15,000</td>
<td>Beverly Tepper, Regina O’Brien, Rutgers University</td>
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<tr>
<td>GNE18-181</td>
<td>Evaluating Native American Hazelnuts for Use as Cold Hardy Pollenizers in European Hazelnut Orchards</td>
<td>$10,048</td>
<td>Dr. Thomas Molnar, Alex Mayberry, Rutgers University</td>
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<tr>
<td>GNE17-141</td>
<td>Breeding for thermal tolerance in farmed atlantic surfclams (Spisula solidissima)</td>
<td>$14,963</td>
<td>Dr. Daphne Munroe, Michael Acquafredda, Rutgers University, Haskin Shellfish Research Laboratory</td>
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<tr>
<td>GNE17-149</td>
<td>Roles of rhizobacteria from northeast natural ecosystems in improving crop productivity and stress tolerance</td>
<td>$14,848</td>
<td>Bingru Huang, William Errickson, Rutgers University, Haskin Shellfish Research Laboratory</td>
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<tr>
<td>GNE17-158</td>
<td>Reclamation of nutrients and irrigation waters from livestock wastewater</td>
<td>$15,000</td>
<td>Ashaki Rouff, Alon Rabinovich, Rutgers University Newark</td>
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<tr>
<td>GNE17-162</td>
<td>Increasing horse pasture productivity by integrating warm-season grasses into cool-season rotational grazing systems</td>
<td>$14,997</td>
<td>Dr. Carey Williams, Jennifer Weinert, Rutgers, The State University of New Jersey, Rutgers University, The State University of New Jersey</td>
</tr>
<tr>
<td>GNE16-132</td>
<td>Identifying realized predation on BMSB (Halyomorpha halys, Stål) and host plant impacts</td>
<td>$13,639</td>
<td>Anne Nielsen, John Pote, Rutgers University</td>
</tr>
<tr>
<td>Project #</td>
<td>Project Title</td>
<td>SARE Support</td>
<td>Project Leaders</td>
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<tr>
<td>ONE20-371</td>
<td>Efficacy of whole herbs on controlling gastrointestinal nematodes in an alpaca fiber operation</td>
<td>$13,448</td>
<td>Dr. Erin Masur, DVM Hoof &amp; Hound</td>
</tr>
<tr>
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<td>Dr. Alexia Tsakiris, BVetMed, GDipWVHM, CVA Blue Sage Veterinary Wellness Center</td>
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<tr>
<td>ONE19-345</td>
<td>Alternative and Organic Management Practices to Control Oriental Beetle in Commercial Blueberries</td>
<td>$29,848</td>
<td>Dean Polk, Rutgers University</td>
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<tr>
<td>ONE16-285c</td>
<td>Integrating cover crops for suppression of soil born diseases in blueberries</td>
<td>$10,000</td>
<td>Dr. Peter Oudemans, Rutgers, The State University</td>
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<tr>
<td>ONE15-243</td>
<td>Rediscovering the Rutgers tomato</td>
<td>$14,900</td>
<td>Peter Nitzsche, Rutgers Cooperative Extension of Morris County</td>
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<tr>
<td>ONE15-247</td>
<td>Establishment and marketing of hops production in the mid-Atlantic</td>
<td>$14,956</td>
<td>James Simon, Rutgers University</td>
</tr>
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</table>
SUSTAINABLE COMMUNITY INNOVATION GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| ONE14-201  | Minimizing risks of Vibrio bacteria in farm-raised oysters grown in intertidal environments of the Delaware Bay | $14,899      | Lisa Calvo
Haskin Shellfish Reserach Laboratory, Rutgers University |
| ONE14-217  | Bringing IPM and Natural Enemies Back to the Orchard Post-BMSB                | $14,970      | Anne Nielsen
Rutgers University |
| ONE13-190  | Mating disruption and reduced-risk methods to control peach pests and brown marmorated stink bug | $14,833      | Dean Polk
Rutgers University |
| ONE13-185  | Pepper weevil pathways                                                        | $14,914      | Joseph Ingerson-Mahar
Rutgers University |
| ONE12-161  | Determining pepper weevil pathways                                            | $14,957      | Joseph Ingerson-Mahar
Rutgers University |
| ONE11-151  | Impact of Production System and Cultivar on Yields of Roselle (Hybiscus sabdariffa) Leaves and Calyces | $14,155      | Richard VanVranken
Rutgers Cooperative Extension - Atlantic County |
| ONE09-106  | Hazelnuts: A New Sustainable Crop for the Northeastern United States          | $10,000      | Dr.Thomas Molnar
Rutgers University |
| ONE09-108  | Integrating Cover crops into Sustainable Highbush Blueberry Production in New Jersey | $10,000      | Dr.Zsofia Szendrei
Michigan State University |
| ONE08-090  | Asian Pears, an alternative crop for Northeast fruit growers – Developing a Plant Growth Regulator Thinning Program to Ensure Profitability | $9,997       | Daniel Ward
Rutgers University |
| ONE08-092  | Low-input management practices for container Ericaceous nursery crops         | $9,985       | Gladis Zinati
Rutgers, The State University
Dr.John Dighton
Rutgers University |
| ONE07-078  | Evaluating the effects of production system and cultivar on the development of silvering in bell pepper fruit | $9,860       | Nancy Maxwell
New Jersey Agricultural Experiment Station
Andy Wyenandt
New Jersey Agricultural Experiment Station
Wesley Kline
New Jersey Agricultural Experiment Station |
| ONE06-054  | Increasing the sustainability of northeastern goat farms via the establishment of value-added goat meat products in new, nontraditional markets | $9,973       | H. Louis Cooperhouse
Rutgers, The State University of New Jersey |
| ONE06-066  | Evaluating the effects of variety and production system on the development of silvering in bell pepper fruit | $9,824       | Andy Wyenandt
New Jersey Agricultural Experiment Station |
| ONE05-043  | Implementation of an integrated peach rusty spot disease management program in commercial orchards | $10,000      | Norman Lalancette
Rutgers University |
| ONE03-016  | Ratcheting up commercial organic high-bush blueberry production systems       | $9,380       | William Sciarappa
Rutgers Cooperative Extension |
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Title</th>
<th>Funding Amount</th>
<th>Contact Person</th>
<th>Affiliation</th>
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</thead>
<tbody>
<tr>
<td>CNE12-101</td>
<td>Improving the Sustainability of the Horse Industry through Equine-Related Business Planning</td>
<td>$14,816</td>
<td>Dr. Carey Williams</td>
<td>Rutgers University Department of Animal Sciences</td>
</tr>
<tr>
<td>CNE06-009</td>
<td>Seeds to Success Youth Farm Stand project: Using social marketing to increase community presence and create a self-supporting project</td>
<td>$10,000</td>
<td>Luanne Hughes</td>
<td>Rutgers Cooperative Extension</td>
</tr>
</tbody>
</table>

**Total funding from the USDA SARE program to New Jersey**

*$3,814,105*

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