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 $307 million to more than 7,384 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...

Connecticut

Project Highlight: Arming Basil Growers with Disease-Control Solutions

Whenever a new pest enters the scene, farmers must quickly learn how to deal with it if they are to remain profitable. Two SARE-funded projects are helping Connecticut farmers cope with this very situation in the case of a serious outbreak of Downy mildew of basil, a new disease to the eastern United States.

Typically, organic farmers depend on cultural practices to reduce disease problems, with control products complementing these practices. In the case of Downy mildew, Connecticut farmers could find no solutions due to the lack of published research on the efficacy of available control products. So Extension agent Joan Allen looked at disease-control products on two species of basil in one SARE-funded project, and then in a second project focused on the most promising contenders. Because of her work, basil growers now have access to possible solutions.

The results from Allen’s first project provided basil farmers information about two products, narrowed down from an original five. Farmers started using the better performers, MilStop and Oxidate. Allen also looked at the effect of nitrogen fertilization rate alone and in combination with the fungicides on the severity of the disease. Close to 500 farmers and gardeners learned of possible new practices through presentations.

For more information on these projects, see sare.org/projects, and search for project numbers ONE11-132 and ONE12-152.

SARE in Connecticut

Sustainable Agriculture Research & Education

northeast.sare.org/sare-in-your-state/connecticut

$2,161,853 in total funding

69 grant projects (since 1988)

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

Total awards: 69 grants

- 31 Farmer/Rancher
- 8 Graduate Student
- 8 On Farm
- Research/Partnership
- 3 Professional Development Program
- 18 Research and Education
- 1 Research Only

Total funding: $2,161,853

- $178,913 Farmer/Rancher
- $114,297 Graduate Student
- $93,630 On Farm
- Research/Partnership
- $227,995 Professional Development Program
- $1,398,144 Research and Education
- $148,874 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/connecticut

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/connecticut to learn more.

Rachel Bespuda
University of Connecticut
(203) 407-3172
rachel.bespuda@uconn.edu

Joe Bonelli
University of Connecticut
(860) 875-3331
joseph.bonelli@uconn.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.
AGRICULTURE PROJECTS FUNDED IN
CONNECTICUT
by USDA’s
Sustainable Agriculture Research and Education (SARE) Program

Connecticut has been awarded $2,232,757 grants to support 72 projects, including but not limited to, 15 research and/or education projects, 3 professional development projects and 31 producer-led projects. Connecticut 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>LNE18-363</td>
<td>Improved N Management for Corn using Aerial Images, Adapt-N, Chemical and Biological Tests, and Cover Crops</td>
<td>$241,570</td>
<td>Dr. Karl Guillard University of Connecticut</td>
</tr>
<tr>
<td>LNE13-324</td>
<td>Developing adaptable native shrubs for the green industry</td>
<td>$58,347</td>
<td>Dr. Jessica Lubell University of Connecticut</td>
</tr>
<tr>
<td>LNE09-279</td>
<td>Development and on-farm training of biologically based methods for integrated crop management of stone fruits in New England</td>
<td>$195,498</td>
<td>Dr. Robert Marra Connecticut Agricultural Lorraine Los University of Connecticut</td>
</tr>
<tr>
<td>LNE09-281</td>
<td>Aronia berries: A sustainable nutraceutical crop for the Northeast</td>
<td>$151,821</td>
<td>Dr. Mark Brand University of Connecticut</td>
</tr>
<tr>
<td>LNE03-177</td>
<td>Perimeter trap crop approach to pest management on vegetable farms</td>
<td>$139,527</td>
<td>Ruth Hazzarad University of Massachusetts Jude Boucher University of Connecticut</td>
</tr>
<tr>
<td>LNE01-144</td>
<td>Survey of the Nutrient Status of Organic Vegetable Farms</td>
<td>$35,397</td>
<td>Thomas Morris University of Connecticut</td>
</tr>
<tr>
<td>LNE01-143</td>
<td>Farmer-Run Research Organization for Southern New England</td>
<td>$167,660</td>
<td>Thomas Morris University of Connecticut</td>
</tr>
<tr>
<td>LNE00-137</td>
<td>Benefits &amp; Drawbacks of Various Winter Cover Crops in Vegetable Pest Management</td>
<td>$89,202</td>
<td>Kimberly Stoner Connecticut Agricultural Experiment Station</td>
</tr>
<tr>
<td>LNE98-106</td>
<td>Biological Control for Soil-Dwelling Insects &amp; Diseases in Strawberries</td>
<td>$147,557</td>
<td>Richard Cowles Connecticut Agricultural Experiment Station</td>
</tr>
<tr>
<td>LNE97-082</td>
<td>Biological and Cultural Methods of Insect Management in Vegetables: Survey and Case Studies of Organic Farms and Evaluation of the Scientific Literature</td>
<td>$20,000</td>
<td>Kimberly Stoner Connecticut Agricultural Experiment Station</td>
</tr>
<tr>
<td>LNE97-083</td>
<td>Nitrogen Management for Pumpkins and Squash</td>
<td>$40,000</td>
<td>Richard A. Ashley University of Connecticut</td>
</tr>
<tr>
<td>LNE96-065</td>
<td>Farm to School Food Education Project</td>
<td>$33,319</td>
<td>Elizabeth Wheeler The Hartford Food System</td>
</tr>
</tbody>
</table>
### RESEARCH ONLY GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
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<th>Project Leaders</th>
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</thead>
<tbody>
<tr>
<td>LNE20-412R</td>
<td>Enhancing the Safety of Eggs and Fresh Produce by Novel Ultra-fine Bubble Technology and Farmer Training</td>
<td>$148,874</td>
<td>Dr. Abhinav Upadhyay, University of Connecticut</td>
</tr>
</tbody>
</table>

### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

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<tr>
<th>Project #</th>
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<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENE10-116</td>
<td>Professional development for agricultural service providers in applied poultry science</td>
<td>$134,501</td>
<td>Dr. Richard Brzozowski, University of Maine Cooperative Extension</td>
</tr>
<tr>
<td>ENE99-048</td>
<td>Alternative &amp; Herbal Livestock Health Practices</td>
<td>$86,994</td>
<td>Thomas Morris, University of Connecticut</td>
</tr>
<tr>
<td>ENE98-042</td>
<td>Feeding Our Cities: Establishing a Strong Urban/Sustainable Agriculture Interface in Southern New England</td>
<td>$6,500</td>
<td>Michael T. Keilty, University of Connecticut Extension</td>
</tr>
</tbody>
</table>

### FARMER/RANCHER GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
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<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNE19-925</td>
<td>Honey Plant Intercropping on Christmas Tree Farms</td>
<td>$10,032</td>
<td>Richard Cowles, Humming Grove Farm</td>
</tr>
<tr>
<td>FNE19-939</td>
<td>Tree Regeneration and Establishment Strategies in Silvopasture and Sugarbush Systems</td>
<td>$13,450</td>
<td>Dr. Joseph Orefice, Hidden Blossom Farm</td>
</tr>
<tr>
<td>FNE19-944</td>
<td>Winter Triticale and Red Clover Double Cropping Field Trials for a Three-Year Production Cycle</td>
<td>$14,824</td>
<td>Craig Stearns</td>
</tr>
<tr>
<td>FNE17-869</td>
<td>Establishing propagation protocols and assessing weed risk of litchi tomato, Solanum sisymbriifolium</td>
<td>$5,459</td>
<td>Diane Dorfer, Cobblestone Farm</td>
</tr>
<tr>
<td>FNE17-883</td>
<td>Comparison of indigenous microorganism and commercial soil inoculant on crop yields and basil downy mildew disease resistance</td>
<td>$15,000</td>
<td>Melody Wright, Pleasant Valley Botanicals</td>
</tr>
<tr>
<td>FNE13-783</td>
<td>Enhancing growth rate and well-being of pigs raised on pasture through the use of mobile evaporative cooling while improving pasture fertility and reducing environmental degradation</td>
<td>$11,033</td>
<td>Peter Lowy, Pete and Jens Backyard Birds</td>
</tr>
</tbody>
</table>
Conservation tillage for organic cabbage: Yield, weed growth, and management costs $4,561  
Janna Berger  
Adamah/Isabella Freedman Jewish Retreat Center  
Arthur Schwab  
Adamah / Isabella Freedman Jewish Retreat Center

Evaluation of the insect resistance of interspecific squash hybrids $4,022  
Bryan Connolly  
Green Dragon Farm

Determining cost-effectiveness of raising slow growing genotype broilers in three alternative housing systems $7,861  
Julie Cronin

Small farm air chill system $6,912  
Craig Floyd  
Footsteps Farm, LLC

Breeding colorful disease- and pest-tolerant potatoes $3,225  
Bryan Connolly  
Green Dragon Farm

Horticultural Weed Barrier Mats From Dairy Manure — Phase 2 $10,000  
Matthew Freund  
Freunds’ Farm, Inc.

Remote Sensing for Nitrogen Management in Corn $6,298  
Randolph Blackmer

Tolerance Variation to Mexican Bean Beetles of Common Bean Cultivars $1,974  
Bryan Connolly  
Green Dragon Farm

Litchfield County Farmers Livestock Market $4,137  
Christos Glynos  
Bethlehem Boer Goat Ranch

Horticultural Weed Barrier Mats From Dairy Manure $8,800  
Matthew Freund  
Freunds' Farm, Inc.

Increasing Small Farm Profits with American Chestnut Production and Silvopasture $4,766  
Elisa Santee  
Foxfire Farm

Compost Planting Pots $7,500  
Matthew Freund  
Freunds’ Farm, Inc.

Fava beans and kale as potential spring nurseries for insect natural enemies to move into the greenhouse. $5,382  
Kathryn Caruso

Timing of Brassica planting to reduce flea beetle damage. $4,697  
Brian O’Hara

Compost Planting Pots $700  
Matthew Freund  
Freunds’ Farm, Inc.

“Clean Green Machine” A Hydroponic System $4,520  
David S. Roberts

Demonstration of the Effectiveness of Pediobius for Control of Mexican Bean Beetle and Squash Beetle $2,480  
Kathryn Caruso
<table>
<thead>
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<tbody>
<tr>
<td>FNE98-203</td>
<td>Squash Vine Borer and Cotton Row Covers</td>
<td>$1,540</td>
<td>Brian O'Hara</td>
</tr>
<tr>
<td>FNE98-208</td>
<td>Sheep Farmstead Cheesemaking in Connecticut</td>
<td>$3,050</td>
<td>Suzanne Sankow Beaverbrook Farm</td>
</tr>
<tr>
<td>FNE97-162</td>
<td>Biological Insect Control of Herbaceous Perennials</td>
<td>$600</td>
<td>Michael Berecz</td>
</tr>
<tr>
<td>FNE96-129</td>
<td>Pedal-Powered Tillage for a Small Community-Supported Farm (CSA)</td>
<td>$2,400</td>
<td>Megan Haney Mad Mares Farm</td>
</tr>
<tr>
<td>FNE96-154</td>
<td>Growing Potatoes Organically 3 Different Ways</td>
<td>$1,670</td>
<td>Johan van Acterberg Hidden Meadow Farm</td>
</tr>
<tr>
<td>FNE96-159</td>
<td>Certified Organic Associated Growers (COAG)</td>
<td>$2,670</td>
<td>Tony Norris</td>
</tr>
<tr>
<td>FNE95-088</td>
<td>Canaan Valley Agricultural Cooperative Waste Management Program</td>
<td>$4,350</td>
<td>Peter Jacquier Laurel Brook Farm</td>
</tr>
<tr>
<td>FNE94-048</td>
<td>Innovative Uses of Leaf Compost for the Modern Farmer/Grower</td>
<td>$5,000</td>
<td>William Gnaizdoski d.b.a. Echo Farms</td>
</tr>
</tbody>
</table>

**GRADUATE STUDENT GRANTS**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>GNE19-213</td>
<td>Use of Lactic Acid Bacteria to Control L. monocytogenes on Apples under Simulated Commercial Conditions</td>
<td>$15,000</td>
<td>Mary Anne Amalaradjou University of Connecticut Deepa Ashwarya Kuttappan University of Connecticut</td>
</tr>
<tr>
<td>GNE19-221</td>
<td>Importance of Environmental Factors on Plantings of Wild-Simulated American Ginseng</td>
<td>$15,000</td>
<td>Marlyse Duguid Yale School of Forestry and Environmental Studies Karam Sheban Yale School of the Environment</td>
</tr>
<tr>
<td>GNE17-146</td>
<td>Maximizing the health and size of on-site native pollinator populations for crops requiring sonication pollination</td>
<td>$14,973</td>
<td>Julia Kuzovkina University of Connecticut John Campanelli University of Connecticut</td>
</tr>
<tr>
<td>GNE16-128</td>
<td>Early (in-ovo) administration of probiotics to promote growth in broiler chicken</td>
<td>$14,999</td>
<td>Mary Anne Amalaradjou University of Connecticut Michael Darre University of Connecticut Muhammed Shafeekh Muuyarikkandy University of Connecticut</td>
</tr>
<tr>
<td>GNE15-113</td>
<td>Natural and eco-friendly approaches to control aflatoxins in poultry feed</td>
<td>$14,393</td>
<td>Michael Darre University of Connecticut Dr.Kumar Venkitanarayanan University of Connecticut Hsinbai Yin University of Connecticut</td>
</tr>
<tr>
<td>GNE14-083</td>
<td>Anaerobically digested dairy as a renewable substitution for peat in media for nursery production</td>
<td>$14,856</td>
<td>Dr.George Elliott UCONN John Lamont University of Connecticut</td>
</tr>
<tr>
<td>GNE11-020</td>
<td>Organic fertilization for greenhouses</td>
<td>$12,556</td>
<td>Dr.George Elliott UCONN Kristin Hulshart University of Connecticut</td>
</tr>
</tbody>
</table>
GNE10-010 Prevalence of Clostridium difficile (C. diff) in Connecticut Swine farms $12,520 Dr. Robert Heimer
Yale University School of Public Health
Dr. Lynda Osadebe
Yale University

### ON FARM RESEARCH/PARTNERSHIP GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| ONE16-265       | Boosting farmer sales through culinary events and marketing                   | $14,992      | Ashley Kremser
CitySeed                                               |
| ONE16-279c      | Farmer-led cover crop trials and demonstrations for vegetable and corn silage fields | $22,465      | Jim Hyde
USDA NRCS                                              |
| ONE13-179       | Investigating forage radish and compost as a means of alleviating soil compaction in established bramble and blueberry fields | $14,958      | Mary Concklin
University of Connecticut                               |
| ONE12-152       | Management of basil downy mildew using organic fungicides and nitrogen fertilization rate | $6,705       | Joan Allen
Assistant Cooperative Extension Educator in Residence |
| ONE11-132       | Evaluation of Organic Control Products for Basil Downy Mildew                | $4,705       | Joan Allen
Assistant Cooperative Extension Educator in Residence |
| ONE08-080       | Hastening Adoption of Zone-Tillage on CT/ New England Vegetable Farms        | $9,902       | Jude Boucher
UNiversity of Connecticut Cooperative Extension         |
| ONE06-064       | Increasing biological control of brassica pests through overwintering       | $9,903       | Kimberly Stoner
Connecticut Agricultural Experiment Station              |
| ONE03-011       | Simple methods to stack manure and make compost without nutrient loss       | $10,000      | Tom Morris
University of Connecticut                               |

### SUSTAINABLE COMMUNITY INNOVATION GRANTS

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<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
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</tr>
</thead>
</table>
| CNE10-073       | Farmland ConneCTions Guide                                                   | $14,978      | Greg Plotkin
American Farmland Trust
Ben Bowell
American Farmland Trust                                   |
| CNE10-079       | Granby Sampler                                                               | $14,942      | Michelle Niedermeyer
Granby Agriculture Commission                             |
| CNE09-064       | Southern Litchfield County’s first regional locally-grown produce distribution facility | $11,214      | Vincent Nolan, Jr.
Town of New Milford                                        |
| CNE07-018       | Engaging and growing community through a community supported market          | $9,986       | Nicole Berube
CitySeed, Inc                                               |
| CNE07-029       | Creating sustainable food purchasing guidelines in the Northeast            | $9,831       | Joshua Viertel
Yale Sustainable Food Project                               |
| CNE06-015       | Planning for community farms across Connecticut                              | $9,953       | Kimberly Stoner
Connecticut Agricultural Experiment Station                 |

Total funding from the USDA SARE program to Connecticut
$2,232,757

For further information on projects, contact Deb Heleba, Northeast SARE communications specialist, at 802-651-8335, ext 552 or debra.heleba@uvm.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).