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

www.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.

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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.
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&lt;br&gt;University of Connecticut</td>
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<tr>
<td>LNE13-324</td>
<td>Developing adaptable native shrubs for the green industry</td>
<td>$58,347</td>
<td>Dr. Jessica Lubell&lt;br&gt;University of Connecticut</td>
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<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&lt;br&gt;Connecticut Agricultural&lt;br&gt;Lorraine Los&lt;br&gt;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&lt;br&gt;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&lt;br&gt;University of Massachusetts&lt;br&gt;Jude Boucher&lt;br&gt;University of Connecticut Cooperative Extension</td>
</tr>
<tr>
<td>LNE01-143</td>
<td>Farmer-Run Research Organization for Southern New England</td>
<td>$167,660</td>
<td>Thomas Morris&lt;br&gt;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&lt;br&gt;University of Connecticut</td>
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<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&lt;br&gt;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&lt;br&gt;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&lt;br&gt;Connecticut Agricultural Experiment Station</td>
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<tr>
<td>LNE97-083</td>
<td>Nitrogen Management for Pumpkins and Squash</td>
<td>$40,000</td>
<td>Richard A. Ashley&lt;br&gt;University of Connecticut</td>
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<tr>
<td>LNE96-065</td>
<td>Farm to School Food Education Project</td>
<td>$33,319</td>
<td>Elizabeth Wheeler&lt;br&gt;The Hartford Food System</td>
</tr>
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</table>
### RESEARCH ONLY GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNE20-412R</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</td>
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<td>University of Connecticut</td>
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### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

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<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</td>
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<tr>
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<td>University of Maine Cooperative Extension</td>
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<tr>
<td>ENE99-048</td>
<td>Alternative &amp; Herbal Livestock Health Practices</td>
<td>$86,994</td>
<td>Thomas Morris</td>
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<td>University of Connecticut</td>
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<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</td>
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<td>University of Connecticut Extension</td>
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### FARMER/RANCHER GRANTS

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<th>Project #</th>
<th>Project Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FNE19-925</td>
<td>Honey Plant Intercropping on Christmas Tree Farms</td>
<td>$10,032</td>
<td>Richard Cowles</td>
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<tr>
<td></td>
<td></td>
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<td>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</td>
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<td></td>
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<td>Hidden Blossom Farm</td>
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<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</td>
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<tr>
<td></td>
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<td>Cobblestone Farm</td>
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<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</td>
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<td></td>
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<td>Pleasant Valley Botanicals</td>
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<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</td>
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<tr>
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<td>Pete and Jens Backyard Birds</td>
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</tbody>
</table>
FNE12-736 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

FNE11-709 Evaluation of the insect resistance of interspecific squash hybrids

$4,022

Bryan Connolly
Green Dragon Farm

FNE07-604 Determining cost-effectiveness of raising slow growing genotype broilers in three alternative housing systems

$7,861

Julie Cronin

FNE07-605 Small farm air chill system

$6,912

Craig Floyd
Footsteps Farm, LLC

FNE06-569 Breeding colorful disease- and pest-tolerant potatoes

$3,225

Bryan Connolly
Green Dragon Farm

FNE04-515 Horticultural Weed Barrier Mats From Dairy Manure — Phase 2

$10,000

Matthew Freund
Freunds’ Farm, Inc.

FNE03-457 Tolerance Variation to Mexican Bean Beetles of Common Bean Cultivars

$1,974

Bryan Connolly
Green Dragon Farm

FNE03-465 Litchfield County Farmers Livestock Market

$4,137

Christos Glynos
Bethlehem Boer Goat Ranch

FNE03-454 Remote Sensing for Nitrogen Management in Corn

$6,298

Randolph Blackmer

FNE02-412 Horticultural Weed Barrier Mats From Dairy Manure

$8,800

Matthew Freund
Freunds' Farm, Inc.

FNE02-437 Increasing Small Farm Profits with American Chestnut Production and Silvopasture

$4,766

Elisa Santee
Foxfire Farm

FNE01-373 Compost Planting Pots

$7,500

Matthew Freund
Freunds’ Farm, Inc.

FNE00-294 Fava beans and kale as potential spring nurseries for insect natural enemies to move into the greenhouse.

$5,382

Kathryn Caruso

FNE00-315 Timing of Brassica planting to reduce flea beetle damage.

$4,697

Brian O’Hara

FNE99-236 Demonstration of the Effectiveness of Pediobius for Control of Mexican Bean Beetle and Squash Beetle

$2,480

Kathryn Caruso

FNE99-243 Compost Planting Pots

$700

Matthew Freund
Freunds’ Farm, Inc.

FNE99-272 “Clean Green Machine” A Hydroponic System

$4,520

David S. Roberts
### FNE98-208 Sheep Farmstead Cheesemaking in Connecticut
$3,050  Suzanne Sankow  Beaverbrook Farm

### FNE98-203 Squash Vine Borer and Cotton Row Covers
$1,540  Brian O’Hara  

### FNE97-162 Biological Insect Control of Herbaceous Perennials
$600  Michael Berecz  

### FNE96-129 Pedal-Powered Tillage for a Small Community-Supported Farm (CSA)
$2,400  Megan Haney  Mad Mares Farm  

### FNE96-154 Growing Potatoes Organically 3 Different Ways
$1,670  Johan van Acterberg  Hidden Meadow Farm  

### FNE96-159 Certified Organic Associated Growers (COAG)
$2,670  Tony Norris  

### FNE95-088 Canaan Valley Agricultural Cooperative Waste Management Program
$4,350  Peter Jacquier  Laurel Brook Farm  

### FNE94-048 Innovative Uses of Leaf Compost for the Modern Farmer/Grower
$5,000  William Gnaizdoski d.b.a. Echo Farms

### GRADUATE STUDENT GRANTS

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

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

### SUSTAINABLE COMMUNITY INNOVATION GRANTS

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

Total funding from the USDA SARE program to Connecticut
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).