

## 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 \$389 million to more than 8,542 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.



[www.sare.org](http://www.sare.org)

## SARE: Advancing the Frontier of Sustainable Agriculture in...

# Connecticut

**Project Highlight:** Assessment of a Composite Herbal Feed Additive on Reducing *Haemonchus contortus* in a Dual Purpose Sheep Operation

Dr. Erin Masurn, a veterinarian at Fork You Farms in Bantam, Connecticut, led a team of researchers to see if the herbal formula “Early Bird” could treat harmful parasites in sheep. Gastrointestinal nematodes are a type of parasite that can negatively impact the health and reproductive ability of sheep herds. “Early Bird” has shown to be successful at preventing gastrointestinal nematode propagation; however, researchers at Fork You Farms want to test the efficacy of “Early Bird” as a treatment method for sheep that have already been affected.

With the help of a Northeast SARE grant, Dr. Masurn ran an experiment to test how sheep infected with various parasites respond to the “Early Bird” treatment. According to researchers, “Early Bird” has the potential to increase the meat, fiber and dairy productivity of small ruminant and camelid operations by diminishing overall parasite burden. Using different species with varying parasite burdens gives producers the opportunity to gain a better understanding of the limits of herbal parasite control. This project will help veterinarians develop protocols for the usage of the product and help farmers determine its worth to their specific operations.

For more information on this project, see [sare.org/projects](http://sare.org/projects) and search for project number ONE21-399.

## SARE in Connecticut

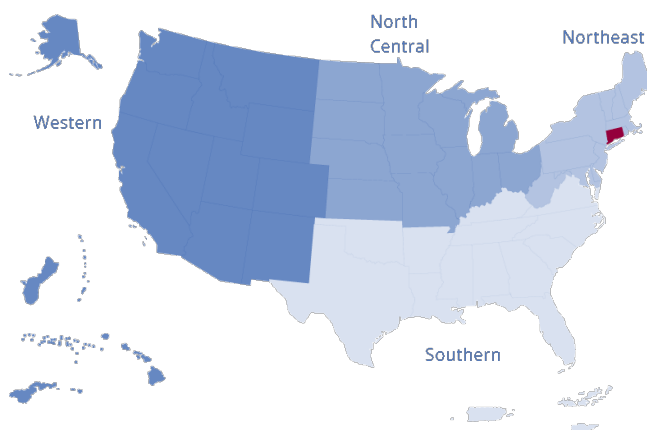
[northeast.sare.org/sare-in-your-state/connecticut](http://northeast.sare.org/sare-in-your-state/connecticut)

**\$3,772,257**  
**in total funding**

**93 grant projects**

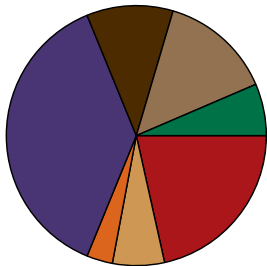
(since 1988)

For a complete list of grant projects state by state, go to [www.sare.org/state-summaries](http://www.sare.org/state-summaries)



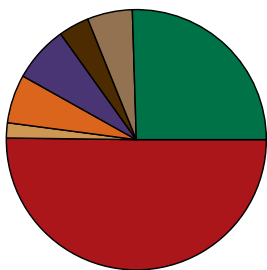
# SARE Grants in Connecticut

Total awards: 93 grants



20 Research and Education  
 6 Sustainable Community Innovation  
 3 Professional Development Program  
 35 Farmer/Rancher  
 10 Graduate Student  
 13 On Farm Research/Partnership  
 6 Research Only

Total funding: \$3,772,257



\$1,893,842 Research and Education  
 \$70,904 Sustainable Community Innovation  
 \$227,995 Professional Development Program  
 \$263,433 Farmer/Rancher  
 \$143,210 Graduate Student  
 \$211,417 On Farm Research/Partnership  
 \$961,456 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](http://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](http://northeast.sare.org/state-pages/connecticut) to learn more.

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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.



# AGRICULTURE PROJECTS FUNDED IN CONNECTICUT

by USDA's  
**Sustainable Agriculture Research and Education (SARE) Program**

Connecticut has been awarded \$3,772,257 grants to support 90 projects, including but not limited to, 17 research and/or education projects, 3 professional development projects and 35 producer-led projects. Connecticut has also received additional SARE support through multi-state projects.

## RESEARCH AND EDUCATION GRANTS

<b>Project #</b>	<b>Project Title</b>	<b>SARE Support</b>	<b>Project Leaders</b>
<a href="#">LNE23-469</a>	A Three-Pronged Strategy to Equitably Provide Planting Stock to Forest Farmers: Propagation Training, Seed Exchange, and Working with Wild Harvesters	\$246,505	Marlyse Duguid Yale School of Forestry and Environmental Studies
<a href="#">LNE21-423</a>	The Northeast Forest Farmers Coalition: Building a Community of Practice	\$249,193	Marlyse Duguid Yale School of Forestry and Environmental Studies
<a href="#">LNE18-363</a>	Improved N Management for Corn using Aerial Images, Adapt-N, Chemical and Biological Tests, and Cover Crops	\$241,570	Dr.Karl Guillard University of Connecticut
<a href="#">LNE13-324</a>	Developing adaptable native shrubs for the green industry	\$58,347	Dr.Jessica Lubell-Brand University of Connecticut
<a href="#">LNE09-281</a>	Aronia berries: A sustainable nutraceutical crop for the Northeast	\$151,821	Dr.Mark Brand University of Connecticut
<a href="#">LNE09-279</a>	Development and on-farm training of biologically based methods for integrated crop management of stone fruits in New England	\$195,498	Dr.Robert Marra Connecticut Agricultural Lorraine Los University of Connecticut
<a href="#">LNE03-177</a>	Perimeter trap crop approach to pest management on vegetable farms	\$139,527	Ruth Hazzarad University of Massachusetts Jude Boucher UNiversity of Connecticut Cooperative Extension
<a href="#">LNE01-143</a>	Farmer-Run Research Organization for Southern New England	\$167,660	Thomas Morris University of Connecticut
<a href="#">LNE01-144</a>	Survey of the Nutrient Status of Organic Vegetable Farms	\$35,397	Thomas Morris University of Connecticut
<a href="#">LNE00-137</a>	Benefits - Drawbacks of Various Winter Cover Crops in Vegetable Pest Management	\$89,202	Kimberly Stoner Connecticut Agricultural Experiment Station
<a href="#">LNE98-106</a>	Biological Control for Soil-Dwelling Insects - Diseases in Strawberries	\$147,557	Richard Cowles Connecticut Agricultural Experiment Station
<a href="#">LNE97-083</a>	Nitrogen Management for Pumpkins and Squash	\$40,000	Richard A. Ashley University of Connecticut

LNE97-082	Biological and Cultural Methods of Insect Management in Vegetables: Survey and Case Studies of Organic Farms and Evaluation of the Scientific Literature	\$20,000	Kimberly Stoner Connecticut Agricultural Experiment Station
LNE96-065	Farm to School Food Education Project	\$33,319	Elizabeth Wheeler The Hartford Food System
LNE96-068	New Connections in the Northeast Food System	\$13,000	Mark Winne Hartford Food System
ANE95-028	Integration of Biological and Chemical Control of Twospotted Spider Mites in Containerized Nursery Production	\$35,246	Timothy Abbey Univ. of Connecticut Cooperative Extension System Richard Cowles Connecticut Agricultural Experiment Station
LNE94-049	Project Farm Fresh Start: A Farm-to-School Feasibility Study	\$30,000	Mark Winne Hartford Food System

#### RESEARCH ONLY GRANTS

Project #	Project Title	SARE Support	Project Leaders
LNE23-482R	Operationalizing Drone Imaging Technology to Detect Nutrient Deficiencies in Fruit Orchards	\$200,000	Dr.Chandi Witharana University of Connecticut
LNE23-477R	Hemp hurd fiber: a sustainable substitute for sphagnum peat moss in greenhouse and nursery plant production	\$161,414	Dr.Jessica Lubell-Brand University of Connecticut
LNE21-432R	Nutritional Management Strategies for Improving Growth and Carcass Composition of Beef-Dairy Crossbred Calves	\$200,000	Dr.Sarah Reed University of Connecticut
LNE21-430R	Reducing Farmer Risk through the Use of Triploid Hemp Genetics	\$101,168	Dr.Jessica Lubell-Brand University of Connecticut
LNE21-425R	In-ovo and Early Probiotic Supplementation to Control Salmonella in Broilers	\$150,000	Mary Anne Amalaradjou University of Connecticut
LNE20-412R	Enhancing the Safety of Eggs and Fresh Produce by Novel Ultra-fine Bubble Technology	\$148,874	Dr.Abhinav Upadhyay University of Connecticut

#### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

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

#### FARMER/RANCHER GRANTS

Project #	Project Title	SARE Support	Project Leaders
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FNE23-066	Identifying and Selecting Wild Yeast Strains in Hard Cider	\$29,104	Jeff Rogers Rogers Orchards
FNE23-046	The Ask Aunt Nellie Project - A Crowd-Sourced Connecticut Farm Management Knowledge Base	\$15,797	Diane Dorfer Cobblestone Farm
FNE22-005	Germination Testing to Improve the Quality of Ecotypic Native Seed in the Northeast	\$29,299	Dina Brewster The Hickories, LLC
FNE21-996	Using Shade Cloth to Prevent Heat Damage in Summer Broccoli	\$10,320	Andrew Urbanowicz Urbanowicz Farm
FNE19-925	Honey Plant Intercropping on Christmas Tree Farms	\$10,032	Richard Cowles Humming Grove Farm
FNE19-944	Winter Triticale and Red Clover Double Cropping Field Trials for a Three-Year Production Cycle	\$14,824	Craig Stearns Mountain Dairy
FNE19-939	Tree Regeneration and Establishment Strategies in Silvopasture and Sugarbush Systems	\$13,450	Dr. Joseph Orefice Hidden Blossom Farm
FNE17-869	Establishing propagation protocols and assessing weed risk of litchi tomato, <i>Solanum sisymbriifolium</i>	\$5,459	Diane Dorfer Cobblestone Farm
FNE17-883	Comparison of indigenous microorganism and commercial soil inoculant on crop yields and basil downy mildew disease resistance	\$15,000	Melody Wright Pleasant Valley Botanicals
FNE13-783	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	\$11,033	Peter Lowy Pete and Jens Backyard Birds
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
FNE07-605	Small farm air chill system	\$6,912	Craig Floyd Footsteps Farm, LLC
FNE07-604	Determining cost-effectiveness of raising slow growing genotype broilers in three alternative housing systems	\$7,861	Julie Cronin
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.

FNE03-454	Remote Sensing for Nitrogen Management in Corn	\$6,298	Randolph Blackmer
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
FNE02-437	Increasing Small Farm Profits with American Chestnut Production and Silvopasture	\$4,766	Elisa Santee Foxfire Farm
FNE02-412	Horticultural Weed Barrier Mats From Dairy Manure	\$8,800	Matthew Freund Friends' Farm, Inc.
FNE01-373	Compost Planting Pots	\$7,500	Matthew Freund Friends' Farm, Inc.
FNE00-315	Timing of Brassica planting to reduce flea beetle damage.	\$4,697	Brian O'Hara
FNE00-294	Fava beans and kale as potential spring nurseries for insect natural enemies to move into the greenhouse.	\$5,382	Kathryn Caruso
FNE99-243	Compost Planting Pots	\$700	Matthew Freund Friends' Farm, Inc.
FNE99-272	"Clean Green Machine" A Hydroponic System	\$4,520	David S. Roberts
FNE99-236	Demonstration of the Effectiveness of <i>Pediobius</i> for Control of Mexican Bean Beetle and Squash Beetle	\$2,480	Kathryn Caruso
FNE98-203	Squash Vine Borer and Cotton Row Covers	\$1,540	Brian O'Hara
FNE98-208	Sheep Farmstead Cheesemaking in Connecticut	\$3,050	Suzanne Sankow Beaverbrook Farm
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
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#### GRADUATE STUDENT GRANTS

Project #	Project Title	SARE Support	Project Leaders
GNE22-297	Controlling Salmonella on eggs using probiotics and postbiotics.	\$15,000	Mary Anne Amalaradjou University of Connecticut Ragini Reddyvari University of Connecticut
GNE22-281	Farmer Engagement with Regenerative Agriculture in New England: Understanding Barriers and Facilitators to Improve Services and Outreach	\$13,913	Brian Gareau Boston College Sandra DiDonato Boston College
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 Mairui Gao 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 Frog Belly Farm
GNE11-020	Organic fertilization for greenhouses	\$12,556	Dr.George Elliott UCONN Kristin Hulshart University of Connecticut
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

Project #	Project Title	SARE Support	Project Leaders
ONE22-415	Investigating Poor Growth of Hard Clams in New Jersey	\$28,713	Dr.Sylvain Deguise, DMV, PhD Connecticut Sea Grant, University of Connecticut
ONE22-412	Pairing Residues, Resistance Genes and Microbial Community Structure to Understand Off-Farm Impact of Antibiotic Use on Dairy Farms	\$29,057	Dr.Christine Georgakakos SUNY College of Environmental Science and Forestry

ONE22-431	Monitor Streptomycin Resistance in Erwinia Amylovora Populations in New England	\$30,000	Quan Zeng Connecticut Agricultural Experiment Station
ONE21-399	Assessment of a Composite Herbal Feed Additive on Reducing Haemonchus contortus in a Dual Purpose Sheep Operation	\$14,319	Dr.Erin Masur, DVM Fork You Farms, LLC
ONE20-368	Incorporating Online Ordering Systems to Increase Farmer Sales at Farmers' Markets and Beyond	\$15,698	Ashley Kremser CitySeed
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

Project #	Project Title	SARE Support	Project Leaders
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



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**Total funding from the USDA SARE program to  
Connecticut  
\$3,772,257**

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For further information on projects, contact 802-651-8335 or [nesare@uvm.edu](mailto:nesare@uvm.edu).  
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