

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 \$309 million to more than 7,408 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

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

Vermont

Project Highlight: *Extension Agent Advances Farmers' Innovative Ideas*

Heather Darby is all about partnering with farmers to advance their cutting edge ideas—in the end, to the benefit of hundreds of producers across the region. A recipient of 13 SARE-funded projects, the University of Vermont Extension specialist has worked with researchers and farmers to help oilseed producers get more value out of biodiesel, organic dairy farmers grow their own feed and other growers tap new local markets for wheat, hops and dry beans.

"I would say that every SARE grant I've received was generated because of the questions and interests of the farmers in Vermont and other nearby areas," Darby says.

Many of those questions have been raised by the region's emerging community of biodiesel producers, who are pioneering the use of oilseed crops like sunflower and canola in New England. Darby has worked on two SARE grants to learn more about oilseeds—particularly pest and weed management—and to share their knowledge with others.

With another SARE grant, she is working with oilseed producers and researchers to "close the loop" by producing food-quality oil that can be sold to restaurants and then later returned to farmers for biodiesel production. This two-stage life can increase the oil's value by up to 50 percent.

Darby is also helping Vermont's wheat growers produce grain suitable for local bakers, who have been hesitant to source flour locally because of inconsistent quality.

For more information on this research, see sare.org/projects, and do a coordinator search for "Darby."

SARE in Vermont

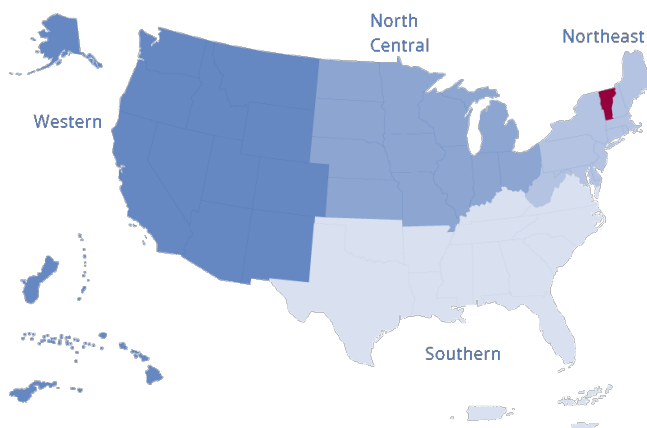
northeast.sare.org/sare-in-your-state/vermont

\$9,319,076
in total funding

255 grant projects

(since 1988)

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



SARE Grants in Vermont

Total awards: 255 grants



101 Farmer/Rancher
 18 Graduate Student
 68 On Farm Research/Partnership
 19 Professional Development Program
 47 Research and Education
 2 Research Only

Total funding: \$9,319,076



\$636,001 Farmer/Rancher
 \$246,949 Graduate Student
 \$1,132,719 On Farm Research/Partnership
 \$1,775,986 Professional Development Program
 \$5,202,585 Research and Education
 \$324,836 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/vermont

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/vermont to learn more.

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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 VERMONT

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

Vermont has been awarded \$9,460,581 grants to support 266 projects, including but not limited to, 46 research and/or education projects, 19 professional development projects and 101 producer-led projects. Vermont has also received additional SARE support through multi-state projects.

RESEARCH AND EDUCATION GRANTS

Project #	Project Title	SARE Support	Project Leaders
LNE20-400	Biological and cultural tactics for the control of wireworms in root crops	\$116,189	Victor Izzo University of Vermont
LNE19-373	New England Cider Apple Program: Optimizing Production for High-Value Markets	\$229,314	Dr. Terence Bradshaw University of Vermont
LNE19-375	Staying Ahead in the Packshed: Improving Postharvest Equipment and Building Guidance for Fruit and Vegetable Farms	\$129,567	Christopher Callahan University of Vermont Extension
LNE19-379	Pre- and Post-Harvest Strategies for Leek Moth Control on Diversified Vegetable Farms	\$102,799	Victor Izzo University of Vermont
LNE18-361	Developing Corn Silage Systems to Meet the Needs of Cover Crops	\$196,108	Dr. Heather Darby University of Vermont Extension
LNE17-355	Improving pasture resource management with farmer-engaged planning	\$91,852	Cheryl Cesario UVM Extension
LNE16-347	The "In-Between": Precooling and curing fruits and vegetables for improved quality and profit	\$129,514	Christopher Callahan University of Vermont Extension
LNE16-348	Development of pest and nutrient management strategies for hop production in the Northeast	\$161,412	Dr. Heather Darby University of Vermont Extension
LNE15-339	Developing best management practice for growing grain suitable for malt in the Northeast	\$177,442	Dr. Heather Darby University of Vermont Extension
LNE13-326	Improving profits for maple producers through tubing sanitation	\$175,726	Dr. Timothy Perkins University of Vermont
LNE12-317	Using winter canola and high-glucosinolate mustards to protect and improve soil resources and enhance on-farm profitability	\$146,890	Dr. John Jemison, Jr. University of Maine Cooperative Extension
LNE11-309	Adding Value to Oilseed Crops by Producing Food Quality Oils	\$143,131	Dr. Douglas Schaufler The Pennsylvania State University
LNE10-299	Novel approaches to improve energy efficiency in northern New England greenhouses	\$195,781	Dr. Bruce L. Parker University of Vermont

LNE09-278	Northeast SARE program evaluation, Sustainable Community Grants	\$15,000	Susan Smalley
LNE09-280	Marketing on-farm compost for sustainability and economic viability	\$43,258	Athena Bradley Northeast Recycling Council, Inc.
LNE09-282	Improving oilseed production and harvesting practices in New England: A farmer-to-Farmer exchange	\$109,306	Dr.Heather Darby University of Vermont Extension
LNE09-283	Integrated learning courses for organic and sustainable vegetable production	\$158,961	Enid Wonnacott Northeast Organic Farming Association of Vermont Dr.Wendy Sue Harper Northeast Organic Farming Association of Vermont
LNE08-267	Increasing Farm Profitability through Agritourism Product Development and Marketing	\$89,563	Dr.Lisa Chase University of Vermont Ext
LNE07-254	Improving pasture management for horses	\$60,210	Rachel Gilker UVM Center for Sustainable Agriculture
LNE07-260	Burlington Food Hub: Innovative direct marketing opportunities	\$98,429	Glenn McRae Intervale Center Travis Marcotte Intervale Center
LNE07-266	Vegetable seed growing handbook	\$26,441	John Navazio SEEDS Margo Baldwin Chelsea Green Publishing
LNE06-243	Dairy stewardship alliance: On-farm assessment for sustainable practices	\$86,157	Allen Matthews UVM Center for Sustainable Agriculture Allen Matthews Chatham University
LNE05-233	Community market project	\$94,746	Enid Wonnacott Northeast Organic Farming Association of Vermont
LNE04-200	Implementing Dairy Goat Nutrition Programs on Farms for Improved Sustainability	\$135,246	Carol Delaney University of Vermont, Northeast SARE
LNE04-205	Developing Sustainable Local Food Sales to a College Institutional Market	\$51,500	Lisa Johnson Vital Communities
LNE03-184	Integrated learning courses for sustainable livestock production	\$123,216	Lisa McCrory Northeast Organic Farming Association of Vermont
LNE03-185	Pasture forage quality and yield response to irrigation, N fertilizer, and organic amendments	\$69,852	William Murphy University of Vermont
LNE03-186	Seed Growers' Handbook: Producing Vegetable Seeds for Sustainable Agriculture	\$62,925	John Navazio SEEDS
LNE03-187	Vermont Food Education Every Day (VTFEED)	\$131,547	Abbie Nelson Northeast Organic Farming Association of VT
LNE99-124	VT Forest Products Industry Conference	\$10,000	Mary Jeanne Packer VT Wood Manufacturers Association

LNE98-104	Controlling Pests of Pastured Livestock on Organic Farms	\$32,590	William Murphy University of Vermont
LNE97-086	Evaluation and Documentation of Homeopathic Nosodes in Organic and Conventional Dairy Production	\$161,026	Lisa McCrory Northeast Organic Farming Association of Vermont
LNE97-087	Managed Riparian Buffer Zones and Cover Crops to Minimize Phosphorus and Nitrogen Runoff Losses from Corn Fields	\$142,448	Bill Jokela University of Vermont
LNE97-097	Documentation of Organic and Transitional Dairy Production Practices	\$43,986	Enid Wonnacott Northeast Organic Farming Association of Vermont
LNE96-066	Evaluating a Heat Therapeutic Control of the Honey Bee Mite Varroa Destructor	\$20,000	Jeffrey T. Cunningham Honeyhunter Apiaries and Farm
LNE96-075	Northeast Kingdom Nutrient Management Project	\$18,920	David Machell Caledonia County NRCD
LNE96-079	New England Sustainable Agriculture Conference - 1997	\$36,478	Kate Duesterberg Center for Sustainable Agriculture, University of Vermont
LNE95-053	An Economic Analysis of Community Supported Agriculture Consumers	\$2,960	Jane Kolodinsky University of Vermont
ANE95-023	Development of Fungal Entomopathogens for Greenhouse IPM (LNE95-058)	\$231,931	Dr. Bruce L. Parker University of Vermont
LNE95-054	Expanding Profits for Sheep Production Through Intensive Pasture Management	\$82,427	Kate Duesterberg Center for Sustainable Agriculture, University of Vermont
LNE95-058	Development of Fungal Entomopathogens for Greenhouse IPM (ANE95-23)	\$217,763	Dr. Bruce L. Parker University of Vermont
LNE94-047	Expanding Profits for Vermont Sheep Production through Intensive Pasture Management	\$10,000	Kate Duesterberg Center for Sustainable Agriculture, University of Vermont
LNE93-039	Systems Analysis of Organic and Transitional Dairy Production	\$165,000	Enid Wonnacott Northeast Organic Farming Association of Vermont
LNE92-033	Fungal Pathogens for Biocontrol of Western Flower Thrips and Green Peach Aphids in Greenhouses	\$79,709	Dr. Bruce L. Parker University of Vermont
LNE89-017	Improving Milk Quality and Animal Health By Efficient Pasture Management	\$58,000	J. Woodrow Pankey UVM
LNE88-002	Improving Farm Profitability by Efficiently Using the Pasture Resource	\$537,265	William Murphy University of Vermont

RESEARCH ONLY GRANTS

Project #	Project Title	SARE Support	Project Leaders
LNE19-391R	Turn the Tap: Integrated Research to Support Sustainable Irrigation Practices on Northeast Vegetable Farms	\$124,982	Dr. Rachel Schattman University of Maine School of Food and Agriculture

LNE18-368R	Potential for a Pheromone Mating Disruption Program for the Invasive Swede Midge within Complex Annual Rotational Systems	\$199,854	Dr.Yolanda Chen University of Vermont
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PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

Project #	Project Title	SARE Support	Project Leaders
ENE20-159	Developing Technical Skills of Service Providers in the Northeast to Assist Farmers with Production of Industrial Hemp	\$185,371	Dr.Heather Darby University of Vermont Extension
ENE18-149	Developing Technical Skills of Service Providers in the Northeast to Assist Farmers with Transition to No-Till	\$171,222	Dr.Heather Darby University of Vermont Extension
ENE14-130	Professional development project in weed and forage identification and management	\$98,303	Dr.Sid Bosworth University of Vermont
ENE13-127	Breaking Barriers: Building Capacity to Provide Tractor Education	\$89,681	Beth Holtzman UVM Extension - New Farmer Project & Women's Agricultural Network
ENE08-107	Focusing on Beginning Farmers	\$71,640	Beth Holtzman UVM Extension - New Farmer Project & Women's Agricultural Network
ENE06-097	A video on sustainable tillage practices for vegetable farms	\$99,504	Dr.Vern Grubinger University of Vermont
ENE06-098	Education to extension agents, veterinarians, and other professionals in complementary treatments and preventive management for organic livestock farms	\$116,962	Lisa McCrory Northeast Organic Farming Association of Vermont
ENE05-091	Climate change and agriculture: Preparing educators to promote practical and profitable responses	\$113,106	Dr.Vern Grubinger University of Vermont
ENE04-083	A Legal Guide to the Business of Farming in Vermont	\$59,069	Debra Heleba Northeast SARE Annette Higby
ENE03-074	A video on vegetable farmers and their innovative cover crop techniques	\$62,027	Dr.Vern Grubinger University of Vermont
ENE01-059	A Professional Development Conference on Organic Agriculture	\$82,695	Dr.Vern Grubinger University of Vermont
ENE99-047	A Video on Ecological Sweet Corn Production	\$33,803	Dr.Vern Grubinger University of Vermont
ENE97-030	Video of Innovations in On-Farm Marketing in New England	\$18,233	Dr.Vern Grubinger University of Vermont
ENE97-036	A Comprehensive Training in Sustainable Agriculture	\$122,000	Dr.Vern Grubinger University of Vermont
ENE96-018	Development of Dairy Farm Management Groups in Vermont and New Hampshire	\$22,300	Louise Calderwood University of Vermont

ENE95-008	New England Extension Sustainable Agriculture Training Program	\$119,613	Kate Duesterberg Center for Sustainable Agriculture, University of Vermont
ENE95-009	A Video Training on Cultivation Featuring Talented Farmers & Their Weed Control Machines	\$14,560	Dr.Vern Grubinger University of Vermont
ENE94-001	New England Extension Sustainable Agriculture Training Program	\$130,101	Kate Duesterberg Center for Sustainable Agriculture, University of Vermont
ENE94-005	Developing a Northeast Pasture User Support Group Network to Sustain Agriculture	\$165,796	William Murphy University of Vermont

FARMER/RANCHER GRANTS

Project #	Project Title	SARE Support	Project Leaders
FNE20-960	Evaluation of Apple Cultivars for Hard Cider Production in the Northeast	\$8,980	Todd Parlo Walden Heights Nursery & Orchard
FNE19-920	Comparing Management-Intensive Rotational Grazing Strategies to Enhance Land Regeneration and Farmer Livelihood	\$13,108	Brandon Bless Bread and Butter Farm
FNE19-935	Feasibility of Integrating Sheep into Vermont Vineyards: An Initial Look at Ecologic and Economic Benefits	\$6,419	Ethan Joseph Shelburne Vineyard
FNE19-937	Modular Meat Processing Facility for Small Grazing Operations	\$14,745	Brian Leach Haystack Farmstead LLC
FNE18-906	Swede Midge Control for Cruciferous Crops	\$8,735	Jaiel Pulskamp KETTLE SONG FARM
FNE18-909	Nutritional Contribution of Forage on Pasture-Raised Pigs	\$3,163	Alessandra Rellini Agricola Farm
FNE18-895	Seakale: Commercial Opportunities for New Perennial Crops and Climate Smart Agriculture	\$14,968	Aaron Guman Walking Onion LLC
FNE17-871	Establishing populations of ground-nesting native bees (Colletes) for orchard pollination services	\$6,989	John Hayden The Farm Between
FNE16-840	Comparison of a commercial Varroa mite honeybee treatment with treatment-free Varroa management techniques	\$14,998	Ross Conrad Dancing Bee Gardens
FNE16-846	Screening broccoli cultivars for Swede midge tolerance	\$8,118	Andy Jones Intervale Community Farm
FNE16-855	Testing an aerated static pile (ASP) compost system for efficiency of time and space	\$14,953	Eric Paris Kingdom View Compost
FNE16-858	An enterprise analysis of three organic strawberry production systems in northeastern Vermont	\$14,401	Eric Skovsted Joe's Brook Farm
FNE16-860	Improving the yield of cold-weather shiitake by irrigation	\$9,374	Michael Walker Philo Woodland Farm

FNE15-816	Wet rice organic weed control trials	\$13,128	Erik Andrus Boundbrook Farm
FNE15-817	Mustard cover crops as biofumigants for organic strawberry production	\$10,688	Rico Balzano Little Lake Orchard
FNE14-793	Economics of pasture and forage in the production of geese	\$8,565	Wesley Bascom Gozzard City LLC
FNE14-801	Effective use of food scraps as poultry feed	\$15,000	Tom Gilbert Winchester Farm
FNE14-812	Evaluation of apple and pear varieties for cold humid climates under certified organic management	\$14,828	Todd Parlo Walden Heights Nursery & Orchard
FNE13-781	Investigating ways to improve native pollinator floral resources by comparing multipurpose cover crops of Phacelia, buckwheat, and a commercial bee forage mix	\$5,983	John Hayden The Farm Between
FNE12-764	Coring-injection method of applying compost to Christmas tree plantations	\$13,491	Fred Salo Northeast Kingdom Christmas Trees
FNE12-770	Cost-benefit analysis of inoculating blueberry bushes with ericoid mycorrhizae	\$8,890	Ben Waterman Watermans Berry Farm
FNE11-703	From Seed to Sugar: A Vertically-Integrated Model for Small-Scale Turbinado Sugar Production from Organic GMO-Free Beets	\$10,681	Erik Andrus Boundbrook Farm
FNE11-704	Soil Nutrition and Fertility Options for Organic Hop Growers in the Northeast	\$4,417	Fletcher Bach Square Nail Hops Farm
FNE11-720	Maximizing Log Based Shiitake Mushroom Production by Determining Optimal Fruiting Conditions	\$12,143	Nicholas Laskovski Dana Forest Farm Bridgett Jamison University of Vermont
FNE10-676	The farmer-built Savonius rotor: A low-tech approach to renewable power for farms	\$10,365	Erik Andrus Boundbrook Farm
FNE10-687	Comparing Fingerling Potato Cropping Methods on No-Till Raised Beds	\$8,524	Justin Hart Whip Poor Will Farm LLC
FNE09-653	Introducing Rice as a Commercial Crop to the Northeast USA, Phase 2	\$10,000	Linda Akaogi
FNE09-654	Northeast Zone Tillage Project	\$9,897	Pail Boivin Vermont Golden Harvest Biofuels
FNE08-624	Introducing rice as a commercial crop to the northeastern U.S.	\$9,885	Linda Akaogi
FNE07-597	Japanese millet seed harvest	\$5,682	Brent Beidler

FNE07-603	Building and evaluating a pedal powered prone workstation and row crop cultivation tool	\$3,974	Andrew Crawford
FNE07-608	Broadcast versus in-furrow banding of fertilizer in spring wheat	\$6,264	Ted Grembowicz Grembowicz Farms
FNE07-613	A Vermont farmers breeding club: developing varieties that work for us	\$7,950	Jack Lazor Butterworks Farm
FNE07-617	Organic edible soybean variety trials in northern Vermont for soymilk and tofu production	\$9,945	Nicholas Meyer North Hardwick Dairy
FNE07-609	Sugarhouse effluent viability as a greenhouse heat source	\$5,970	Lisa Holderness
FNE06-570	Powering a sugarhouse with used vegetable oil	\$8,917	Daniel Crocker Sidelands Sugarbush
FNE06-579	Feasibility of organic wool production in Vermont: Testing market demand	\$2,000	Kathy Lambert
FNE05-551	Mustard green seed crop production	\$4,514	Jodi Lew-Smith Sweetgrass Farm
FNE05-553	Matted row strawberries planted into weed suppressing cover crops	\$4,020	David Marchant River Berry Farm
FNE05-562	A comparison of biodegradable mulches to black plastic mulch	\$2,577	Laura Sorkin Cave Moose Farm
FNE05-563	Educational plan for alternative manure management system	\$5,752	Mary Whitcomb North Williston Cattle Company
FNE04-512	Integrated Salad Green and Dairy Production	\$5,824	Ben Dykema
FNE04-531	Legume Interseed in Field Corn-2004	\$6,096	Steve Stocking Birch Meadow Farm
FNE04-510	Training Center for On-Farm Milk Processing	\$10,000	Peter Dixon Westminster Dairy, LLC
FNE04-511	Agronomic and Economic Effects of Harvesting Legume Cover Crops at Varying Maturities	\$7,128	Kate Duesterberg Cedar Circle Farm
FNE03-453	Cost of Producing Bio-Diesel to Fuel a Greenhouse	\$4,367	Carl Benson Back Acres Farm
FNE03-466	Evaluating New, Extra-Hardy Grape Cultivars in Vermont	\$4,919	Chris Granstrom
FNE03-468	Organic Plug Production: Evaluating Growing Media, Fertilizer and Economic Feasibility	\$2,954	Brenda Hedges Greystone Gardens

FNE03-491	Early Sweet Corn From Transplants	\$7,735	Jon Satz Wood's Market Garden
FNE03-494	Legume Interseed in Field Corn	\$5,137	Steve Stocking Birch Meadow Farm
FNE02-448	Development of Organic Feeds and Production Techniques for Tilapia Fish Production in Ecologically Based Recirculating Aquaculture Systems	\$9,733	Eric Wells Ocean Arks International
FNE02-408	Rearing Free Mated Mite-Tolerant Queens Without Chemotherapies	\$5,081	Jeffrey T. Cunningham Honeyhunter Apiaries and Farm
FNE02-409	Effect of Different Grazing Systems on Dairy Goat Productivity	\$3,635	Kristan Doolan
FNE02-410	Technical Assistance for Cheese Curing for Farmstead Cheesemakers	\$5,264	Mark Fischer Woodcock Farm
FNE02-420	Investigating the Commercial Viability of Growing Organic Black Currants in the Northeast	\$1,080	John Hayden The Farm Between
FNE02-421	Adaptation of the Cornell Net Carbohydrate and Protein System to Northeast Sheep Dairy Operations	\$5,953	Tyler Hotaling Woodcock Farm
FNE02-434	Three Sisters Farm	\$3,679	Brian Rahm Three Sisters Farm
FNE02-436	pH and Calcium Requirement in Woods-Grown Organic Goldenseal Hydrastis Canadensis L.	\$5,399	Steven Saint-Onge Over the Hill Farm
FNE01-392	Planting Strawberries & Blueberries Into Oats & White Clover	\$3,690	Dean Stockman
FNE01-362	Organic Row Cropping of Threatened Medicinal Herbs for Market in the Northeast	\$3,825	Jeffery Carpenter Zack Woods Herb Farm
FNE01-368	No-Till Reduction or Elimination of Major Equipment for the Small-Scale Farmer	\$1,605	Maggie Randolph
FNE01-369	Effect of Different Grazing Systems on Dairy Goat Productivity	\$3,700	Kristan Doolan
FNE01-371	Fiberworks Blanket Project	\$5,210	Laini Fondiller Lazy Lady Farm
FNE01-389	Managed Rotational Grazing in Wetland Area	\$4,650	Hannah Sessions Blue Ledge Farm
FNE00-303	Testing a biological fertility program for organic grains.	\$12,113	Ben Gleason Gleason Grains
FNE00-340	Northern meat breeders cooperative plan.	\$5,865	Theresa Lawyer

FNE00-353	Technical assistance for sheep dairy farms.	\$5,600	Ann Works
FNE99-231	Using Milkhouse Waste Water for Alternative Cash Crop	\$3,750	Brent Beidler
FNE99-247	Identification of Local Ethnic Needs for Livestock	\$4,904	Jennifer Gilligan
FNE99-258	Evaluating the Effectiveness of Non-Chemical Methods in the Control of Tarnished Plant Bug in Strawberries	\$2,230	Joseph Klein Littlewood Farm
FNE99-270	Small Breeders' Meat Marketing Project	\$7,650	Lydia Ratcliff
FNE99-274	On-Farm Impacts of Soybean Silage in an Annual Rotation with Corn Silage	\$7,200	Jeff Senesac
FNE98-219	Rootswork 1998 - A Community-Based Research, Demonstration, Education and Participation Project	\$3,393	Linda Faillace
FNE98-228	Low-Cost Conversion of Cow Dairy to Sheep Dairy	\$4,625	Neil Urie Bonnieview Farm
FNE98-217	Northeast Livestock Export Program (Phase III)	\$5,370	Lydia Ratcliff
FNE97-178	Technical Assistance for New Sheep Dairy Farms	\$7,431	Cynthia Major Major Farm
FNE97-180	Northeast Livestock Export Program (Phase II)	\$4,600	Lydia Ratcliff
FNE97-181	Development of NOFA Certified Pastured Poultry contractual Company to Diversify and Revitalize Vermont Agricultural Industry	\$5,450	Ryan Rich
FNE97-182	Education of Public in the Use of Native Woodland Plants and Wildflowers in the Home Garden	\$1,145	Chris Schlegel Grow Wild
FNE97-183	Organic Meat/Poultry Processing, Marketing, and Distribution Effort	\$3,345	Judith M. Sheehan
FNE97-185	Diversifying an Organic Grain System: Spring Wheat & Edible Bean Variety Trials...	\$6,000	Ken Van Hazinga
FNE97-188	Sorghum Syrup Production in Vermont (FNE96-157)	\$6,000	John Williamson
FNE97-173	Greenhouse Subsurface Pipe System to Convert Solar Energy to Soil Heat	\$4,475	Pete Johnson
FNE96-132	Agri-Tourism: Educating the Public and Generating On-Farm Income	\$1,450	John Hayden The Farm Between

FNE96-149	Northeast Livestock Export Program	\$4,400	Lydia Ratcliff
FNE96-151	Best Method for Establishing Globe Artichoke Seedlings	\$1,060	Eric Rozendaal
FNE96-157	Sorghum Syrup Production in Vermont	\$5,875	John Williamson
FNE95-095	Covercropping Strategies for the Intercropping of Clovers with Corn and Cereal Crops	\$4,348	Jack Lazor Butterworks Farm
FNE95-097	Minimizing Damage to Poultry During Transportation	\$3,025	Rob Litch
FNE95-114	Sorghum Syrup Production in Vermont	\$1,750	John Williamson
FNE95-086	The Value of Low Maintenance Turfgrass for Cut Flower Production	\$2,483	Judith Hall Frost Hill Farm
FNE95-092	Using Pastured Chickens for the Control of Colorado Potato Beetle	\$821	Joseph Klein Littlewood Farm
FNE94-044	Don't Bag it...Compost It!!	\$2,100	Tod Delaricheliere
FNE94-046	Garlic: The Natural Wormer	\$2,500	Laini Fondiller Lazy Lady Farm
FNE94-047	Comparative Rotational/Cover Cropping for Weed Suppression	\$325	Martin Gil
FNE94-051	Evaluating Hoopouses for Rotationally Grazed Turkeys	\$705	John Hayden The Farm Between
FNE94-054	Biological Control of Tarnish Plant Bug in Strawberries	\$1,275	Bruce Kaufman Riverside Farm
FNE94-059	Establishment of a Production Line for Food Grade Rolled Organic Oats	\$5,200	Andrew Leinoff
FNE93-022	Deep Root Organic Truck Farmers Co-op Mentor Program	\$3,300	Dennis Sauer
FNE93-023	Mountain Sheep Project	\$3,600	David Major
FNE93-029	Soil Heating in Unheated Tunnels	\$973	Michael Collins

GRADUATE STUDENT GRANTS

Project #	Project Title	SARE Support	Project Leaders
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GNE19-205	Impacts of Silage Tarps on Soil Arthropods, Soil Properties and Crop Yields	\$15,000	Gillian Galford University of Vermont Eva Kinnebrew University of Vermont
GNE18-170	Agricultural Best Management Practices to Mitigate Gaseous Carbon and Nitrogen Losses from a Zea Mays Silage System	\$15,000	Carol Adair University of Vermont Kyle Dittmer University of Vermont
GNE18-179	Improving the Rotational Value of Field Pea as a Legume Cover Crop.	\$15,000	Eric BishopvonWettberg University of Vermont Edward Marques University of Vermont
GNE17-157	Full-diet farming: A case study of an alternative model for community-supported agriculture	\$14,171	Amy Trubek University of Vermont Caitlin Morgan University of Vermont
GNE17-163	Linking adaptive management to climate change impacts on diversified vegetable and berry farms in northern New England	\$13,385	Dr.V. Ernesto Mendez University of Vermont Alissa White Department of Plant & Soil Science at the University of Vermont
GNE16-121	Development of an effective and economical pheromone mating disruption system for swede midge	\$14,265	Dr.Yolanda Chen University of Vermont Rebecca Hallett University of Guelph Dr.Elisabeth Hodgdon Cornell Cooperative Extension
GNE16-124	The effects of compost and vegetation on stormwater treatment and soil nutrient distribution within bioretention cells	\$3,892	Dr.Stephanie Hurley University of Vermont - Plant and Soil Science Department Dr.Joshua Faulkner University of Vermont Extension Dr.Eric Roy University of Vermont - Rubenstein School of Environment and Natural Resources Jason Kokkinos University of Vermont
GNE16-129	Quantifying the nest density of an economically important native pollinator using population genetics	\$14,758	Dr.Taylor Ricketts University of Vermont Charlie Nicholson University of Vermont
GNE16-117	Table to farm: Using shotgun metagenomics to quantify antibiotic resistance on farms feeding food scraps to laying hens	\$14,909	John Barlow University of Vermont Korin Eckstrom University of Vermont
GNE15-094	Bee Viruses: The Evaluation of Flowering Plants in Horizontal Transmission and Conditions Promoting Viral Replication	\$14,640	Alison Brody University of Vermont Dr.Samantha Alger University of Vermont
GNE15-097	Improvements in feed efficiency, milk yield, and components by delineating the rumen microbiome	\$15,000	Dr.Andre Brito University of New Hampshire Dr.Jana Kraft University of Vermont Laura Cersosimo University of Vermont
GNE15-098	Exploring the use of bokashi as a soil fertility amendment in Northeast vegetable production systems	\$13,062	Dr.Josef Görres University Of Vermont Dana Christel University of Vermont
GNE15-109	The Root of the Problem: Enhancing food security among Latino/a farm workers in Vermont	\$14,537	Dr.Teresa Mares Jessie Mazar University of Vermont

ONE14-087	Staphylococcus mastitis, biofilms, and antibiotic resistance: Barriers to milk quality and food safety on artisanal and farmstead cheese producing farms in Vermont	\$14,999	John Barlow University of Vermont Dr.Robert Mugabi University of Vermont
ONE14-091	Evaluating the Use of Forage Radish to Enhance Winter Rye Cover Crop Performance	\$14,998	Dr.Sid Bosworth University of Vermont Kirsten Workman UVM Extension
ONE12-033	Evaluation of flowering cover crops as an IPM tool in Northeastern hop production	\$14,154	Dr.Heather Darby University of Vermont Extension Lily Calderwood University of Vermont
ONE12-045	Mitigating and preventing flood-related soil quality degradation using cover crop blends	\$14,836	Dr.Josef Görres University Of Vermont Lindsey Ruhl UVM
ONE11-022	Evaluating the use of forage radishes as a pasture improvement tool	\$10,343	Dr.Josef Görres University Of Vermont Peter Austin University of Vermont

ON FARM RESEARCH/PARTNERSHIP GRANTS

Project #	Project Title	SARE Support	Project Leaders
ONE20-379	Evaluating "Flex Ear" Corn Varieties for Agronomic and Conservation Performance	\$29,363	Jeffrey Sanders University of Vermont Extension Dr.Heather Darby University of Vermont Extension
ONE20-358	Exploring Low-Phosphorous Wool Pellets as Fertilizer and Soil Conditioner for Vegetables	\$29,329	Dr.Terence Bradshaw University of Vermont Laura Johnson, Terence Bradshaw UVM Center for Sustainable Agriculture
ONE20-360	Understanding Opportunities and Risks Associated with Alternative Milking Strategies	\$29,737	Dr.Heather Darby University of Vermont Extension
ONE20-362	Expanding local markets through evaluating sensory characteristics and agronomic performance of flint corn varieties	\$29,185	Roy Desrochers University of Vermont and State Agricultural College
ONE20-375	Expanding Farm Partnerships to Trial Human-Urine-Derived Fertilizer on New Crops	\$28,187	Abraham Noe-Hays Rich Earth Institute
ONE20-361	Assessment of a Collaborative Milk Shed in Lamoille County, Vermont	\$16,079	Silene DeCiucies Center for an Agricultural Economy
ONE20-355	A Partnership for Improving Northeast Honey Bee Breeding Stock by Implementing Novel Selection Criteria	\$30,000	Dr.Samantha Alger University of Vermont
ONE20-365	Field assessment of a novel behavioral disruptor for spotted wing Drosophila management in Northeastern berry crops.	\$29,999	Victor Izzo University of Vermont Scott Lewins University of Vermont
ONE19-343	Anaerobic Soil Disinfestation to Control Soilborne Pathogen Rhizoctonia solani in Vermont Field Conditions	\$30,000	Dr.Deborah Neher, PhD University of Vermont
ONE19-348	Building a Resilient Farmer Network in the Face of Climate Disruption	\$29,917	Beth Roy Vital Communities

ONE19-350	Supporting Local Agriculture via Clinical Research: Human Studies with Elderberries to Improve Biomarkers of Obesity	\$29,998	Dr.Patrick Solverson University of Vermont
ONE19-329	Increasing Yield and Carbon Sequestration of Hemp Production with Understory Companion Crops	\$20,224	Dr.Eric Bishop-von Wettberg University of Vermont
ONE19-331	The Ag Engineering Podcast: Tools, Tips and Techniques for Improving Sustainability on Your Farm	\$27,280	Andrew Chamberlin UVM Extension
ONE19-333	Developing Pest and Fertility Best Practices for Industrial Hemp	\$29,973	Dr.Heather Darby University of Vermont Extension
ONE19-335	Mycoremediation of Phosphorus in Agricultural Runoff using Mycorrhizal-Plant Associations	\$29,981	Dr.Josef Görres University Of Vermont
ONE18-312	Understanding Quality Standards for Cereal Rye to Help Farmers Access Value-Added Markets for Malting, Distilling, and Baking	\$14,971	Dr.Heather Darby University of Vermont Extension
ONE18-318	Practical Strategies for Reducing Ammonia Volatilization from Urine-Derived Fertilizers	\$14,938	Abraham Noe-Hays Rich Earth Institute
ONE18-323	Vermont Maple in Every School Project	\$14,998	Helen Rortvedt NOFA-VT
ONE17-299	Evaluating the perennial living mulches in a silage corn production system in the Northeast	\$15,000	Dr.Sid Bosworth University of Vermont
ONE17-302	Application of regionally adapted nematodes for root maggot management	\$13,046	Scott Lewins University of Vermont
ONE17-305	A farmer collaboration initiative	\$14,994	Beth Roy Vital Communities
ONE17-293	Winter-terminated cover crop strategies for vegetable farms in northern New England	\$14,996	Dr.Heather Darby University of Vermont Extension
ONE16-275	A regional, farmer-driven approach to labor issues	\$14,930	Beth Roy Vital Communities
ONE16-288c	Vermont cover crop initiative	\$11,111	Jeffrey Sanders University of Vermont Extension
ONE16-254	Orchard pruning for cider apple production	\$14,889	Dr.Terence Bradshaw University of Vermont
ONE16-253	Can grazing selectivity increase fatty acid and nutritive content of annual forages grown for dairy?	\$14,999	Dr.Sid Bosworth University of Vermont
ONE16-256	Vermont organic dairy custom grazing network	\$14,957	Jennifer Colby, M.S. UVM Center for Sustainable Agriculture
ONE16-258	Increasing the viability of heirloom dry bean production in the Northeast: Part II	\$14,925	Dr.Heather Darby University of Vermont Extension

ONE15-228	Evaluation of tillage and manure application practices on soil quality and greenhouse gas emissions	\$12,940	Carol Adair University of Vermont
ONE15-230	Innovative Impact Assessment of Farm and Food Innovations	\$14,999	Christopher Callahan University of Vermont Extension
ONE15-234	Increasing the viability of heirloom dry bean production in the Northeast	\$14,998	Dr.Heather Darby University of Vermont Extension
ONE15-235	Evaluating water quality benefits from soil aeration	\$14,877	Laura Dlugolecki Winooski Natural Resources Conservation District Sophie Sauvé Winooski NRCD Holly Kreiner Winooski Natural Resources Conservation Specialist
ONE15-244	Value-added products from urine: Enriched compost and stabilized liquid fertilizer	\$14,833	Kim Nace Rich Earth Institute Abraham Noe-Hays Rich Earth Institute
ONE14-196	Tools for grass farmers to monitor grazing behavior and forage use in real time	\$13,095	Dr.Juan Alvez UVM Extension
ONE14-199	Biological management of apple replant disease	\$14,314	Dr.Terence Bradshaw University of Vermont
ONE14-202	Aeration Tillage Effects on Hay Yield and Soil Health in Clay Soils	\$14,986	Jeffrey Carter UVM Extension Rico Balzano Little Lake Orchard
ONE14-210	Evaluating value chain facilitators	\$14,905	Executive Director Rutland Area Farm and Food Link
ONE14-218	Urine as fertilizer: Maximizing hay yield and enriching low-N composts	\$14,955	Abraham Noe-Hays Rich Earth Institute Kim Nace Rich Earth Institute
ONE14-220	Biological control of conifer root aphids in Christmas trees	\$14,995	Dr.Bruce L. Parker University of Vermont
ONE13-182	Vermicompost as a fast-acting nitrogen amendment to mitigate nitrogen deficiencies in organic vegetable production	\$14,588	Dr.Josef Görres University Of Vermont
ONE13-188	Sustainable fertilizer from reclaimed urine: A farm-scale demonstration for hay production	\$14,876	Kim Nace Rich Earth Institute Abraham Noe-Hays Rich Earth Institute
ONE13-175	Enhancing honey production with clover: Innovative methods to use white and alsike clover in Vermont hay fields	\$14,848	Dr.Sid Bosworth University of Vermont
ONE13-176	Food Storage Curriculum for Farmers and Processors	\$14,952	Christopher Callahan University of Vermont Extension
ONE13-177	Cover Crop Diversity in No-Till Systems	\$14,964	Jeffrey Carter UVM Extension Kirsten Workman UVM Extension

ONE13-180	Developing agronomic practices for flax production in the Northeast	\$14,889	Dr.Heather Darby University of Vermont Extension
ONE12-154	The future of growing rice in Vermont: Managing for climate change	\$14,923	Dr.Laura Bermingham University of Vermont
ONE12-155	Raw waste milk as a pasture amendment	\$14,944	Dr.Sid Bosworth University of Vermont
ONE12-158	Mitigating fertility effects of flooding with variable rate amendment	\$14,999	Dr.Josef Görres University Of Vermont
ONE12-169	Evaluating flowering plant selection for pollinator habitat enhancement: Open-pollinated natives vs. native cultivars	\$14,850	Dr.Leonard Perry University of Vermont
ONE11-137	Underseeding Clover in Organic Wheat to Reduce Mycotoxins and Improve Grain Quality	\$14,728	Dr.Sid Bosworth University of Vermont
ONE11-139	Evaluation of organic strategies to control a new invasive pest, swede midge, Contarinia nasturtii (Diptera: Cecidomyiidae)	\$15,000	Dr.Yolanda Chen University of Vermont
ONE11-140	The Effects of Topdressing Organic Nitrogen on Hard Red Winter Wheat Yield and Quality: Part II	\$14,186	Dr.Heather Darby University of Vermont Extension
ONE11-146	Guide to Financing the Community Supported Farm	\$14,982	Mark Cannella University of Vermont Extension Allen Matthews Chatham University
ONE11-148	Evaluation of the effects of aerators on alfalfa stands	\$14,992	Hilary Solomon PMNRCD
ONE10-114	The effects of topdressing organic nitrogen on wheat protein	\$11,540	Dr.Heather Darby University of Vermont Extension
ONE10-123	Compost for Management of Plant Pathogens and Weed Seeds	\$15,000	Dr.Deborah Neher, PhD University of Vermont
ONE10-126	Evaluating the on-farm environmental and economic impacts of the use of aerators with liquid and semi-solid manure under various management conditions	\$14,907	Hilary Solomon PMNRCD
ONE08-081	Assessing the value of oilseed meals for soil fertility and weed suppression	\$9,213	Dr.Heather Darby University of Vermont Extension
ONE08-084	Developing On-Farm Research Expertise Among Farmers in Vermont	\$9,997	Dr.Wendy Sue Harper Northeast Organic Farming Association of Vermont
ONE08-089	Eggplants as habitat plants in Poinsettias	\$9,993	Dr.Margaret Skinner University of Vermont
ONE07-070	Fenceless Grazing	\$10,000	Christopher Dutton Vermont Technical College

ONE06-052	Assessing on-farm pasture availability and forage quality for dairy feed planning	\$9,914	Dr.Sid Bosworth University of Vermont
ONE06-061	A study to determine if anthelmintic-resistant internal parasites exist in Vermont sheep flocks	\$10,000	Chet Parsons University of Vermont Extension
ONE05-036	Farm-fabricated on-farm composting equipment project: Aerating equipment	\$9,980	Tom Gilbert The Highfields Institute
ONE05-039	Women's Agricultural Network Farm Visits	\$4,313	Beth Holtzman UVM Extension - New Farmer Project & Women's Agricultural Network
ONE04-018	Integration of Forage Fenugreek into the Northeast Cropping System	\$9,634	Dr.Heather Darby University of Vermont Extension
ONE04-021	Development of Partnerships and Support for an Emerging Alternative Crop: Grapes in Northern New England	\$9,604	Lorraine Berkett University of Vermont
ONE03-005	Farmer educators for a pilot grazing demonstration project in Vermont	\$8,000	Gwyneth Harris UVM Center for Sustainable Agriculture

SUSTAINABLE COMMUNITY INNOVATION GRANTS

Project #	Project Title	SARE Support	Project Leaders
CNE13-107	On-Line Farm to Workplace System	\$14,985	Tara Kelly Rutland Area Farm and Food Link
CNE13-110	FarmRaisers: Raising funds, kids, and crops in the Upper Valley	\$14,716	Beth Roy Vital Communities
CNE12-093	The Community Market Project	\$14,369	Erin Buckwalter Northeast Organic Farming Association of Vermont
CNE11-084	Market Basket	\$8,755	Angela Berkfield Post Oil Solutions
CNE10-070	Facilitating Collaborative Farm-to-Restaurant Sales in Chittenden County, Vermont	\$9,783	Travis Marcotte Intervale Center
CNE10-074	Greater Falls Food Hub	\$15,000	Denise Mason Southeastern Vermont Community Action (SEVCA)
CNE09-066	Incubation, expansion and learning: The microloan fund for New England farmers	\$17,514	Dorothy Suput The Carrot Project
CNE09-065	Marketing the market: facilitating EBT usage among farmers' market customers	\$9,792	Liz Kenton UVM Extension Sarah Kleinman University of Vermont Extension
CNE08-049	Vermont food basket project	\$10,000	Travis Marcotte Intervale Center
CNE07-026	Bridging the gap: Connecting youth, farms and communities	\$9,994	Sara Porth University of Vermont Extension

CNE06-006	Rutland Area Farm and Food Link – community farm and agricultural resource center	\$9,900	India Burnett Farmer
CNE06-007	South Hero Land Trust Farm Initiative	\$6,697	Chris Gordon South Hero Land Trust

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Vermont
\$9,460,581**



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).