
AGRICULTURE PROJECTS FUNDED IN NORTH CAROLINA
by USDA's
Sustainable Agriculture Research and Education (SARE) Program
1988-2008

Summary: North Carolina has received \$8,056,062 to support 136 projects, including 46 research and/or education projects, 16 extension projects and 41 producer-led projects. North Carolina also has received additional SARE support through multi-state projects.

State sustainable agriculture extension coordinator(s): Paul Mueller, North Carolina State University

Project #	Project Title	SARE support	Project Leader	Organization
LS08-203	Exploiting the organic peanut market: refining production systems for the Southeast	\$175,000.00	Mark Boudreau	Herbert Green Agroecology, Inc.
LS08-211	A multi-disciplinary approach to improve the environmental performance of niche pork production systems and marketability of Heritage swine breeds	\$175,000.00	Sang Oh	North Carolina A&T State Univ.
LS08-210	Reduced tillage in organic systems: a soil and water quality imperative	\$190,000.00	Paul Mueller	North Carolina State University
LS07-200	Selecting cover crops for diverse functions: an integrated soil management approach for organic strawberry production in North Carolina	\$200,000.00	Michelle Schroeder	North Carolina State University
LS07-197	Appalachian grown: farm to school project	\$170,000.00	Emily Jackson	Appalachian Sustainable Agriculture Proj
LS06-193	Grafting rootstocks onto heirloom and locally adapted tomato selections to confer resistance to root-knot nematodes and other soil borne diseases and to increase nutrient uptake efficiency in an intensive farming system for market gardeners	\$193,000.00	Mary Peet	NCSU Dept. Horticultural Science
LS05-169	Exploiting the Organic Peanut Market: Design of Production Systems for the Southeast	\$159,000.00	Mark A. Boudreau	Hebert Green Agroecology
LS05-178	Sustainability indicators as management tools to guide farmers, scientists, policy makers and the general public	\$250,000.00	Ada Wossink	NCSU Dept Agric & Resource Economics

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LS05-173	Microarray analysis and functional assays to assess microbial ecology and disease suppression in soils under organic or sustainable management	\$250,000.00	Frank Louws	NCSU Dept Plant Pathology
LS04-158	N2-fixation and weed competition: breaking the connection between crops and weeds	\$248,000.00	Mike Burton	NCSU, Crops Science Dept.
LS04-161	Evaluation of Beneficial Insect Habitat for Organic Farms	\$88,772.00	Matt Ronning	North Carolina State University
LS04-165	Renewing the Agriculture of the Middle: A Planning grant request to develop a Southern Strategy	\$15,500.00	Scott Marlow	RAFI-USA
LS03-154	Examining pasture-based dairy systems to optimize profitability environmental impact, animal health and milk quality	\$226,903.00	Steven P. Washburn	North Carolina State Univ
LS03-146	Appalachian Grown: Toward Regional Community-based Food Systems	\$154,030.00	Charlie Jackson	Appalachian Sust. Agric. Project-ASAP
LS02-134	The Importance of Genetics: biological fitness and productivity in range-based systems comparing standard turkey varieties and industrial stocks	\$182,386.00	Donald E. Bixby	Amer. Livestock Breeds Cons.
LS02-132	Cover Cropping and Residue Management for Weed Suppression, Soil Fertility and Organic Crop Production	\$99,154.00	Keith Baldwin	NC A&T Univ
LS01-120	Long-term, Large-scale Systems Research Directed Toward Agricultural Sustainability	\$230,000.00	Paul Mueller	North Carolina State University
LS01-122	The Importance of Genetics: Assessing Immunological Health of Standard Turkey Varieties vs. Industrial Turkey Stocks for Sustainable Turkey Production Systems	\$18,002.04	Donald Bixby	American Livestock Breeds Conservancy
LS01-126	Sustaining Ecological and Economic Diversity Among Limited Resource Landholders by Expanding Opportunities for Management of Productive Woodlands	\$180,431.00	Sarah Warren	North Carolina State University
LS01-128	Influence of Microbial Species and Functional Diversity in Soils on Pathogen Dispersal and Ecosystem Processes in Organic and Conventional Agroecosystems	\$167,842.00	Dr. Jean Ristaino	North Carolina State University

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LS00-109	Increasing Growers' Quality of Life Through Direct Marketing: The Role of Farmers Markets and CSA	\$45,516.00	Susan Andreatta	Dept. of Anthropology UNCG
LS00-110	The Impact of Agricultural Systems on Soil Quality and Sustainability	\$191,263.00	Mary Barbercheck	NC State, Dept of Entomology
LS99-106	Integrated Crop and Sylvan Systems with Swine: a State and National Initiative	\$156,262.00	Charles W. Talbott	North Carolina A&T
LS98-094	A Model for Long-Term, Large-Scale Systems Research Directed Toward Agricultural Sustainability	\$256,604.00	J. Paul Mueller	North Carolina State University, Crop Science
LS98-091	Development of Decision Support Systems for Improvement of Silvicultural Practices on Farm-Based Non-Industrial Private Forests	\$26,204.00	Frederick Cubbage	Forestry Department, North Carolina State University
LS97-086	Equal Access to Agriculture Programs and Opportunities	\$151,290.00	David Harris	Land Loss Prevention Project
LS96-077	Development of Sustainable Cropping Systems for Seedless Watermelon and Fall Lettuce in Rotation with Green Manures	\$182,751.00	M. R. Reddy	NCA & T State University, Natural Resources and Environmental Design
AS95-018	Wildlife Enhancement and Education as a Catalyst in the Widespread Implementation of Sustainable Agriculture Practices (Also listed as LS95-065)	\$75,000.00	Peter Bromley	North Carolina State University
AS95-021	Reduced-Risk Cockroach Control in Confined Animal Production	\$38,840.00	Coby Schal	North Carolina State University
LS95-065	Wildlife Enhancement and Education as a Catalyst in the Widespread Implementation of Sustainable Agriculture Practices (Also listed as AS95-18)	\$173,205.00	Peter Bromley	North Carolina State University
LS95-060.1	Animal Waste, Winter Cover Crops, and Biological Antagonists for Sustained Management of Columbia Lance and Other Associated Nematodes on Cotton	\$96,691.00	Kenneth R. Barker	North Carolina State University
AS94-013	Assessing the Impact of Beneficial Insect Populations on Organic Farms (Continuation of LS94-059)		George K. Kennedy	North Carolina State University

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LS94-059	Assessing the Impact of Beneficial Insect Populations on Organic Farms (AS94-013)	\$17,735.00	George K. Kennedy	North Carolina State University
LS94-063	Regional Center for Sustainable Dairy Farming	\$180,497.00	Steve Washburn	North Carolina State University
LS94-060	Animal Waste, Winter Cover Crops, and Biological Antagonists for Sustained Management of Nematodes on Cotton	\$143,412.00	Kenneth R. Barker	North Carolina State University
AS92-005	Effects of Sustainable and Conventional Agriculture on Farm Wildlife	\$130,000.00	John R. Anderson Jr.	North Carolina State University
AS92-006	Use of Organic Nitrogen Sources for Sweetpotatoes: Production Potential and Economic Feasibility	\$15,000.00	Wanda W. Collins	North Carolina State University, Horticultural Science
LS92-045	Organic Nitrogen Sources for Sweetpotatoes: Production Potential and Economic Feasibility	\$120,000.00	Wanda W. Collins	North Carolina State University, Horticultural Science
LS91-035	Improved Nitrogen Use-Efficiency in Cover Crop Based Production Systems	\$179,992.00	Michael Wagger	North Carolina State University
LS91-032	Economically Viable Production of Vegetables in The Southern Region Using Low-input and Sustainable Techniques: A Data Base	\$37,000.00	Mary M. Peet	NCSU
LS90-026	Swine Waste -- Low-cost Alternative to Commercial Fertilizer for Production of Forage for Grazing Cattle	\$50,000.00	J. Paul Mueller	North Carolina State University
LS89-018	Composting Poultry Litter -- Economics and Market Potential of a Renewable Resource	\$15,000.00	L. M. Safley, Jr.	North Carolina State University
LS89-014	On-Farm Demonstrations and Research of Low-input Sustainable Farming	\$100,000.00	William W. Dow	Carolina Farm Stewardship Association
LS88-009	A Comparison of Cropping Systems Managed Conventionally or with Reduced Chemical Input	\$255,000.00	Larry King	North Carolina State University

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LS88-006	Planning Grant: On-farm Demonstration of Low-input Farming	\$15,000.00	William W. Dow	Carolina Farm Stewardship Association
LS88-005	Planning Funds for a Proposal on Extending the Issue of Sustainable Agriculture to Small Farms in North Carolina, Tennessee and Virginia	\$15,000.00	M. Ray McKinnie	North Carolina A & T State University
PROFESSIONAL DEVELOPMENT PROJECTS				
ES08-090	An agent Training Program in Safe Food Handling & Legal Liability	\$77,344.00	Diane Ducharme	North Carolina Cooperative Ext.
ES08-092	Energy Training for Agricultural Professionals in the Southern SARE Regions	\$97,684.00	Mike Morris	National Center for Appropriate Tchnology (NCAT)
ES06-083	Pasture Pork 101: Comprehensive Agent Training in Pasture-based Hog production	\$62,500.00	Susan Mellage	North Carolina State Univ
ES05-078	Sustainable Production Systems for Range-Reared Standard Turkeys	\$109,444.00	Charles Bassett	American Livestock Breeds Conservancy
ES05-079	Direct Market Training for Agricultural Professionals	\$96,757.00	S. Gary Bullen	North Carolina State University
ES03-065	Building Sustainable Soil Systems	\$117,848.00	Keith Baldwin	NC A&T State University
ES03-066	Producer managed efforts in marketing of livestock & livestock products	\$89,400.00	John O'Sullivan	NC A&T State University
ES01-058	Sustaining Agriculture Through Community Partnerships	\$49,884.00	Robin Kohanowich	The Sustainable Farming Program
ES00-047	Training in Alternative Research Strategies for Sustainable Farming Systems	\$101,800.00	Keith Baldwin	NC Cooperative Extension Service
ES99-043	Multimedia Training Resources on Sustainable Greenhouse Vegetable Production	\$39,870.00	Mary M. Peet	North Carolina State University

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ES98-039	Multi Disciplinary Training on Pasture-Based Dairy Systems - A Sustainable Alternative for the Region	\$52,578.00	Steve Washburn	North Carolina State University
ES98-040	Grazing Management Training to Enhance the Sustainability of Pasture-Based Beef Production Systems	\$31,745.00	Jim Green	North Carolina State University, Crop Science Dept.
ES98-042	Training in Agriculture Program (TAP)	\$17,890.00	Dorothy Barker	Operation Spring Plant, Inc.
ES97-014	Southern Region Sustainable Ag Training Consortium	\$116,723.00	Roger Crickenberger	North Carolina State University
ES97-025	Building Capacity in Sustainable Agriculture: A Comprehensive Training Program in Organic Farming Systems	\$97,500.00	Nancy Creamer	North Carolina State University
LST94-001	Southern Region Sustainable Agriculture Training Consortium (LST96-8)	\$199,620.00	Roger G. Crickenberger	North Carolina State University

GRANTS TO FARMERS

FS08-230	Building Capacity for Pastured Poultry Production in Western North Carolina	\$7,755.00	Casey McKissick	
FS07-216	Season Extension for Winter CSA and Restaurant Sales	\$5,829.00	Annie Louise Perkinson	Flying Cloud Farm
FS07-220	Meeting the Needs of Microbreweries with Fresh Hops Production	\$9,762.00	Linda Sakiewicz	Bracken Brae Farm, LLC
FS06-211	Value from byproducts of the Southern Wine Grape Industry	\$9,925.00	Ben Webb	Sandy Cross Vineyard
FS06-206	A Diversifying and Marketing Strategy for Sustaining Small Farm Agriculture	\$9,976.00	Nancy C. Moretz	
FS06-197	Increasing Economic Viability and Promoting Sustainable Agriculture through Agritourism	\$7,485.00	Amy Ager	Hickory Nut Gap Farm – Spring House Meats
FS06-199	Capillary Irrigation for Container Nurseries: a practical alternative to overhead irrigation?	\$9,867.00	Ellen J. Colodney, M.D.	Coastal Plain Conservation Nursery, Inc

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FS04-185	Farmstead Cheese (Queso Blanco) for the Latino Food Market	\$4,361.00	Tom Shore	
FS03-167	Mountain Tailgate Market Association Marketing Initiative	\$14,280.00	Charlie Jackson	Mountain Tailgate Market Association
FS03-163	Managing Beneficial Insects and Using Pest Trap Crops in Organic Broccoli	\$9,950.00	Charles A. Church	Watauga River Farms
FS03-175	Greenhouse Grown Fraser Fir Tree Seedlings	\$7,593.00	Justin Wells	Sugar Grove Botanical Farm, Inc.
FS03-170	Short- and Long-term Crop Replacement Project	\$9,787.00	Phyllis Kinlaw Pate	
FS03-171	Made In the Shade: Dairy Goat Woodland Grazing Project	\$9,900.00	Brit Pfann	Celebrity Dairy
FS03-164	Test Growing & Marketing Specialty Woody Cutflowers	\$8,555.00	Susan Wright Cochran	Shady Grove Gardens & Nursery
FS02-146	Farmscaping Organic Broccoli to Increase Beneficial Insect Numbers	\$9,855.00	Charles Church	Watauga River Farms
FS02-152	Biodiverse-Organic Christmas Tree Production	\$9,333.00	Mark Lackey	
FS01-132	Ginseng Production Utilizing Natural Fungicides	\$9,986.00	Robert Eidus	Eagle Feather Farm
FS00-114	Creating a Tailgate Farmers Market	\$4,380.00	Annie Louise Perkinson	
FS00-128	Direct Marketing Opportunities to Improve Economic Outlook	\$9,050.00	Andy Youngblood	
FS99-085	The Effects of Cover Crops on Weed and Insect Management in Blackberries	\$9,935.00	Sam Bellamy	Indigo Farms
FS99-096	Use of Low Value Hardwoods for Shiitake Mushroom Production	\$1,929.00	Walter H. Rayburn Jr.	
FS99-105	Low Cost Compost Screening	\$2,975.00	Carl Weston	

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FS99-097	Oriental Persimmons and PawPaws: Two Sustainable Crops for the South	\$6,534.00	Lesley Sanderson	
FS99-091	Ratite Marketing Education Program	\$7,250.00	Tina Hurdt	
FS98-068	Late Blight Suppression in Tomatoes -- Using Competing Fungi on Leaf Surfaces	\$5,800.00	Tom Elmore	Thatchmore Farm
FS98-076	Development of Low Input Sustainable Practices for Rose Production	\$2,690.00	Jacqueline Jones	
FS98-071	Workshop on Parasite Control Through On-Farm Fecal Studies	\$6,545.00	Susan Gladin	
FS98-083	Organic Specialty Lettuce Production in Tobacco Greenhouses	\$7,455.00	John Vollmer	
FS98-078	High-Fructose Corn Syrup as a Replacement for Mepiquat to Reduce Vegetative Growth in Cotton	\$2,224.00	Hubert Morris	
FS97-054	Forest Site Preparation with Swine	\$5,088.00	Thomas Livingston	
FS97-048	Evaluation of Mycorrhizal Inoculation on Growth and Quality of Three Eastern North Carolina Christmas Tree Species	\$650.00	Daniel Dorsey	
FS97-051	Effect of Different Application Rates of Swine Lagoon Effluent on Corn and Wheat	\$2,317.00	John Hart	
FS96-044	Alternatives to Chemicals in the Peanut Cotton Rotation	\$9,366.00	Hubert Morris	
FS96-035	Aquaculture Conversion Model Emphasizing Poultry and Hog Facilities Re-Use and Recycled On-Farm Resources	\$6,000.00	Benny Bunting	
FS96-037	Identification of Cover Crops to Enhance the Habitat of Specific Beneficial Insects in Sustainable Production Systems	\$8,452.00	Kenny Haines	Misty Morning Farm
FS96-038	Multiple On-Farm Use of Aquatic Plants and Animals	\$9,575.00	Harvey Harman	Sustenance Farm
FS95-027	Demonstration of High Value, Small Scale Sustainable Vegetable and Fruit Production Methods	\$9,612.00	Larry & Judy McPherson	

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FS95-034	Hydroponic Vegetable Production in Conjunction with a Trout Farming Operation	\$9,975.00	Carl Zietlow	Best Trout and Organic Farm
FS94-007	Perennial Warm Season Grasses as Summer Pasture	\$733.00	Norman and Karen Jordan	
FS94-008	Meat Goats for Weed Control and Alternative Income on Cattle Operations	\$2,020.00	Tony Kern	KC Ranch
FS94-013	Plant Shelters to Extend the Growing Season for Herbs	\$3,550.00	Richard Morgan	Harmony Herb Farm
Community Innovation				
CS08-063	SNAP! A Sustainable Network at Polk Farm to Fork and back to Farm again	\$10,000.00	Mary Lyth	EarthSong Rising LLC dba Giardini Gardens, Giardini Catering Co.
CS07-055	Stecoah Kitchen Entrepreneurship & Agri-Tourism Project	\$10,000.00	Beth Fields	Stecoah Valley Arts, Crafts & Educational Center Inc.
CS06-050	Getting your small farm products to market / a three county program to solve product logistics: marketing/sales, product development, packages and labeling, transportation	\$40,000.00	David Kendall	NC Cooperative Extension
CS06-045	Establishing community and business partnerships to build a market identify for local seafood	\$9,950.00	Jennifer Ulz	Carteret Community College
CS05-033	Women Farmers Building a Healthy Community and Economy in the High Country	\$9,900.00	Shelly Connor	Blue Ridge Women in Agriculture (BRWIA)
CS04-027	Agricultural Community Support Across Boundaries	\$10,000.00	Tom Elmore	Land-of-Sky Regional Council
CS04-030	Healthy Livestock Agriculture & Healthy People: Connecting Local Pasture-Raised Food and Consumers in Central North Carolina	\$10,000.00	Sally Norton	The Univ of North Carolina at Chapel Hill Dept Physical Medicine & Rehabilitation

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CS04-021	A Strategy for Sustaining Henderson County Agricultural Communities	\$8,500.00	Joshua Freeman	Henderson County North Carolina
CS03-018	New River Sustainable Agriculture Marketing Plan	\$10,000.00	Hollis Wild	New River Community Partners
CS03-009	Strengthening Rural Communities Through Direct Marketing	\$9,941.00	Susan Andreatta	The University of North Carolina at Greensboro - Project Green Leaf
CS02-005	SouthEastern North Carolina Agri-Tourism Corridor Development	\$7,000.00	Nancy Hunt	The Conservation Fund

Graduate Student Grants

GS08-073	TRAITS OF INTEREST FOR IMPROVING WEED SUPPRESSIVE ABILITY IN SOYBEAN DURING THE CRITICAL PERIOD FOR WEED COMPETITION	\$9,972.00	George Place	North Carolina State University
GS08-076	Chemistry and Biodegradability of Dissolved Soil Organic Matter in Diverse Farming Systems	\$9,850.00	Lei Tian	North Carolina State University
GS08-068	Elucidating the role of cellulases involved in biological control of Phytophthora root rot	\$9,931.00	Brantlee Richter	North Carolina State University Mountain Horticultural Crops Research & Extension Center
GS08-067	Southeastern North Carolina Food Systems Project	\$10,000.00	Raven Bruno	University of North Carolina Wilmington Dept of Sociology
GS07-062	Omega-3 Purlane Eggs	\$10,000.00	Laura Vance	North Carolina State University
GS07-060	Potential of grafting to improve nutrient management of Heirloom tomatoes on organic farms	\$10,000.00	Suzanne O'Connell	North Carolina State University
GS07-058	Cover crop mulches for no-till organic onion production	\$10,000.00	Emily Vollmer	North Carolina State University Dept of Horticultural Science

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GS06-052	Testing technologies for affordable bioshelters	\$9,914.00	Marie Hoepfl	Dept of Technology Appalac hian State University
GS06-055	Combining socioeconomic and ecological analysis to determine the optimal distribution of green payments in the Albermarle Sound region of North Carolina	\$9,999.00	Lucy Henry	Duke University, Nicholas School of the Environment and Earth Sciences
GS06-051	Effects of management practices and plant growth regulators on the allelopathic potential of rye (<i>Secale cereale</i>)	\$9,780.00	James Burton	North Carolina State University
GS05-046	Inducing Disease Resistance and Increased Production in Organic Heirloom Tomato Production Through Grafting	\$10,000.00	Cary Rivard	North Carolina State University Departme nt of Plant Pathology
GS04-032	Effects of Tillage, Rotation, and Organic Inputs on Soil Ecological Properties in Vegetable Crop Production Systems	\$9,998.00	Greg Hoyt	NCSU, Dept. of Soil Science
GS04-034	Optimizing substrates, composts, and fertilizer additions for organic transplant production	\$10,000.00	Mary Peet	NCSU - Dept Hort Science
GS03-028	Evaluation of Beneficial Insect Habitat for Organic Farms	\$10,000.00	David Orr	NCSU
GS03-027	Natural Vegetation and its Influence on Weed Populations in Neighboring Fields	\$9,932.00	J. Paul Mueller	NCSU
GS01-008	Breeding a Better Cover Crop: A Screen of Rye Germplasm for Weed Suppression and Nitrogen Scavenging	\$9,986.00	Chris Reberg- Horton	North Carolina State University
GS00-004	Interactions Between Predators and Insect-Parasitic Nematodes in Soil	\$10,000.00	C. Marie Newman	NC State University, Dept. Entomology
GS00-006	Evaluation of Cover Crops and Conservation Tillage for Conventional and Organic Sweetpotato Production in North Carolina	\$9,927.00	Danielle Treadwell	Dept. of Horticulture, NCSU
On-Farm Grants				
OS08-042	New Tools to Make Organic No-till Soybeans and Corn a Reality	\$14,917.00	Chris Reberg- Horton	North Carolina State University

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OS07-038	On-Farm Biofuel Production from Sweet Sorghum Juic	\$14,898.00	Matthew Veal	North Carolina State University
OS06-032	Opportunities for pasture-raised Jersey beef in the Southeast	\$14,952.00	Steve Washburn	NCSU
OS05-025	Salmonella Contamination and Antibiotic Resistance on Pastured Poultry and Conventional Poultry Farms	\$9,542.39	Larry Modlin	Warren Wilson College

Total funding from USDA SARE program to North Carolina = \$8,056,062

For further information on projects, contact Sue Blum, Southern Region Communications Assistant, 770-229-3350, sueblum@uga.edu, or Dena Leibman, SARE National Communications Specialist, communications@sare.org, 301-504-5230.

SARE is a national USDA program that provides competitive grants, educational materials and extension programs to develop and support approaches that enhance profits, protect the environment and improve rural quality of life.