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 $404 million to more than 8,776 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 in Utah

Utah

Project Highlight: Better Onions, Fewer Inputs

Onions are a high-value crop, but high fertilizer rates and aggressive use of pesticides to suppress weeds, diseases and insects threaten the sustainability of onion production. In Utah, growers and researchers are working to show how changes in management practices can allow farmers to maintain profitable yields while lowering their use of inputs.

In 2013 a SARE-funded team led by Utah State University’s Diane Alston studied the effect of certain changes on onion yields, in particular fertilization rates and crop rotations. They were following the lead of a small group of onion producers in the state who were finding they could reduce their use of pesticides by lowering their use of fertilizers and still achieve good yields.

The team pursued multiple objectives and developed a body of information that is helping Utah’s producers adopt more sustainable practices. They surveyed nearly 60 farms to better understand production system predictors of pests and yield; conducted field experiments that showed reducing fertilizer rates could reduce pest densities; and created an interactive production modeling tool.

In an assessment of producers conducted near the end of the project, 67 percent said the information they learned would help them diversify their operation, and 80 percent felt it would help them reduce their use of off-farm inputs.

For more information on this project, see sare.org/projects, and search for project number SW13-034.

SARE in Utah

www.sare.org/state-profiles/utah/

$3,628,412 in total funding
28 grant project
(since 1988)

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

Grants awarded
2019–2024

Total awards: 28 grants

6 Farmer/Rancher
8 Research and Education
5 Professional Development Program
3 On Farm Research/Partnership
6 Graduate Student

Total funding: $3,628,412

$124,518 Farmer/Rancher
$2,727,725 Research and Education
$445,058 Professional Development Program
$156,148 On Farm Research/Partnership
$174,963 Graduate Student

Find a complete list of projects on page 3.

Farmer and rancher impacts
2019–2024

SARE grantees have reported the following impacts from their projects:

6,818 farmers participated in a SARE-funded project

1,538 farmers reported a change in knowledge, awareness, skills or attitude

142 farmers changed a practice

Learn about local impacts at:
western.sare.org/sare-in-your-state/utah/

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 western.sare.org/state-profiles/utah/ to learn more.

Marion Murray
Utah State University
(435) 797-0776
marion.murray@usu.edu

Justen Smith
Utah State University
(435) 919-1331
justen.smith@usu.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.
Utah has been awarded $8,032,987 grants to support 92 projects, including but not limited to, 37 research and/or education projects, 12 professional development projects and 24 producer-led projects. Utah 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>
</table>
| SW23-950   | Impact of including sprouted grains in the ration of beef cattle relative to animal performance, quality and nutritive value of meat, and economic via | $349,974     | Dr. Kara Thornton  
Utah State University  
Brady Blackett  
Blackett Cattle Company  
Kelly Crozier  
Raise'm Right Ranch  
Dr. Matthew Garcia  
Utah State University  
Dr. Korry Hintze, PhD  
Utah State University  
Dr. Clay Isom  
Utah State University, Dept. of Animal, Dairy, and Veterinary Sc  
Dr. Ryan Larsen  
Utah State University, Dept. of Applied Economics  
Jason Morgan  
Morgan Ranching Company  
Dr. Stephan van Vliet  
Utah State University |
| SW23-948   | Can soil carbon help fund rangeland management?                                                                                           | $349,795     | Megan Nasto  
Working Lands Conservation/Multiplier |
| SW22-942   | Using grazing-duration to balance: livelihoods, clean water, sage-grouse habitat, and sustainable forage in semi-arid rangelands       | $328,329     | Dr. Kris Hulvey  
Working Lands Conservation  
Taylor Payne  
Utah Department of Agriculture's Grazing Improvement Program |
| SW22-941   | Identifying Stacked Conservation Practices that Optimize Water Use in Agriculture: Phase II                                                 | $350,000     | Matt Yost  
Utah State University  
Dr. Earl Creech  
Utah State University  
Neil Hansen  
Brigham Young University  
Dr. Bryan Hopkins  
BYU |
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Title</th>
<th>Funding Amount</th>
<th>Principal Investigators</th>
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<tr>
<td>SW21-923</td>
<td>Developing sustainable strategies for nutrient and pest management on small-acreage strawberry farms</td>
<td>$349,736</td>
<td>Dr. Jennifer Reeve (Utah State University), Dr. Brent Black (Utah State University), Dr. Kynda Curtis (Utah State University), Dr. Robert Schaeffer (Utah State University)</td>
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<tr>
<td>SW21-927</td>
<td>Dry Matter Intake and Feed Efficiency of Four Dairy Breeds in a Pasture-Based Heifer Development Program</td>
<td>$299,935</td>
<td>Dr. Blair Waldron (USDA-ARS), Dr. Earl Creech (Utah State University), Dr. Clay Isom (Utah State University, Dept. of Animal, Dairy, and Veterinary Sciences), Dr. Ryan Larsen (Utah State University, Dept. of Applied Economics), Dr. Rhonda Miller (WSARE), Dr. Kerry Rood, MPH, DVM (Utah State University, Dept. of Animal, Dairy, and Veterinary Sciences)</td>
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<tr>
<td>SW19-909</td>
<td>Identifying Stacked Conservation Practices that Optimize Water Use in Agriculture</td>
<td>$349,977</td>
<td>Matt Yost (Utah State University), Niel Allen (Utah State University), Dr. Earl Creech (Utah State University), Neil Hansen (Brigham Young University), Matthew Heaton (Brigham Young University), Dr. Bryan Hopkins (BYU), Ross Spackman (Brigham Young University-Idaho)</td>
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<tr>
<td>SW19-905</td>
<td>Can we manage public rangelands for producers and the environment?: Using grazing-duration to balance livelihoods, clean water, sage-grouse habitat, and sustainable forage</td>
<td>$349,979</td>
<td>Dr. Kris Hulvey (Working Lands Conservation), Taylor Payne (Utah Department of Agriculture's Grazing Improvement Program)</td>
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<tr>
<td>SW18-058</td>
<td>Establishing a protocol for receiving cattle that are at-risk of having a mineral deficiency</td>
<td>$206,209</td>
<td>Dr. Kara Thornton (Utah State University)</td>
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<tr>
<td>SW17-077</td>
<td>Best Management Practices for Regionally-Distinct Populations of the Blue Orchard Bee</td>
<td>$246,910</td>
<td>Theresa Pitts-Singer (USDA Agricultural Research Service)</td>
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<tr>
<td>ID</td>
<td>Project Title</td>
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<tr>
<td>SW17-046</td>
<td>Grass-birdsfoot trefoil mixtures to improve the economic and environmental sustainability of pasture-based organic dairies in the western U.S.</td>
<td>$214,123</td>
<td>Dr. Blair Waldron USDA-ARS</td>
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<tr>
<td>SW15-029</td>
<td>Improving Tart Cherry Sustainability</td>
<td>$230,154</td>
<td>Dr. Brent Black Utah State University</td>
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<tr>
<td>SW15-003</td>
<td>Training cattle to graze medusahead and avoid velvet lupine: A new tool to sustain the economic viability of livestock operations in the Western US</td>
<td>$249,909</td>
<td>Dr. Juan Villalba Utah State University</td>
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<td>SW14-015</td>
<td>Integrated Byproduct Streams for Enhanced Viability of Combined Dairy Farm and Milk Processing Operations</td>
<td>$295,688</td>
<td>Dr. Donald McMahon Western Dairy Center, Utah State University</td>
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<tr>
<td>SW13-034</td>
<td>Onion Systems Management Strategies for Crop Nutrition, Weeds, Thrips, and Iris Yellow Spot Virus</td>
<td>$169,299</td>
<td>Dr. Diane Alston Utah State University</td>
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<tr>
<td>SW10-088</td>
<td>Grass-Legume pastures to increase economic and environmental sustainability of livestock production</td>
<td>$209,907</td>
<td>Dr. Blair Waldron USDA-ARS</td>
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<tr>
<td>SW08-076</td>
<td>Cultural Management of Onion Thrips and Iris yellow Spot Virus</td>
<td>$133,441</td>
<td>Dr. Jennifer Reeve Utah State University</td>
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<tr>
<td>SW07-035</td>
<td>High Value Crop Rotations for Utah High Tunnels</td>
<td>$144,495</td>
<td>Brent Black PSC Department, Utah State University Dr. Brent Black Utah State University</td>
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<tr>
<td>SW07-014</td>
<td>Sustainable Vegetable Production: Screening Cover Crops for Water Use Efficiency</td>
<td>$118,411</td>
<td>Dr. Daniel Drost Utah State University</td>
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<tr>
<td>SW04-060</td>
<td>Perennial Forage Kochia for Improved Sustainability of Grass-Dominated Ecosystems</td>
<td>$149,503</td>
<td>Dale Zobel ADVS Dept., Utah State University</td>
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<tr>
<td>SW02-013</td>
<td>Sustainable Water Management for Irrigated Asparagus</td>
<td>$23,014</td>
<td>Dr. Daniel Drost Utah State University</td>
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<tr>
<td>SW01-034</td>
<td>Assessment of Value Added Milk from Pasture-based Dairies</td>
<td>$78,000</td>
<td>Tilak Dhiman Utah State University</td>
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<tr>
<td>Project Code</td>
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<tr>
<td>SW01-023</td>
<td>Biofumigants in Commercial Onion Production to Enhance Soil Nutrient Availability, Soil Quality, and Control of Weed, Nematode, and Disease Pests</td>
<td>$134,317</td>
<td>Brad Geary, Brigham Young University</td>
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<tr>
<td>SW01-020</td>
<td>Production of Drought-adapted Intermountain Native Plants Through Low-cost, In-containers for Emerging Western Markets</td>
<td>$71,686</td>
<td>Roger Kjelgren, Utah State University</td>
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<tr>
<td>SW01-001</td>
<td>Value Added Opportunities from the Manufacture and Feeding of Silages Produced from Liquid Cheese Whey and Other By-products to Growing and Finishing Cattle and Beef Cows</td>
<td>$59,777</td>
<td>Dale Zobel, ADVS Dept., Utah State University</td>
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<tr>
<td>SW00-040</td>
<td>In-house composting in high-rise, caged layer facilities</td>
<td>$60,975</td>
<td>Richard Koenig, Utah State University</td>
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<tr>
<td>SW00-063</td>
<td>Impact Assessment of Western Region SARE Projects</td>
<td>$38,500</td>
<td>Dr. Rhonda Miller, WSARE</td>
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<tr>
<td>SW99-024</td>
<td>The Effects of Altering the Protein Efficiency of Lactating Dairy Cows on the Whole-farm Nitrogen Efficiency of Dairy Farms: Subcontract 1</td>
<td>$19,184</td>
<td>Allen Young, Utah State University</td>
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<tr>
<td>SW99-024A</td>
<td>The Effects of Altering the Protein Efficiency of Lactating Dairy Cows on the Whole-Farm Nitrogen Efficiency of Dairy Farms.</td>
<td>$89,571</td>
<td>Allen Young, Utah State University</td>
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<tr>
<td>SW99-024B</td>
<td>The Effects of Altering the Protein Efficiency of Lactating Dairy Cows on the Whole-Farm Nitrogen Efficiency of Dairy Farms.</td>
<td>$19,184</td>
<td>Richard Kohn, Utah State University</td>
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<tr>
<td>SW98-058</td>
<td>Reducing Chemical Inputs in Arid-Climates Through Sustainable Orchard Management</td>
<td>$261,044</td>
<td>Schuyler Seeley, Utah State University</td>
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<tr>
<td>SW96-032</td>
<td>Identification of Management Practices and Cultivars for Organic Hard-Winter Wheat Production</td>
<td>$93,911</td>
<td>David Hole, Utah State University</td>
</tr>
<tr>
<td>SW95-015</td>
<td>Public-Land Grazing Permittees Under Pressure: Sustainability of Coping Strategies on Private Land</td>
<td>$63,000</td>
<td>D. Layne Coppock, Utah State University</td>
</tr>
</tbody>
</table>
### A Livestock Production System Less Reliant on the Use of Publicly Owned Lands

$60,000
Randall D. Wiedmeier
Utah State University

### Four Corners Navajo Nation Sustainable Agriculture Demonstration Project

$100,000
Lyle G. McNeal
Utah State University

### Navajo Nation Whole Farm/Ranch Sustainable Systems Demonstration Project

$14,000
Lyle G. McNeal
Utah State University

### Conference on the Science of Sustainable Agricultural Systems

$15,500
David Bezdicek
Washington State University

### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPDP23-008</td>
<td>Expanding cut flower production education supports agricultural professionals and small farms</td>
<td>$99,979</td>
<td>Dr. Melanie Stock&lt;br&gt;Utah State University&lt;br&gt;Dr. Kynda Curtis&lt;br&gt;Utah State University&lt;br&gt;Claudia Nischwitz&lt;br&gt;Utah State University&lt;br&gt;Nick Volesky&lt;br&gt;Utah State University</td>
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<tr>
<td>WPDP22-002</td>
<td>Training Agriculture Educators in Utah using the Wyoming Ranch Tools site and Western SARE research projects.</td>
<td>$83,892</td>
<td>Bridger Feuz&lt;br&gt;Master Stockman Consulting&lt;br&gt;Hudson Hill&lt;br&gt;Master Stockman Consulting LLC.</td>
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<tr>
<td>WPDP22-014</td>
<td>Educating and training community leaders to implement water recycling approach in Utah’s landscapes and nursery industry</td>
<td>$93,568</td>
<td>Dr. Shital Poudyal&lt;br&gt;Utah State University&lt;br&gt;Dr. Kelly Kopp&lt;br&gt;Utah State University and CWEL&lt;br&gt;Katie Wagner&lt;br&gt;Utah State University Extension&lt;br&gt;Josh Zimmerman&lt;br&gt;Utah Department of Natural Resources</td>
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<tr>
<td>WPDP21-012</td>
<td>Assisting Extension professionals in assessing profitable and sustainable agricultural enterprises with producer clientele</td>
<td>$99,969</td>
<td>Dr. Kynda Curtis&lt;br&gt;Utah State University&lt;br&gt;Dr. Ryan Larsen&lt;br&gt;Utah State University, Dept. of Applied Economics&lt;br&gt;Dr. Anastasia Thayer&lt;br&gt;Utah State University&lt;br&gt;Ruby Ward&lt;br&gt;Utah State University</td>
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<tr>
<td>WPDP19-14</td>
<td>Enhancing Enterprise Diversification Assessment for Native American Farmers to Enhance Economic Sustainability</td>
<td>$67,650</td>
<td>Ruby Ward&lt;br&gt;Utah State University&lt;br&gt;Vicki Hebb&lt;br&gt;Trent Teegerstrom&lt;br&gt;University of Arizona</td>
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**FARMER/RANCHER GRANTS**

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<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
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<tbody>
<tr>
<td>FW24-019</td>
<td>Effects of Breeding Ewe Lambs on Reproductive Performance Longevity.</td>
<td>$24,562</td>
<td>Gene Peckham Peckham Livestock</td>
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<tr>
<td>FW23-429</td>
<td>Study of hydroponics in cut flower production to increase water conservation and crop quality</td>
<td>$25,000</td>
<td>Anna Zack Zack Family Farms</td>
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<tr>
<td>FW23-420</td>
<td>Reduction Of Water Use On Peony Crops By Using Shade Cloth.</td>
<td>$9,067</td>
<td>Britin Van Brocklin Cherry petals flower farm</td>
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<tr>
<td>FW22-400</td>
<td>Economic and Yield Potential of Hemp Waste Material in Specialty Mushroom Substrate</td>
<td>$24,282</td>
<td>Natasha Quinones-Rodriguez Intentional Growth</td>
</tr>
<tr>
<td>FW22-394</td>
<td>The Economics of Early Weaning and Early Breeding of Range Ewe Lambs</td>
<td>$22,200</td>
<td>Gene Peckham Peckham Livestock</td>
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</tbody>
</table>
Can barley fodder be fed in place of grass hay to dairy goats and dairy sheep and what effect will it have on milk production and composition.

$19,407
Anita Wilson
Milky Hollow Creamery

Bramble Variety Trials in Utah to Reduce Disease, Increase Production and Enhance Profitability

$23,250
Rick Heflebower
Utah State University

Integrating Annual Crop Residues, Perennial Pastures, and Livestock Management to Extend the Grazing Season and Minimize Losses of Soil Nitrogen

$10,000
Thomas Griggs
Utah State University

Commercial Artichokes in the Intermountain West

$5,180
James Haggarty
Sun River Farms

Interseeding Forage Kochia in Established CRP Land for Enhanced Livestock and Wildlife Utilization

$7,621
Ron Harper

Increasing the Profitability of Raspberries byExtending the Growing Season

$2,310
Clark Willis

Goats as a Weed Control Alternative in Small Acreage Ranchettes

$3,382
Kyle Christensen

Tomato Disease Prevention and Production Enhancement

$2,095
Aviva Maller-O’Niel
Rick Heflebower
Utah State University

Organic Dairy Transition in Northern Utah

$7,500
Clark Israelsen
Utah State University Cooperative Extension

Winter Cover Crop Experiment

$1,120
Aviva Maller-O’Niel

Season Extension Experiment

$1,250
Rick Heflebower
Utah State University

Southern Utah Forest Products Association Cooperative Marketing Act

$4,835
Brian Cottam

Medusashead Control and Revegetation in Southern Cache County, UT

$6,414
Guy Pulsipher
<table>
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<tr>
<th>Project #</th>
<th>Project Title</th>
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<tr>
<td>FW00-317</td>
<td>The Original Cache Junction Families Popped Wheat</td>
<td>$2,801</td>
<td>Wes Roundy</td>
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<td>FW99-080</td>
<td>Composting Poultry Waste Inside High Rise Layer Houses</td>
<td>$4,992</td>
<td>Mike Shepherd</td>
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<td>FW99-117</td>
<td>Hovenweep Burn Reseeding and Demonstration Area</td>
<td>$4,000</td>
<td>Mary Tso</td>
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<td>FW97-038</td>
<td>Increased Forage Production during Alfalfa Rotation Years in Johnson Canyon,</td>
<td>$2,900</td>
<td>Michael E. Noel</td>
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<td></td>
<td>Utah. Biological Control of Scotch and Bull Thistle on Disturbed Alfalfa</td>
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<td>FW97-065</td>
<td>Alternative Cropping For the Navajo Reservation</td>
<td>$4,300</td>
<td>Mark Maryboy</td>
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<td>FW95-084</td>
<td>Pasture Aeration and Fertilizer Study</td>
<td>$2,480</td>
<td>Ken Carter</td>
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**GRADUATE STUDENT GRANTS**

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<tr>
<td>GW24-010</td>
<td>The effect of finishing strategy and &quot;terroir&quot; on the phytochemical richness</td>
<td>$29,968</td>
<td>Dr.Stephan van Vliet</td>
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<td>of bison meat in Western rangelands</td>
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<td>Joseph Vinod Varre</td>
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<td>GW24-008</td>
<td>Developing 4 Mason Bee Species for Pollination of Berry Crops</td>
<td>$30,000</td>
<td>Dr.Kelsey Graham</td>
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<td>USDA ARS</td>
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<td>Miranda Jones</td>
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<td>GW22-230</td>
<td>Evaluating the Effectiveness of Range Riding at Reducing Conflicts Between</td>
<td>$30,000</td>
<td>Dr.Julie Young</td>
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<td>Livestock and Native Carnivores Across the American West</td>
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<td>Rae Nickerson</td>
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<td>GW22-244</td>
<td>Evaluating the Impact of Wheat Straw Amendments on Dryland Organic Wheat</td>
<td>$29,995</td>
<td>Dr.Astrid Jacobson</td>
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<td>Dr.Jennifer Reeve</td>
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<td>Preston Christensen</td>
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<td>Utah State University</td>
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GW21-221  Enhancement of Samurai Wasp [Trissolcus japonicus (Ashmead)] for Biocontrol of Invasive Brown Marmorated Stink Bug [Halyomorpha halys (Stål)] in Utah $30,000 Dr.Diane Alston
Utah State University
Curtis Rowley
Cherry Hill Farms
Dr.Lori Spears
Utah State University
Kate Richardson
Utah State University

GW20-215  Identification of effective cover crop varieties and integrated management practices for weedy and invasive plant suppression in the Western US $25,000 Dr.Corey Ransom
Utah State University
Danielle Thiemann
Utah State University

GW18-156  Utilizing Tannin-Containing Forages and Holos Software for Sustainable Beef Production in the Intermountain West $20,204 Dr.Jennifer Reeve
Utah State University
Kathryn Slebodnik
Utah State University

GW18-106  Brown Marmorated Stink Bug in Utah's Intermountain West $24,999 Dr.Diane Alston
Utah State University
Mark Holthouse
Utah State University

GW17-060  Navajo Spinach (Cleome Serrulata): Improving Seed Germination from Wild Populations Gathered across Native Lands of the Four Corners $24,969 Dr.Daniel Drost
Utah State University
Reagan Wytsalucy
Utah State University

GW15-046  Improved simple on-site soil quality testing for soils in the Intermountain West $24,844 Dr.Jennifer Reeve
Utah State University
Esther Thomsen
USU

GW13-006  Determination of gas emissions from manure sources in animal feeding operations $25,000 Scott B. Jones
Utah State University
Dr.Rhonda Miller
WSARE
Pakorn Sutitarnnontr
Biological Engineering Department, Utah State University

GW12-030  Contributions to pest suppression through predator phenology and functional diversity $13,095 Dr.Ricardo Ramirez
Utah State University
Erica Stephens
Utah State University

ON FARM RESEARCH/PARTNERSHIP GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| GW21-221  | Enhancement of Samurai Wasp [Trissolcus japonicus (Ashmead)] for Biocontrol of Invasive Brown Marmorated Stink Bug [Halyomorpha halys (Stål)] in Utah | $30,000 | Dr.Diane Alston
Utah State University
Curtis Rowley
Cherry Hill Farms
Dr.Lori Spears
Utah State University
Kate Richardson
Utah State University |
| GW20-215  | Identification of effective cover crop varieties and integrated management practices for weedy and invasive plant suppression in the Western US | $25,000 | Dr.Corey Ransom
Utah State University
Danielle Thiemann
Utah State University |
| GW18-156  | Utilizing Tannin-Containing Forages and Holos Software for Sustainable Beef Production in the Intermountain West | $20,204 | Dr.Jennifer Reeve
Utah State University
Kathryn Slebodnik
Utah State University |
| GW18-106  | Brown Marmorated Stink Bug in Utah's Intermountain West | $24,999 | Dr.Diane Alston
Utah State University
Mark Holthouse
Utah State University |
| GW17-060  | Navajo Spinach (Cleome Serrulata): Improving Seed Germination from Wild Populations Gathered across Native Lands of the Four Corners | $24,969 | Dr.Daniel Drost
Utah State University
Reagan Wytsalucy
Utah State University |
| GW15-046  | Improved simple on-site soil quality testing for soils in the Intermountain West | $24,844 | Dr.Jennifer Reeve
Utah State University
Esther Thomsen
USU |
| GW13-006  | Determination of gas emissions from manure sources in animal feeding operations | $25,000 | Scott B. Jones
Utah State University
Dr.Rhonda Miller
WSARE
Pakorn Sutitarnnontr
Biological Engineering Department, Utah State University |
| GW12-030  | Contributions to pest suppression through predator phenology and functional diversity | $13,095 | Dr.Ricardo Ramirez
Utah State University
Erica Stephens
Utah State University |
<table>
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<tr>
<th>Project Code</th>
<th>Title</th>
<th>Funding</th>
<th>Principal Investigator(s)</th>
</tr>
</thead>
</table>
| OW24-004     | Developing New Osmia Species for Commercial Management and Pollination Diversification | $75,000 | Dr. Kelsey Graham  
USDA ARS  
Kimball Clark  
Nativebees.com  
Scott Pohlschneider  
Stahlbush Island Farm  
Mervin Weeks  
Weeks Berries of Paradise |
| OW19-343     | Management strategies for Tomato spotted wilt virus and curtoviruses in Utah | $31,149 | Claudia Nischwitz  
Utah State University  
Dr. Diane Alston  
Utah State University  
Richard Heflebower  
Utah State University Extension - Washington County |
| OW19-346     | Promoting crop diversification and soil health for cut flower production | $49,999 | Dr. Melanie Stock  
Utah State University  
Dr. Brent Black  
Utah State University  
Dr. Daniel Drost  
Utah State University  
Dr. Larry Rupp  
Utah State University |
| OW18-007     | Supporting Natural Enemies of the Cabbage Aphid with Hedgerow Plantings | $48,554 | Laura Horn  
Wild Bee Project |
| OW14-036     | Biochar Amendment to Enhance Tomato and Melon Productivity and Protect Against Phytophthora Root Rot Disease | $49,990 | Marion Murray  
Utah State University |
| OW13-005     | Rangeland Restoration on the Channel Scablands of Eastern Washington | $49,931 | Dr. Kip Panter  
USDA-ARS-PPRL |
| OW12-020     | Feedlot performance, feed efficiency, and profitability of cattle fed either a complete mixed ration or allowed to voluntarily select their diet. | $49,967 | Beth Burritt  
Utah State University |

**Total funding from the USDA SARE program to Utah**

$8,032,987

For further information on projects, contact Western SARE at (406) 994-4785 or wsare@montana.edu.

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