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 $310 million to more than 7,433 initiatives.

SARE is grassroots with far-reaching impact

Four regional councils of expert practitioners set priorities and make grants in every state and island protectorate.

SARE communicates results

SARE shares project results by requiring grantees to conduct outreach and grower engagement; and by maintaining an online library of practical publications, grantee-produced information products and other educational materials.

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

Idaho

Project Highlight: High Tunnels Extend Local Food Production

In 2010, Idaho’s farmers, researchers and educators launched a collaborative effort to achieve the goal of having 20 percent of the state’s food produced locally by 2020. At the same time, a survey of local food vendors revealed that the single largest roadblock to making this goal a reality is Idaho’s short growing season.

This prompted the University of Idaho’s Stephen Love to organize a team of horticulture specialists to expand farmers’ use of high tunnels in the state. Funded by a SARE grant, the team collaborated with three experienced high tunnel growers in different parts of the state to evaluate high tunnel designs and the profitability of growing various crops in them.

The experience at the three farms gave the team important information to share with growers around the state. On one farm, eggplants grown inside the tunnels were superior economically to ones grown outside, but for cucumbers the results were mixed. On another farm, there was a clear advantage to growing tomatoes, garlic and peppers in high tunnels. The third farm showed that medicinal crops otherwise unsuited to Idaho’s climate can be grown in high tunnels. It also evaluated structures specially designed by engineering students to withstand harsh winter conditions.

For more information on this project, see sare.org/projects, and search for project number OW13-043.

SARE in Idaho

western.sare.org/sare-in-your-state/idaho

$4,085,786 in total funding

70 grant projects

(since 1988)

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

Total awards: 70 grants
- 2 Enhanced State Grants
- 31 Farmer/Rancher
- 2 Graduate Student
- 4 On Farm
- Research/Partnership
- 9 Professional Development
- Program
- 22 Research and Education

Total funding: $4,085,786
- $124,998 Enhanced State Grants
- $264,787 Farmer/Rancher
- $49,991 Graduate Student
- $151,960 On Farm
- Research/Partnership
- $641,098 Professional Development
- Program
- $2,852,952 Research and Education

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: western.sare.org/sare-in-your-state/idaho

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-pages/idaho to learn more.

Kate Painter
University of Idaho Extension,
Boundary County
(208) 267-3235
kpainter@uidaho.edu

Carmen Willmore
University of Idaho Extension
(208) 886-2406
cwillmore@uidaho.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.
Idaho has been awarded $3,960,788 grants to support 65 projects, including but not limited to, 19 research and/or education projects, 9 professional development projects and 31 producer-led projects. Idaho has also received additional SARE support through multi-state projects.

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| SW18-015  | On-farm evaluation and demonstration of advanced manure solidliquid separation | $287,466     | Dr.Lide Chen  
University of Idaho          |
|           | technologies for a sustainable dairy industry in Idaho                       |              |                                          |
| SW16-031  | Optimizing Water and Nitrogen Use for Sustainable Wheat Production           | $249,939     | Dr.Olga Walsh  
University of Idaho          |
| SW11-122  | Incorporating Cover Crops and Green Manure in High-Desert Organic and          | $47,628      | Lauren Golden  
Conventional Farming Systems        | University of Idaho        |
| SW06-039  | 'Living on the Land' Stewardship Education Program Expansion                 | $160,204     | Stephanie Etter  
University of Idaho Extension |
| SW06-083  | Black Soldier Fly Larvae as a Tool for Managing Animal Waste and providing    | $117,682     | Sophie St-Hilaire  
Aquaculture Industry               | Idaho State University     |
| SW05-039  | Using farmer-rancher input to develop and implement experiential educational  | $160,056     | Cinda Williams  
opportunities for beginning farmers | University of Idaho Extension |
| SW05-067  | Assessment and Demonstration of the Sustainability of Long vs. Short Potato    | $179,403     | Bryan Hopkins  
Rotations                          | University of Idaho         |
| SW05-142  | Assessment and Demonstration of the Sustainability of Long vs. Short Potato    | $135,756     | Amanda Shiffler  
Rotations                          | University of Idaho         |
| SW03-021  | Integrated Residue Management Systems for Sustained Seed Yield of Kentucky    | $294,243     | Donald Thill  
Bluegrass Without Burning          | University of Idaho         |
| SW02-004  | Reducing Nitrogen and Phosphorus Excretions from Dairies in Gooding and       | $145,672     | Alexander Hristov  
Jerome Counties, Idaho             | University of Idaho         |
| SW02-037  | Promoting Sustainable Potato Cropping Systems                                | $158,477     | Bryan Hopkins  
University of Idaho               |
### On-Farm Versus Agricultural Experiment Station Evaluation and Improvement of Intrinsic Characteristics of Landrace Common Bean Cultivars for Sustainable Farming Systems in the Twenty-First Century

- **Project #:** SW02-038
- **Title:** On-Farm Versus Agricultural Experiment Station Evaluation and Improvement of Intrinsic Characteristics of Landrace Common Bean Cultivars for Sustainable Farming Systems in the Twenty-First Century
- **SARE Support:** $167,717
- **Project Leader(s):** Shree Singh, University of Idaho

### Exploration and Implementation of Sustainable Ag Practices and Outreach on the Fort Hall Indian Reservation for the Protection of Groundwater

- **Project #:** SW00-042
- **Title:** Exploration and Implementation of Sustainable Ag Practices and Outreach on the Fort Hall Indian Reservation for the Protection of Groundwater
- **SARE Support:** $103,913
- **Project Leader(s):** Jennifer Miller, NCAP, John Helsel, Shoshone-Bannock Tribes

### Management, Impact and Economics of Beef Cattle Grazing in Mountain Riparian Ecosystems

- **Project #:** SW97-010
- **Title:** Management, Impact and Economics of Beef Cattle Grazing in Mountain Riparian Ecosystems
- **SARE Support:** $105,400
- **Project Leader(s):** Patrick A. Momont, Univ. of ID, Dept. of Animal & Vet. Sci.

### Brassica Green Manure Systems for Weed, Nematode, and Disease Control in Potatoes

- **Project #:** SW95-021
- **Title:** Brassica Green Manure Systems for Weed, Nematode, and Disease Control in Potatoes
- **SARE Support:** $112,580
- **Project Leader(s):** Charlotte Eberlein, University of Idaho

### Development of Winter Wheat Cover Crop Systems for Weed Control in Potatoes

- **Project #:** LW91-027
- **Title:** Development of Winter Wheat Cover Crop Systems for Weed Control in Potatoes
- **SARE Support:** $42,141
- **Project Leader(s):** Charlotte Eberlein, University of Idaho

### Development of Sustainable Potato Production Systems for the Pacific North West

- **Project #:** LW91-029
- **Title:** Development of Sustainable Potato Production Systems for the Pacific North West
- **SARE Support:** $330,000
- **Project Leader(s):** Jeffrey C. Stark, University of Idaho

### An Economic Evaluation of the MSU Crop Rotations On-Farm Research, Demonstration Legume, Cereal Rotations Compared with Conventional Rotations

- **Project #:** LWD91-002
- **Title:** An Economic Evaluation of the MSU Crop Rotations On-Farm Research, Demonstration Legume, Cereal Rotations Compared with Conventional Rotations
- **SARE Support:** $23,675
- **Project Leader(s):** Edgar Michalson, University of Idaho

### Total Resource Budgeting of LISA (SARE) Farm Enterprises

- **Project #:** LW89-015
- **Title:** Total Resource Budgeting of LISA (SARE) Farm Enterprises
- **SARE Support:** $31,000
- **Project Leader(s):** Paul Patterson, University of Idaho

### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

#### EW20-039 Enhancing Processing and Access to Local Food in Idaho

- **SARE Support:** $90,000
- **Project Leader(s):** Carmen Willmore, University of Idaho Extension, Kate Painter, University of Idaho, Extension

#### EW18-028 Idaho Qualitative Soil Health Initiative and Training

- **SARE Support:** $15,724
- **Project Leader(s):** Jessica Harrold, Ada Soil & Water Conservation District, Josie Erskine, Jessica Harrold, Ada Soil & Water Conservation District

#### EW18-018 Supporting outcome-based management on private & public rangelands: training agricultural professionals on monitoring techniques

- **SARE Support:** $72,519
- **Project Leader(s):** Dr. Jason Karl, University of Idaho

#### EW05-012 Forage and Pasture Educational Program for Extension, FSA, and NRCS in the Pacific Northwest

- **SARE Support:** $90,000
- **Project Leader(s):** Glenn Shewmaker, University of Idaho

#### EW04-014 Building Knowledge of Sustainable Rangeland Management Using Information Technology

- **SARE Support:** $91,847
- **Project Leader(s):** Karen Lauchbaugh, University of Idaho

#### EW03-009 Expanding Opportunities for Community-Based Educational Programs in Sustainable Small Acreage Farming and Ranching

- **SARE Support:** $98,143
- **Project Leader(s):** Cinda Williams, University of Idaho Extension

#### EW02-011 Workshops on Soil Quality Assessment and Application for Field Staff

- **SARE Support:** $27,590
- **Project Leader(s):** Paula Jones, USDA-NRCS, Three Rivers RC&D Council, Inc.
### Farmer/Rancher Grants

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>FW17-039</td>
<td>Saving Water and Improving Soil Health Through LESA, Cover Crops, No-Till, and Management Intensive Grazing</td>
<td>$20,000</td>
<td>Pat Purdy&lt;br&gt;Pat Purdy</td>
</tr>
<tr>
<td>FW17-055</td>
<td>No-till potatoes into cover crop, using mod. conv. planter</td>
<td>$20,000</td>
<td>Jeff Parkinson&lt;br&gt;Jeff Parkinson</td>
</tr>
<tr>
<td>FW16-042</td>
<td>A Rangeland Stock Handling Concept: Inherding on the Hat Creek Grazing Allotment, Ellis Idaho</td>
<td>$19,423</td>
<td>Glenn Elzinga&lt;br&gt;Alderspring Ranch</td>
</tr>
<tr>
<td>FW11-032</td>
<td>Goat Meat is Great!</td>
<td>$7,799</td>
<td>Evelyn Simon&lt;br&gt;Simon Boers</td>
</tr>
<tr>
<td>FW10-039</td>
<td>Pokey Creek Farm Elderberry Exploration</td>
<td>$14,877</td>
<td>Cinda Williams&lt;br&gt;University of Idaho Extension&lt;br&gt;Greg and Leah Sempel&lt;br&gt;Ashley McFarland&lt;br&gt;University of Idaho Extension</td>
</tr>
<tr>
<td>FW08-031</td>
<td>What Good Are Pasture-Raised Ducks to Whole Farm Systems?</td>
<td>$14,942</td>
<td>Mary Rohlfling</td>
</tr>
<tr>
<td>FW08-318</td>
<td>IBC Technical Services to Farmer’s/Ranchers for Online Markets in South Central Idaho</td>
<td>$29,997</td>
<td>Judy Hall&lt;br&gt;Idaho’s Bounty Co-op</td>
</tr>
<tr>
<td>FW08-322</td>
<td>A Multi-Faceted Approach to Managing Powdery Mildew on Organic Table Grapes in Southwest Idaho</td>
<td>$15,000</td>
<td>Ariel Agenbroad&lt;br&gt;University of Idaho Extension</td>
</tr>
<tr>
<td>FW06-036</td>
<td>Winter and Summer Greenhouse Production for Small-scale Growers</td>
<td>$6,235</td>
<td>Brad Jaeckel&lt;br&gt;Orchard Farm</td>
</tr>
<tr>
<td>FW06-042</td>
<td>Harvest Frequency, Yield and Economics of Summer Squash</td>
<td>$4,730</td>
<td>Karen Strickler</td>
</tr>
<tr>
<td>FW06-015</td>
<td>Extending Forage Season with Multi-functional Browse Islands</td>
<td>$8,560</td>
<td>Juvia Judd&lt;br&gt;Lazy M Suris&lt;br&gt;Deborah Berman&lt;br&gt;Lazy M Suris</td>
</tr>
<tr>
<td>FW05-007</td>
<td>Controlling Common Tansy with Sheep</td>
<td>$3,422</td>
<td>Kimberly McConnaughy</td>
</tr>
<tr>
<td>FW04-203</td>
<td>Optimizing Spatial &amp; Temporal Aspects of Designs for Small-Scale Diverse Farms</td>
<td>$5,500</td>
<td>Bridget Betta Bunzel&lt;br&gt;Bunzel Organics</td>
</tr>
<tr>
<td>FW03-307</td>
<td>Ovine Browsing for Brush Control of Forested Environments</td>
<td>$7,500</td>
<td>Jeff Nauman&lt;br&gt;Idaho Department of Lands</td>
</tr>
<tr>
<td>Project #</td>
<td>Project Title</td>
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<td>Project Leaders</td>
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</tr>
<tr>
<td>FW01-025</td>
<td>Developing a Sustainable Market for Small Farms in a Rural Community</td>
<td>$7,385</td>
<td>Diane Green  Grentree Naturals</td>
</tr>
<tr>
<td>FW01-039</td>
<td>Noxious Weed Grazing with Goats</td>
<td>$7,000</td>
<td>Bonnie Jensen  Lemhi County Ext.</td>
</tr>
<tr>
<td>FW01-056</td>
<td>Farmers Educating Farmers: Developing a Soil Quality Indicator Guide</td>
<td>$10,500</td>
<td>Kyle Wilson  Natural Resource Conservation Agency</td>
</tr>
<tr>
<td>FW00-259</td>
<td>The Farm to Fork Exchange</td>
<td>$4,625</td>
<td>Nate Jones</td>
</tr>
<tr>
<td>FW00-052</td>
<td>Low Stress Stockmanship School for Lemhi County, ID</td>
<td>$5,450</td>
<td>Wally Butler</td>
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<tr>
<td>FW99-012</td>
<td>Automated On-Farm Irrigation Water Diversion Gate</td>
<td>$3,890</td>
<td>George Davis</td>
</tr>
<tr>
<td>FW99-076</td>
<td>On-Site Rearing of Beneficial Predatory Mite Species</td>
<td>$4,200</td>
<td>Richard Nathanson</td>
</tr>
<tr>
<td>FW98-099</td>
<td>Wiersema Dairy Agroforestry Project</td>
<td>$5,000</td>
<td>Jim Wiersema</td>
</tr>
<tr>
<td>FW98-097</td>
<td>Fear and Loathing in the Potato Patch: Controlling Nematodes with Rape Seed Meal and Green Manures</td>
<td>$9,910</td>
<td>John O'Connor</td>
</tr>
<tr>
<td>FW97-024</td>
<td>Systems Thinking in a Range Environment</td>
<td>$5,000</td>
<td>Jay Black</td>
</tr>
<tr>
<td>FW97-044</td>
<td>Paradise Time Controlled Grazing</td>
<td>$5,000</td>
<td>Mark Pratt</td>
</tr>
<tr>
<td>FW97-049</td>
<td>Non-Irrigated Alfalfa Performance Trial, Benewah County, Idaho</td>
<td>$3,500</td>
<td>Christina Crawford</td>
</tr>
<tr>
<td>FW96-060</td>
<td>Economic Viability of Greenhouse Solarization</td>
<td>$2,450</td>
<td>Larry Higgins</td>
</tr>
<tr>
<td>FW95-034</td>
<td>Row Spacing Effect on Weed Suppression</td>
<td>$530</td>
<td>Lee Griffiths</td>
</tr>
<tr>
<td>FW95-046</td>
<td>Developing an Idaho-Based Marketing Cooperative for Sustainability and Locally Grown Produce</td>
<td>$4,622</td>
<td>Janie Burns  Meadowlark Farms</td>
</tr>
<tr>
<td>FW95-080</td>
<td>Squash Bug Management Through Introduction of Game Birds</td>
<td>$2,740</td>
<td>Jill Kohler  Eagle Organic Farms</td>
</tr>
<tr>
<td>FW95-025</td>
<td>Biological Control in Idaho Alfalfa Seed Fields</td>
<td>$5,000</td>
<td>Larry Sorenson  Sorenson Farms</td>
</tr>
</tbody>
</table>
GW20-206  Evaluating the effectiveness of mustard species and their concentrated extracts in reducing losses to wireworms in the Pacific Northwest, USA. $24,998 Dr. Arash Rashed
University of Idaho
Reed Findlay
University of Idaho
Atoosa Nikoukar/ PI Rashed
University of Idaho

GW20-217  The effects of cover crops on soil arthropod communities in the Inland Pacific Northwest $24,993 Dr. Sanford Eigenbrode
University of Idaho
Dane Elmquist (PI: Eigenbrode)
University of Idaho

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>
| OW15-032  | Madison County Healthy Soil Initiative                                        | $50,000      | Robbie Taylor
Madison SWCD                           |
| OW13-017B | Reference strips and precision sensors for increased nitrogen use efficiency in wheat production | $1,961       | Dr. Olga Walsh
University of Idaho                   |
| OW13-043  | Extension of Local Food Production in Idaho Using High Tunnel Technology       | $49,999      | Dr. Stephen Love
University of Idaho                   |
| OW10-301  | Using Aquaponics with Renewable Energy Resources to Create Sustainable Food Systems while Reducing Nutrient, Energy, and Water Costs | $50,000      | Matt Johnson
Sustain Pro Management
Harry Ako
University of Hawaii                   |

Total funding from the USDA SARE program to Idaho
$3,960,788

For further information on projects, contact Western SARE at (435) 797-2257 or wsare@usu.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).