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 $312 million to more than 7,507 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

$3,960,788
in total funding

68 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: 68 grants
- 31 Farmer/Rancher
- 2 Graduate Student
- 4 On Farm Research/Partnership
- 9 Professional Development Program
- 22 Research and Education

Total funding: $3,960,788
- $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

USDA SARE

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.

### RESEARCH AND EDUCATION GRANTS

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

$167,717
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

$103,913
Jennifer Miller
NCAP
John Helsel
Shoshone-Bannock Tribes

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

$105,400
Patrick A. Momont
Univ. of ID, Dept. of Animal & Vet. Sci.

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

$112,580
Charlotte Eberlein
University of Idaho

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

$42,141
Charlotte Eberlein
University of Idaho

Development of Sustainable Potato Production Systems for the Pacific North West

$330,000
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

$23,675
Edgar Michalson
University of Idaho

Total Resource Budgeting of LISA (SARE) Farm Enterprises

$31,000
Paul Patterson
University of Idaho

PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| WID21-001    | Enhancing Processing and Access to Local Food in Idaho                       | $90,000      | Carmen Willmore
University of Idaho Extension
Kate Painter
University of Idaho, Extension |
| EW18-028     | Idaho Qualitative Soil Health Initiative and Training                        | $15,724      | 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 | $72,519      | Dr. Jason Karl
University of Idaho |
| EW05-012     | Forage and Pasture Educational Program for Extension, FSA, and NRCS in the Pacific Northwest | $90,000      | Glenn Shewmaker
University of Idaho |
| EW04-014     | Building Knowledge of Sustainable Rangeland Management Using Information Technology | $91,847      | Karen Launchbaugh
University of Idaho |
| EW03-009     | Expanding Opportunities for Community-Based Educational Programs in Sustainable Small Acreage Farming and Ranching | $98,143      | Cinda Williams
University of Idaho Extension |
| EW02-011     | Workshops on Soil Quality Assessment and Application for Field Staff        | $27,590      | Paula Jones
USDA-NRCS, Three Rivers RC&D Council, Inc. |
### Project # | Project Title | SARE Support | Project Leaders
--- | --- | --- | ---
EW99-013 | A Community Based Approach to Extension In Organic Agriculture | $10,000 | Mir M. Seyedbagheri  
University of Idaho, Elmore County Extension  
EW97-012 | Composting Education and Information Access for Western Agriculture | $145,275 | Cinda Williams  
University of Idaho Extension  
Robert Rynk  
University of Idaho

### FARMER/RANCHER GRANTS

| Project # | Project Title | SARE Support | Project Leaders
--- | --- | --- | ---
FW17-039 | Saving Water and Improving Soil Health Through LESA, Cover Crops, No-Till, and Management Intensive Grazing | $20,000 | Pat Purdy  
Pat Purdy

FW17-055 | No-till potatoes into cover crop, using mod. conv. planter | $20,000 | Jeff Parkinson  
Jeff Parkinson

FW16-042 | A Rangeland Stock Handling Concept: Inherding on the Hat Creek Grazing Allotment, Ellis Idaho | $19,423 | Glenn Elzinga  
Alderspring Ranch

FW11-032 | Goat Meat is Great! | $7,799 | Evelyn Simon  
Simon Boers

FW10-039 | Pokey Creek Farm Elderberry Exploration | $14,877 | Cinda Williams  
University of Idaho Extension  
Greg and Leah Sempel  
Ashley McFarland  
University of Idaho Extension

FW08-031 | What Good Are Pasture-Raised Ducks to Whole Farm Systems? | $14,942 | Mary Rohlfling

FW08-318 | IBC Technical Services to Farmer's/Ranchers for Online Markets in South Central Idaho | $29,997 | Judy Hall  
Idaho's Bounty Co-op

FW08-322 | A Multi-Faceted Approach to Managing Powdery Mildew on Organic Table Grapes in Southwest Idaho | $15,000 | Ariel Agenbroad  
University of Idaho Extension

FW06-042 | Harvest Frequency, Yield and Economics of Summer Squash | $4,730 | Karen Strickler

FW06-015 | Extending Forage Season with Multi-functional Browse Islands | $8,560 | Juvia Judd  
Lazy M Suris  
Deborah Berman  
Lazy M Suris

FW06-036 | Winter and Summer Greenhouse Production for Small-scale Growers | $6,235 | Brad Jaeckel  
Orchard Farm

FW05-007 | Controlling Common Tansy with Sheep | $3,422 | Kimberly McConnaghy

FW04-203 | Optimizing Spatial & Temporal Aspects of Designs for Small-Scale Diverse Farms | $5,500 | Bridget Betta Bunzel  
Bunzel Organics

FW03-307 | Ovine Browsing for Brush Control of Forested Environments | $7,500 | Jeff Nauman  
Idaho Department of Lands
<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<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</td>
</tr>
<tr>
<td>FW01-025</td>
<td>Grentree Naturals</td>
<td></td>
<td>Grentree Naturals</td>
</tr>
<tr>
<td>FW01-039</td>
<td>Noxious Weed Grazing with Goats</td>
<td>$7,000</td>
<td>Bonnie Jensen</td>
</tr>
<tr>
<td>FW01-039</td>
<td>Lemhi County Ext.</td>
<td></td>
<td>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</td>
</tr>
<tr>
<td>FW01-056</td>
<td>Natural Resource Conservation Agency</td>
<td></td>
<td>Natural Resource Conservation Agency</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>
</tr>
<tr>
<td>FW00-259</td>
<td>The Farm to Fork Exchange</td>
<td>$4,625</td>
<td>Nate Jones</td>
</tr>
<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>FW98-097</td>
<td>Fear and Loathing in the Potato Patch: Controlling Nematodes with Rape Seed</td>
<td>$9,910</td>
<td>John O'Connor</td>
</tr>
<tr>
<td>FW98-097</td>
<td>Meal and Green Manures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FW98-099</td>
<td>Wiersema Dairy Agroforestry Project</td>
<td>$5,000</td>
<td>Jim Wiersema</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>FW95-046</td>
<td>Developing an Idaho-Based Marketing Cooperative for Sustainability and Locally</td>
<td>$4,622</td>
<td>Janie Burns</td>
</tr>
<tr>
<td>FW95-046</td>
<td>Grown Produce</td>
<td></td>
<td>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</td>
</tr>
<tr>
<td>FW95-080</td>
<td>Eagle Organic Farms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FW95-025</td>
<td>Biological Control in Idaho Alfalfa Seed Fields</td>
<td>$5,000</td>
<td>Larry Sorenson</td>
</tr>
<tr>
<td>FW95-025</td>
<td>Sorenson Farms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FW95-034</td>
<td>Row Spacing Effect on Weed Suppression</td>
<td>$530</td>
<td>Lee Griffiths</td>
</tr>
</tbody>
</table>

**GRADUATE STUDENT GRANTS**
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

<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 |
| OW13-043  | Extension of Local Food Production in Idaho Using High Tunnel Technology | $49,999 | Dr. Stephen Love  
University of Idaho |
| OW13-017B | Reference strips and precision sensors for increased nitrogen use efficiency in wheat production | $1,961 | Dr. Olga Walsh  
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).