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 $308 million to more than 7,395 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…

Oklahoma

Project Highlight: Growing a Local Understanding of Soil Health

Some farming practices commonly used in Oklahoma have reduced the state’s soil quality, leading to soils that are often low in organic matter. To remain productive, attention needs to be placed on improving and monitoring soil quality.

Realizing the importance of such attention, Kefyalew Desta used a SARE grant to obtain local soil quality information and develop a soil quality assessment index that can be used to quantify the overall soil quality status of a farm. As Desta was testing soil properties on-farm, 65 percent of the owners participated in the sampling and discussed the results.

This engagement of the farmers paid off. According to Desta, at the beginning of the project, 65 percent of them did not know the difference between soil health and soil fertility. Following the on-farm sampling and trainings, 80 percent of the farmers are now communicating with ag educators to seek help in soil health analysis. At least 60 percent plan to use on-site soil quality testing as part of their routine soil management. Desta also coordinated in-service trainings and demonstrations, reaching over 200 people.

For more information on this project, see sare.org/projects, and search for project number OS11-058.

SARE in Oklahoma

southern.sare.org/sare-in-your-state/oklahoma

$2,756,374 in total funding

44 grant projects

(since 1988)

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

Total awards: 44 grants
- 13 Farmer/Rancher
- 2 Graduate Student
- 8 On Farm Research/Partnership
- 7 Professional Development Program
- 14 Research and Education

Total funding: $2,756,374
- $122,429 Farmer/Rancher
- $19,969 Graduate Student
- $113,934 On Farm Research/Partnership
- $635,389 Professional Development Program
- $1,864,653 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: southern.sare.org/sare-in-your-state/oklahoma

Contact Your SARE State Coordinator

Terry Gipson
Langston University
(405) 466-6126
terry.gipson@langston.edu

Jason Warren
Oklahoma State University
(405) 744-1721
jason.warren@okstate.edu

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.

For detailed information on SARE projects, go to www.SARE.org
Oklahoma has been awarded $2,773,238 grants to support 45 projects, including but not limited to, 13 research and/or education projects, 7 professional development projects and 13 producer-led projects. Oklahoma 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>
| LS20-338  | Researching & Networking Native American & Socially Disadvantaged Farmers Traditional Market Gardening Production System Resiliency | $298,066     | Dr. Joshua Ringer  
Longston University School of Agriculture and Applied Sciences  
Julie Gahn  
Oklahoma Farmers and Ranchers Association  
Denis Haga  
Pawnee Nation College  
Dr. Tracey Payton-Miller  
Langston University School of Agriculture and Applied Sciences  
Dr. Monte Randall  
College of the Muscogee Nation |
| LS06-189  | Increasing Sustainability of Southern Great Plains’ Agriculture Through No-till Production Systems | $183,000     | Jeff Edwards  
Oklahoma State University |
| LS02-139  | Developing Sustainable Stored Grain IPM Systems in Oklahoma and Texas | $133,371     | Thomas Phillips  
Oklahoma State University |
| LS01-119  | Use of goats for sustainable vegetation management in grazing lands | $172,210     | Arthur Goetsch  
Langston University |
| LS00-116  | Developing Plans for Sustainable Beef Marketing Strategies | $19,700      | Eric Allenbach  
The Kerr Center for Sustainable Agriculture, Inc. |
| LS99-102  | Demonstration of a Sustainable Integrated Production System for Native Pecan and Beef Cattle Producers and its Effect on Ecology in Flood Prone Areas | $210,188     | B. Dean McCraw  
Dept. of Horticulture |
| LS96-074  | Improving Integrated Resource Management Skills of Beef Producers | $163,642     | Damona Doye  
Oklahoma State University |
| LS96-079  | Multi-Cropping Cattle and Watermelon in the Southern Plains | $54,752      | Warren Roberts  
Oklahoma State University, Department of Horticulture |
Oklahoma State University |
| LS94-058  | Post-CRP Land Management and Sustainable Production Alternatives for Highly Erodible Land in the Southern Great Plains | $196,100     | Thanh H. Dao  
USDA ARS |
**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>ES19-145</td>
<td>Southern Region SARE Professional Development Grant -- The Road to Soil Health</td>
<td>$59,442</td>
<td>Amy Hays Noble Research Institute, LLC</td>
</tr>
<tr>
<td>ES02-062</td>
<td>A Training and Educational Program to Ensure the South’s Future</td>
<td>$119,905</td>
<td>Jim Horne Kerr Center for Sustainable Agriculture</td>
</tr>
<tr>
<td>ES98-037</td>
<td>Oklahoma Master Woodland Owner Program</td>
<td>$23,640</td>
<td>William Ross Oklahoma State University Department Of Forestry</td>
</tr>
<tr>
<td>ES97-024</td>
<td>Barriers to Sustainable Agriculture Training in Oklahoma</td>
<td>$10,000</td>
<td>Derrell Peel Oklahoma State University</td>
</tr>
<tr>
<td>ES97-027</td>
<td>A Training Program for Agriculture Educators Targeting Integrated Cow/calf Operation Management Systems</td>
<td>$342,389</td>
<td>Steven Smith Oklahoma State University</td>
</tr>
<tr>
<td>ES97-020</td>
<td>State Training in Integrated Erosion Control Systems</td>
<td>$70,013</td>
<td>Gerrit Cuperus Oklahoma State University</td>
</tr>
<tr>
<td>ES97-021</td>
<td>State Training Enhancement Project to Ensure Effective Sustainable Agriculture Training in Integrated Erosion Control Systems</td>
<td>$10,000</td>
<td>Gerrit Cuperus Oklahoma State University</td>
</tr>
</tbody>
</table>

**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>FS14-283</td>
<td>Diversification of Winter Wheat &amp; Beef Cattle Production fields Through Agroforestry &amp; Covercrop integration</td>
<td>$9,107</td>
<td>Doug Ringer Farmer</td>
</tr>
<tr>
<td>FS11-254</td>
<td>Hitting Seasonal Market Highs by breeding Meat Goats during the Summer months</td>
<td>$2,821</td>
<td>James Jones Rockin Double J Boer Goats</td>
</tr>
<tr>
<td>FS04-183</td>
<td>Sustainable Hair Sheep Silvopastoral System</td>
<td>$9,980</td>
<td>Brother Joseph-Marie Owen</td>
</tr>
<tr>
<td>FS03-162</td>
<td>Oklahoma Farm Direct Retail Market Project</td>
<td>$15,000</td>
<td>Kathy Carter-White Cherokee Small Farm Project</td>
</tr>
<tr>
<td>FS03-166</td>
<td>White Wheat Marketing System</td>
<td>$15,000</td>
<td>Bob Dietrick Oklahoma White Wheat Producers’ Alliance</td>
</tr>
<tr>
<td>FS02-150</td>
<td>Fixed Film Anerobic Methane Digester</td>
<td>$9,184</td>
<td>Michael H. Green</td>
</tr>
</tbody>
</table>
Low Cost Method of Establishing High Seral Native Grass Species  $8,519  Terry Stuart Forst

The Effect of Crop Land Applied Poultry Litter on Water Quality  $9,556  Rick Jeans

Integrated Goat Management System for Fiber and Meat  $10,000  Claud Evans

Economics of Extended-season Cut Flower Production  $8,100  Vicki Stamback  Bear Creek Farm

Sustainable Wheat Management Systems  $9,344  Curtis Torrance

Demonstration of No-Tillage Grain Production for Soil and Moisture Conservation  $9,818  Bob Dietrick  Oklahoma White Wheat Producers’ Alliance

Cut Flowers as a Sustainable Agriculture Alternative  $6,000  Vicki Stamback  Bear Creek Farm

**GRADUATE STUDENT GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS08-066</td>
<td>Conservation of Predatory Carabid Beetles (Coleoptera: Carabidae) in agroecosystems of the Southern Great Plains</td>
<td>$9,996</td>
<td>Kristopher Giles  Oklahoma State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sarah Donelson  Oklahoma State University</td>
</tr>
<tr>
<td>GS03-025</td>
<td>Integrating Effects of Natural Enemies into Winter Wheat Greenbug Management</td>
<td>$9,973</td>
<td>Kristopher Giles  Oklahoma State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Douglas Jones  Oklahoma State University</td>
</tr>
</tbody>
</table>

**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>
<tbody>
<tr>
<td>OS18-115</td>
<td>Practical Approaches to Microbial Community Analyses for Production Agriculture in the Southern Great Plains</td>
<td>$9,745</td>
<td>Dr.David Brown  USDA-ARS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dr.Curtis Dell  USDA-ARS</td>
</tr>
<tr>
<td>OS18-120</td>
<td>A Comparison of Row Cover Materials for Use in Excluding Major Insect Pests from Cucurbit Crops</td>
<td>$14,933</td>
<td>Dr.Eric Rebek  Oklahoma State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dr.Jim Shrefler  Oklahoma State University</td>
</tr>
<tr>
<td>OS14-091</td>
<td>Row Cover Use Methods for Cucurbit Pest and Pollinator Management</td>
<td>$14,995</td>
<td>Dr.Jim Shrefler  Oklahoma State University</td>
</tr>
<tr>
<td>OS13-080</td>
<td>Companion Plants as Tools for Pest Management of Squash Bug on Summer Squash</td>
<td>$14,792</td>
<td>Dr.Brian Kahn  Oklahoma State University</td>
</tr>
<tr>
<td>OS11-058</td>
<td>Comparison of soil quality of farms managed with sustainable and conventional soil management practices in Oklahoma</td>
<td>$15,000</td>
<td>Dr.Kefyalew (Girma)  Montana State University</td>
</tr>
<tr>
<td>OS09-048</td>
<td>Teff: An Alternative Crop for Oklahoma</td>
<td>$14,948</td>
<td>Dr.Kefyalew (Girma)  Montana State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kefyalew Desta  Oklahoma State University</td>
</tr>
</tbody>
</table>
Increasing the Sustainability of Oklahoma Cropping Systems Using Cover Crops

Dr. Chad Godsey
Oklahoma State University

Introducing Legume Cover Crops into Large Scale Grain-Cattle Production Systems

Steve Kraich
Oklahoma State University Extension

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS11-084</td>
<td>Traditional Mvskoke Foods Recovery Project</td>
<td>$9,964</td>
<td>Stephanie Berryhill</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mvskoke Food Sovereignty Initiative</td>
</tr>
<tr>
<td>CS02-007</td>
<td>Pioneering the Way to the Future</td>
<td>$6,900</td>
<td>Diann Neal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Okemah Chamber of Commerce</td>
</tr>
</tbody>
</table>

Total funding from the USDA SARE program to Oklahoma
$2,773,238

For further information on projects, contact Candace Pollock, Southern SARE public relations coordinator, at (770) 412-4786 or cpollock@uga.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).