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 $389 million to more than 8,542 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, granteeproduced information products and other educational materials.

www.sare.org

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

South Dakota

Project Highlight: High-Efficiency, Year-Round, Tropical Greenhouse

In South Dakota, soybeans, corn, wheat, sunflowers, and alfalfa come to mind when contemplating the state's number one industry - agriculture. In Aurora, South Dakota, Wayward Springs Acres boasts 30 acres of pasture, 20 acres of grass hay ground, sheep, cattle, and goats on their farm. But some of the crops at Wayward Springs have veered in a different, more exotic, direction.

As a child, mechanical engineer Shannon Mutschelknaus developed an interest in horticulture and eventually began saving seeds and growing tropical and subtropical trees.

"I discovered the demand for exotic tropical fruit trees was robust because they are regularly ravaged by seasonal hurricanes," said Mutschelknaus. "Examples of the many plants I’ve successfully propagated include soursop, mamey, Garcinia humilus, Garcinio madruno, cherimoya, Monstera deliciosa, and passion fruit."

Mutschelknaus wanted to use his engineering, research, and horticultural expertise to build a specialized greenhouse to expand his exotic plant business. With support from a SARE grant, he built a greenhouse with an insulated rear wall, passive solar heat, and an in-ground "climate battery." Climate battery greenhouses like Mutschelknaus's use the earth below the greenhouse to manage excess heat captured during the day. Tubing is buried beneath the greenhouse, and a fan circulates air through the tubing. Warm, humid daytime air circulates underground, where it cools down before re-entering the greenhouse. And at night, fans push the cool air underground to absorb the earth's heat and bring warmth back into the structure.

Mutschelknaus now grows leafy greens and tomatoes in his greenhouse along with novel fruits like lowquats, soursops, and cherimoya. His plans are available to the public with easy-to-read graphs, illustrations, videos, and clear guidelines.

View Wayward Spring's greenhouse plans and instructional videos at sare.org/projects; search for project number FNC19-1185.

SARE in South Dakota

northcentral.sare.org/state-programs/south-dakota

$4,794,402 in total funding

126 grant projects

(since 1988)

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

Total awards: 126 grants
- 30 Research and Education
- 8 Professional Development Program
- 54 Farmer/Rancher
- 14 Graduate Student
- 9 Youth Educator
- 8 Youth
- 3 On Farm Research/Partnership

Total funding: $4,794,402
- $3,626,345 Research and Education
- $458,940 Professional Development Program
- $421,646 Farmer/Rancher
- $150,698 Graduate Student
- $24,335 Youth Educator
- $2,580 Youth
- $109,858 On Farm Research/Partnership

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: northcentral.sare.org/state-programs/south-dakota

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 northcentral.sare.org/state-pages/south-dakota to learn more.

Amanda Bachmann  
South Dakota State University  
(605) 773-8120  
amanda.bachmann@sdstate.edu

David Karki  
South Dakota State University  
(605) 882-5140  
David.Karki@sdstate.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.
South Dakota has been awarded $4,794,402 grants to support 123 projects, including but not limited to, 27 research and/or education projects, 8 professional development projects and 54 producer-led projects. South Dakota 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>
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</thead>
<tbody>
<tr>
<td>LNC23-479</td>
<td>Ethnobotany Education Project</td>
<td>$66,442</td>
<td>Marla Bull Bear</td>
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<td>Lakota Youth Development</td>
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<td>LNC23-485</td>
<td>Assessing and Improving Lakota Land-User Social-Ecological Interactions and Impacts on Sustainability</td>
<td>$249,768</td>
<td>Dr. Francisco Munoz-Arriola</td>
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<td>University of Nebraska-Lincoln, School of Natural Resources</td>
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<tr>
<td>LNC23-493</td>
<td>Evaluating sustainability of dairy production systems in South Dakota: Relationship between milk carbon footprint and farm profitability</td>
<td>$249,824</td>
<td>Dr. Maristela Rovai, DVM</td>
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<td></td>
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<td>South Dakota State University - DEPT. DAIRY &amp; FOOD SCIENCE</td>
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<td>Md Elias Uddin South Dakota State University</td>
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<tr>
<td>LNC22-460</td>
<td>Comparing soil tarping and solarization for early season weed control in vegetable crop systems - a research and demonstration study</td>
<td>$249,935</td>
<td>Dr. Rhoda Burrows</td>
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<tr>
<td>LNC21-445</td>
<td>Improving watershed health, wildlife habitat, and ranch profitability: education and demonstration of low-cost, low-tech riparian restoration tools</td>
<td>$246,721</td>
<td>Dr. Krista Ehler</td>
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<tr>
<td>LNC18-405</td>
<td>Using native rhizobia to create a drought-resilient field pea production system</td>
<td>$199,813</td>
<td>Christopher Graham</td>
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<td>South Dakota State University</td>
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<tr>
<td>LNC18-410</td>
<td>Dynamics of Dung Invertebrate Communities, and Their Contributions to Profitability in Regenerative Rangelands</td>
<td>$200,000</td>
<td>Dr. Jonathan Lundgren, PhD</td>
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<td>Ecdysis Foundation</td>
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<td>LNC15-371</td>
<td>Managing Grassland Vegetation with Winter-Patch Grazing: Potential Benefits to Livestock and Wildlife</td>
<td>$199,294</td>
<td>Dr. Patricia Johnson</td>
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<td>South Dakota State University</td>
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<tr>
<td>LNC11-338</td>
<td>Mob Grazing Increases Efficiency and Profitability of Livestock Production</td>
<td>$199,988</td>
<td>Dr. Alexander Smart</td>
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<td>LNC10-322</td>
<td>Development and Demonstration of a New Method of Physical Weed Control</td>
<td>$174,603</td>
<td>Dr. Frank Forcella</td>
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<td>USDA-ARS</td>
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<tr>
<td>Project #</td>
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<td>Project Leaders</td>
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<tr>
<td>LNC10-326</td>
<td>Small Acreage Success: Connecting Natural Resource Professionals with a Non-Traditional Audience</td>
<td>$95,319</td>
<td>Mindy Hubert&lt;br&gt;South Dakota State University&lt;br&gt;Dr. Roger Gates&lt;br&gt;SDSU Extension</td>
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<tr>
<td>LNC09-311</td>
<td>South Dakota Beginning Farmer Training and Linking Project</td>
<td>$25,000</td>
<td>Frank James&lt;br&gt;Dakota Rural Action&lt;br&gt;Tonya Haigh&lt;br&gt;Dakota Rural Action</td>
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<tr>
<td>LNC07-277</td>
<td>Patch Burn-Grazing to Promote Environmental Sustainability</td>
<td>$144,685</td>
<td>Dr. Alexander Smart&lt;br&gt;South Dakota State University</td>
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<td>LNC07-278</td>
<td>Benefits of forage-based heifer development and post-AI supplementation.</td>
<td>$149,026</td>
<td>Dr. George Perry&lt;br&gt;South Dakota State University</td>
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<tr>
<td>LNC07-280</td>
<td>Post-Prairie Dog Rangeland Recovery</td>
<td>$147,470</td>
<td>Dr. Patricia Johnson&lt;br&gt;South Dakota State University</td>
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<td>LNC05-260</td>
<td>Effectiveness of thiamin in reducing the impacts of high-sulfate water</td>
<td>$144,805</td>
<td>Dr. Patricia Johnson&lt;br&gt;South Dakota State University</td>
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<tr>
<td>LNC03-224</td>
<td>From Food Stamps to Home Production</td>
<td>$135,000</td>
<td>Ann Krush&lt;br&gt;Center for Permaculture as a Native Science</td>
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<tr>
<td>LNC01-194</td>
<td>Profit by Planning: Helping Fresh Market Vegetable Growers Meet Financial Goals and Improve their Quality of Life</td>
<td>$71,914</td>
<td>John Hendrickson&lt;br&gt;CIAS, UW-Madison</td>
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<tr>
<td>LNC00-163</td>
<td>Rosebud Producers Develop WIC Markets</td>
<td>$94,000</td>
<td>Ann Krush&lt;br&gt;Center for Permaculture as a Native Science</td>
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<tr>
<td>LNC95-079</td>
<td>The Effect of Spring Seeded Annual Medic, Genus Medicago, on Weed Management and Soil Quality in Corn Production</td>
<td>$73,000</td>
<td>Sharon Clay&lt;br&gt;Dept of Agronomy, Horticulture, and Plant Science, South Dakota State University</td>
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<tr>
<td>LNC93-055</td>
<td>Economic and Environmental Implications of 1990 Farm Bill Sustainability Provisions in Water Quality Sensitive Areas</td>
<td>$82,650</td>
<td>Thomas Dobbs&lt;br&gt;South Dakota State University</td>
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<tr>
<td>LNC92-009.3</td>
<td>Agronomic and Whole-Farm Economic Analyses of Alternative Small Grain/Row Crop Production Systems for the Northern Plains</td>
<td>$47,150</td>
<td>James Smolik&lt;br&gt;South Dakota State University</td>
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<td>LNC90-009.2</td>
<td>Agronomic and Whole-Farm Economic Analyses of Alternative Small Grain/Row Crop Production Systems for the Northern Plains</td>
<td>$67,950</td>
<td>James Smolik&lt;br&gt;South Dakota State University</td>
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<td>LNC89-009.1</td>
<td>Agronomic and Economic Analyses of Alternative Small Grain/Row Crop Production Systems for the Northern Plains</td>
<td>$60,000</td>
<td>James Smolik&lt;br&gt;South Dakota State University</td>
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<tr>
<td>LNC88-009</td>
<td>Agronomic and Economic Analyses of Alternative Small Grain/Row Crop Production Systems for the Northern Plains</td>
<td>$66,700</td>
<td>James Smolik&lt;br&gt;South Dakota State University</td>
</tr>
</tbody>
</table>
ENC22-216  Strengthening High Tunnel Training and Support for the Next Generation of Technical Service Providers and Producers  $89,805  Kristine Lang  South Dakota State University

ENC15-144  Learning About the Benefits of Integrated Crop-Livestock Systems on Soil Health  $73,861  Julie Walker  South Dakota State University

ENC07-095  Educational Curricula and Professional Development Training for Energy Efficient Production Practices.  $49,947  Dr. David Clay  South Dakota State University

ENC04-077  Building Knowledge of Sustainable Rangeland Management Using Information Technology – Northern Great Plains Partnership  $16,719  Dr. Roger Gates  SDSU Extension

ENC03-074  Advanced Training in Sustainable Production Systems in the Northern Great Plains  $63,556  Dr. Roger Gates  SDSU Extension

ENC00-052  Training in Sustainable Livestock Production Systems on Rangelands of the Western Dakotas  $80,642  Hubert Patterson  South Dakota State University

ENC98-037.1  Outreach Education for Permaculture as Native Science  $36,450  Ann Krush  Center for Permaculture as a Native Science

ENC97-022  Outreach Education for Permaculture as Native Science  $47,960  Ann Krush  Center for Permaculture as a Native Science

**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>FNC22-1340</td>
<td>Create artisan-in-residence program to further education in value-added agricultural products specific to our remote, ranching community</td>
<td>$3,905</td>
<td>Eliza (Blue) Loughlin  Plainsong Farm and Fiber</td>
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<tr>
<td>FNC20-1221</td>
<td>Exploring the use of compost &amp; biochar as both soil amendments and as heat sources to extend the growing season inside high-tunnels on the Pine Ridge</td>
<td>$27,000</td>
<td>Patricia Hammond  Rebel Earth Farms</td>
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<tr>
<td>FNC20-1256</td>
<td>Growing Camelina (Camelina sativa) in Western South Dakota</td>
<td>$9,641</td>
<td>Dr. Jennifer Walker  Walker Farm</td>
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<tr>
<td>FNC19-1185</td>
<td>High Efficiency Year-Round Tropical Greenhouse</td>
<td>$9,000</td>
<td>Shannon Mutschelknaus  Wayward Springs Acres</td>
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<tr>
<td>FNC19-1187</td>
<td>The evaluation of Integrated Weed Management practices to control chicory infestation in the pastures and hay ground of conventional and organic agricultural operations.</td>
<td>$8,935</td>
<td>Doug Pavel  Butte Vista Farm</td>
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<tr>
<td>FNC19-1197</td>
<td>Wiconi Waste Resistance Farm a Lakota regenerative agroforestry permaculture demonstration farm</td>
<td>$9,000</td>
<td>Michelle Tyon  Wiconi Waste Farm</td>
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<tr>
<td>FNC19-1203</td>
<td>The Evaluation of Integrated Weed Management Practices to Control Chicory Infestation in the Pastures and Hay Ground of Conventional and Organic Agricultural Operations</td>
<td>$9,000</td>
<td>Sue Hillard  Three Heart Farm</td>
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<tr>
<td>Project ID</td>
<td>Project Title</td>
<td>Budget</td>
<td>Investigator(s)</td>
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<tr>
<td>FNC18-1124</td>
<td>Rebel Earth Farms’ Value-Added, Direct Marketing Lakota Herbal Tea High-tunnel Production</td>
<td>$7,500</td>
<td>Patricia Hammond</td>
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<tr>
<td>FNC18-1131</td>
<td>Edible Net Wrap: A Possible Solution to Livestock Longevity</td>
<td>$7,500</td>
<td>Amanda Konechne, Chris and Amanda Konechne</td>
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<tr>
<td>FNC17-1079</td>
<td>Research of Methods to Improve the Processing of Hops (Humulus lupulus L.)</td>
<td>$7,500</td>
<td>Yvonne Hines</td>
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<td>FNC16-1031</td>
<td>Controlling Cedar Tree Invasion by Rotational Grazing Goats through Pasture</td>
<td>$6,793</td>
<td>Adam Carlson</td>
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<tr>
<td>FNC16-1036</td>
<td>Examination of the Productivity of Four Hops Varieties (Humulus lupulus L.) in Two Soil Types in Southwest South Dakota</td>
<td>$7,500</td>
<td>Yvonne Hines</td>
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<tr>
<td>FNC14-942</td>
<td>Making Goats Milk Soap Business Sustainable by Implementing Standard Manufacturing and Testing Protocols</td>
<td>$5,635</td>
<td>Penny Adler</td>
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<tr>
<td>FNC14-947</td>
<td>Examining Water and Nutrient Dynamics of a Cover Crop in an Upper Great Plains Vineyard</td>
<td>$7,467</td>
<td>Chris Graham</td>
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<td>FNC14-977</td>
<td>Reduced Pesticide Fly Control in Feedlots and Native Rangeland to Conserve Dung Beetles and Benefit Beef and Sheep Production</td>
<td>$21,287</td>
<td>Linda Simmons, Peter Bauman</td>
</tr>
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<td>FNC12-846</td>
<td>The Producer-Initiated Development of a Goat Meat Market in the Black Hills Region of South Dakota</td>
<td>$14,999</td>
<td>Tom Barnes</td>
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<tr>
<td>FNC12-862</td>
<td>Growing, Processing and Selling Organic Grape Vinegar and Verjus</td>
<td>$7,391</td>
<td>Steven Hauff</td>
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<td>FNC12-892</td>
<td>A Hoop House in western South Dakota</td>
<td>$5,290</td>
<td>Cathy Timmons</td>
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<td>FNC10-815</td>
<td>The economic value of multi-species grazing of cattle and goats utilizing goats for brush and weed control</td>
<td>$18,000</td>
<td>Jim Deboer, Kelly Frensko, Penny Adler</td>
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<tr>
<td>FNC09-764</td>
<td>Grazing Lambs to Manage Weeds and Grass in a Cold Climate Vineyard</td>
<td>$2,291</td>
<td>Karlys WElls</td>
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<td>FNC08-699</td>
<td>Field Harvest of Grassfed Bison</td>
<td>$17,802</td>
<td>Dan O’Brien</td>
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<tr>
<td>FNC08-746</td>
<td>Winter Greenhouse</td>
<td>$1,922</td>
<td>Bill Powers</td>
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<tr>
<td>FNC07-666</td>
<td>Effects of Eastern South Dakota Soils and Climate on Sustainable Production of Cold Hardy Grape Varieties</td>
<td>$5,990</td>
<td>Dave Greenlee</td>
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<tr>
<td>FNC07-688</td>
<td>Standing Grain as Winter Grazing for Cattle</td>
<td>$930</td>
<td>Jennifer Walker</td>
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</table>
FNC05-566  Strengthening Grazing Success Through Genetics with Flax in an Organic Environment $5,995  Angela Jackson-Pridie

FNC05-575  Sustainable Energy for Sustainable Production $17,632  Shawn Burke

FNC04-542  LaCreek Growing Solutions $15,066  Gail Kocer

FNC04-543  South Dakota Grazing/Pasture Management Research and Tour $3,162  Phil Raml

FNC03-450  Growing Native Fruits of the North Central Region $6,000  Kim Graber

FNC03-471  South Dakota Grasslands Coalition Bus Tour to Grassland Grazing Demonstration Sites $5,000  Dan Rasmussen  South Dakota Grasslands Coalition

FNC03-482  Cider Hill Farm Cheese Plant $5,997  Joan Williams  Cider Hill Farm

FNC02-412  Low Cost Precision Supplements to Add Profit to Cow-Calf Operations $5,153  Jim Faulstich  Day Break Ranch

FNC02-437  Development of Self-Sustaining Farmer's Market in Clay County, South Dakota $4,032  Grace Freeman

FNC01-348  Management and Control of Canadian Thistle in Limited Access and Field Locations $3,040  Jordan Dawn  Enormous Brontosaurus Organic Farm

FNC01-351  Developing Added Value, Convenience Products From Free-Range Pastured Chickens $14,513  Tom Neuberger

FNC01-354  The Value of Value Added Products from Farm to Farm Market $4,858  Gail Dawn

FNC00-327  Kiyaksa Timber Salvage and Restoration Project $2,546  Marcell Bull Bear

FNC00-331  Weed Control $5,000  Duane Lammers

FNC99-008  Interns for Garden Markets $8,000  Ann Krush
**GRADUATE STUDENT GRANTS**

<table>
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<tr>
<th>Project #</th>
<th>Project Title</th>
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<th>Project Leaders</th>
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</thead>
</table>
| GNC20-313   | Measuring the impacts of returning to tillage on soil health parameters after long-term no-till soil management: An educational opportunity.                                                                 | $14,976      | Dr. David Clay  
South Dakota State University  
Shaina Westhoff  
South Dakota State University |
| GNC19-286   | Field evaluation of traffic-induced compaction and its potential impact on soil physical characteristics and crop yield                                                                                         | $14,982      | Dr. Sandeep Kumar  
South Dakota State University  
Jasdeep Singh  
South Dakota State University |
| GNC18-254   | Predation, Herbivory, and Farmer Profitability and Sustainability in Response to Inter Seeded Covercrops in Standing Corn for Agroecosystem Diversification                                                      | $11,906      | Jonathan Lundgren  
South Dakota State University  
Michael Bredeson  
South Dakota State University |
| GNC16-227   | Interactive Effects of Cover Crops, Soil Health Practices, and Insect Community Dynamics on Corn Production                                                                                               | $9,998       | Jonathan Lundgren  
South Dakota State University  
Claire LaCanne, M.S.  
South Dakota State University |
Effect of Cover Crops on Beef Animal Performance and Soil Health

Dr. Derek Brake
South Dakota State University
Brooke Brunsvig
South Dakota State University

Contributions of Dung Arthropods to Sustainable Pest Management in Rangeland Systems of the Northern Great Plains

Jonathan Lundgren
South Dakota State University
Jacob Pecenka
South Dakota State University

Developing Guidelines for Sustainable Livestock Grazing in South Dakota Ponderosa Pine Forests: Balancing Economically Important Ecosystem Goods with Ecological Integrity

Dr. Roger Gates
SDSU Extension
Kurt Chowanski
South Dakota State University West River Ag Center

A Process-Based Nutrient Model for the Bedpack Manure of Confined Beef Systems

Dr. Erin Cortus
South Dakota State University
Ferouz Ayadi
South Dakota State University

Using Forage Quality Testing to Predict Nitrogen Replacement Value of Cover Crops

Peter Sexton
Greg DeRynck
South Dakota State University

Interseeding Yellow-flowered Alfalfa into Crested Wheatgrass Stands for Multiple Uses and Benefits

Dr. Roger Gates
SDSU Extension
Lan Xu
South Dakota State University
Christopher Misar
South Dakota State University

Prairie Restoration: Effects of Burning, Herbicide, and Nitrogen Manipulation to Reduce Invasive Cool-Season Grasses

Dr. Sharon Clay
SDSU
Shauna Waughtel
SDSU

Restoring Native Tallgrass Prairie and Improving Profitability on Eastern South Dakota Grasslands with Intensive Early Stocking

Dr. Eric Mousel
South Dakota State University
Kyle Schell
South Dakota State University

Floristic Quality of Native Tallgrass Pastures in Eastern South Dakota

Dr. Alexander Smart
South Dakota State University
Matthew Nelson
South Dakota State University

Effects of Prairie Dogs on Sustainability of Cattle Grazing in Mixed-Grass Prairie

Dr. Alexander Smart
South Dakota State University
Matthew Stoltenberg
South Dakota State University

Enhancing producer resources to build small meat processing capacity and local meat demand

Dr. Amanda Blair
South Dakota State University

Developing a guide for farmers or local machine shops to build an affordable roller-crimper by repurposing tillage equipment

Dr. Ryan Schmid
Ecdysis Foundation

Oat Variety Trial under Organic Management: Increasing Profitability for Organic Producers in the North Central Region

Dr. Melanie Caffe-Treml
South Dakota State University

ON FARM RESEARCH/PARTNERSHIP GRANTS

YOUTH EDUCATOR GRANTS
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<th>Project #</th>
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<tbody>
<tr>
<td>YENC23-199</td>
<td>YFS Sowing Opportunities for Youth Leadership (SOYL)</td>
<td>$6,000</td>
<td>Sharon Oney&lt;br&gt;Youth &amp; Family Services, Inc.</td>
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<td>YENC20-155</td>
<td>Cheyenne River Youth Project — Traditional Lakota Herbs, Fruits, and Roots Garden</td>
<td>$4,000</td>
<td>Julie Garreau&lt;br&gt;Cheyenne River Youth Project</td>
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<td>YENC19-138</td>
<td>Planting the Pond</td>
<td>$4,000</td>
<td>Dr. Kelsey Murray&lt;br&gt;Western Dakota Tech&lt;br&gt;Bryan Mitchell&lt;br&gt;Western Dakota Tech</td>
</tr>
<tr>
<td>YENC15-084</td>
<td>Sustainable Agriculture Using All Five Senses</td>
<td>$1,342</td>
<td>Linda Grace Freeman&lt;br&gt;Irene-Wakonda School</td>
</tr>
<tr>
<td>YENC15-090</td>
<td>Producer-led, multi-topic, hands-on informational seminar to educate youth about sustainable and profitable meat goat production</td>
<td>$1,000</td>
<td>Doug Pavel&lt;br&gt;Butte Vista Farm</td>
</tr>
<tr>
<td>YENC12-041</td>
<td>Youth Livestock Skill-a-thon</td>
<td>$1,993</td>
<td>Megan Nielson&lt;br&gt;SDSU Extension</td>
</tr>
<tr>
<td>YENC08-002</td>
<td>Native American Roots &amp; Shoots Farmers, Gardeners, &amp; Gatherers Market &amp; Educational Garden</td>
<td>$2,000</td>
<td>Jason Schoch&lt;br&gt;Jane Goodall's Roots &amp; Shoots Native Amerias Proje</td>
</tr>
<tr>
<td>YENC08-003</td>
<td>Cover Crops – Grazing Alternatives Research Project</td>
<td>$2,000</td>
<td>Steve Sutera&lt;br&gt;Bon Homme 4-H Clubs &amp; Bon Homme FFA Chapter</td>
</tr>
<tr>
<td>YENC08-004</td>
<td>Understanding the Historical Uses, Current Uses, and Importance of Native Plants on the Cheyenne River Sioux Reservation</td>
<td>$2,000</td>
<td>Justine Kougl&lt;br&gt;South Dakota State University Cooperative Extension</td>
</tr>
</tbody>
</table>

**YOUTH GRANTS**
Total funding from the USDA SARE program to South Dakota

$4,794,402

For further information on projects, contact North Central SARE at (612) 626-3113 or ncrsare@umn.edu.

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