

## 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 \$7.8 million to more than 137 initiatives [1].

### 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...

# Colorado

Project Highlight: *Impact of Genetics and Grazing Management on Enteric Methane Emissions and Performance in Stocker Steers*

As cows digest grasses and other cellulose-rich plants, microbes in their large first stomach – the rumen – break down the feed, releasing the potent greenhouse gas methane as a natural fermentation byproduct. A low-emission beef cow would use fuel – in this case feed – more efficiently, converting it into muscle readily and minimizing methane emissions over the life of the animal.

Ashley Schilling, a doctoral student with Colorado State University's AgNext program, worked on a Western SARE-funded project that examines how animal genetics and grazing practices effect both emissions and performance. Her project compared two sets of genetically distinct steers – one group sourced locally within Colorado, the other imported from Nebraska – in a production environment. The local steers originate from a similar shortgrass steppe ecosystems as the experiment station, while the Nebraska steers originate from a tall grass prairie ecosystem.

What she found was the local steers emitted more methane but they also had a greater average daily weight gain so their overall emissions intensity was significantly lower than the steers from Nebraska. The results of this study indicate that cattle origin alters CH<sub>4</sub> emissions and animal performance in stocker steers grazing extensive semi-arid rangelands.

For more information on this project, see [sare.org/projects](http://sare.org/projects), and search for project number GW22-232.

## SARE in Colorado

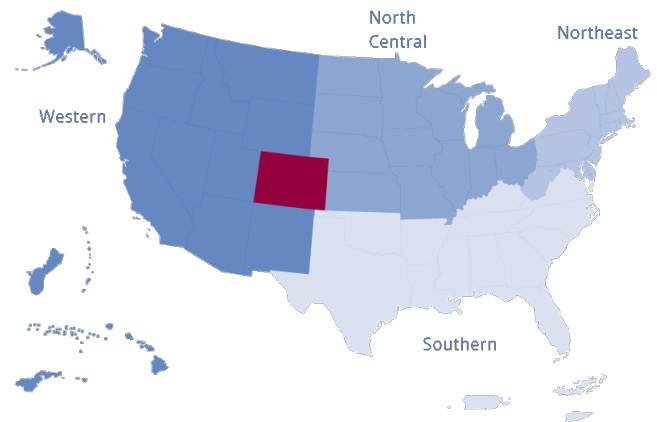
[western.sare.org/state-profiles/colorado/](http://western.sare.org/state-profiles/colorado/)

**\$7,762,149**  
**in total funding**

**137 grant projects**

(since 1988 [1])

For a complete list of Colorado grant projects, go to [projects.sare.org/state-fact-sheets/](http://projects.sare.org/state-fact-sheets/)



[1] These totals reflect available data; complete information may not be available for all grant programs prior to 2016.

# SARE in Colorado, 2021-2026

This is a summary of recent SARE-funded activities and impacts in the state. To search all SARE projects visit [projects.sare.org](https://projects.sare.org). For a list of all projects in Colorado visit [projects.sare.org/state-fact-sheets/](https://projects.sare.org/state-fact-sheets/).

## Grants awarded

Total awards: **31 grants**

- 7 Farmer/Rancher
- 3 Research and Education
- 7 Professional Development Program
- 7 On Farm Research/Partnership
- 5 Graduate Student
- 1 Local Ed & Demo (formerly RGR)
- 1 PDP State Program [2]

Total funding: **\$2,674,269**

- \$192,449 Farmer/Rancher
- \$1,049,500 Research and Education
- \$562,462 Professional Development Program
- \$500,736 On Farm Research/Partnership
- \$149,122 Graduate Student
- \$100,000 Local Ed & Demo (formerly RGR)
- \$120,000 PDP State Program [2]

[2] The Professional Development Program (PDP) State Program is a non-competitive award that funds the activities of the state coordinator(s). See more below.

For a complete list of Colorado awards, visit: [projects.sare.org/state-fact-sheets/](https://projects.sare.org/state-fact-sheets/)

## Farmer and rancher impacts

SARE grantees have reported the following impacts from their projects:

**3,858 farmers participated in a SARE-funded project**

**227 farmers changed a practice**



Photo credit: Larimer Conservation District

Learn about local impacts at: [western.sare.org/sare-in-your-state/colorado/](https://western.sare.org/sare-in-your-state/colorado/)

## 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/colorado/](https://western.sare.org/state-profiles/colorado/) to learn more.

Adrian Card  
Colorado State University Extension  
(303) 678-6383  
[Adrian.card@colostate.edu](mailto:Adrian.card@colostate.edu)



National Institute of Food and Agriculture  
U.S. DEPARTMENT OF AGRICULTURE

SARE is funded by the USDA's National Institute of Food and Agriculture (NIFA).