

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

# Arkansas

## Project Highlight: *Maximizing Cover Crop Use in High Tunnels*

Cover crops are becoming a vital tool in soil management, yet vegetable growers who use high tunnels may decline to plant them inside structures due to a variety of factors. In the warm indoor environment, cover crops could potentially provide habitat for overwintering pests. Economically, the benefits may not seem clear since there are fewer off-season periods for a cover crop to fill and growers in such a capital-intensive system may not want to use valuable ground for a crop that has no immediate return.

Funded by a SARE grant, University of Arkansas graduate student Luke Freeman sought to determine the optimum timing for planting cover crops in Southern high tunnels to minimize the negatives and maximize the benefits.

Cover crops can be beneficial in high tunnels for reducing nitrogen fertilizer use and improving soil quality. Since local growers stated that mid-November through mid-February was the least productive season, Freeman researched four winter cover crops, followed by summer tomatoes and fall broccoli, during that time period.

He found that winter peas contributed a greater amount of biomass nitrogen than all other treatments. This led to a 48 percent increase in mean tomato yield compared to the control. Sharing these results gives Southern high tunnel vegetable growers a better understanding of the benefits of cover crops.

For more information on this project, see [www.sare.org/projects](http://www.sare.org/projects), and search for project number GS14-136.

## SARE in Arkansas

[www.southernsare.org/arkansas](http://www.southernsare.org/arkansas)

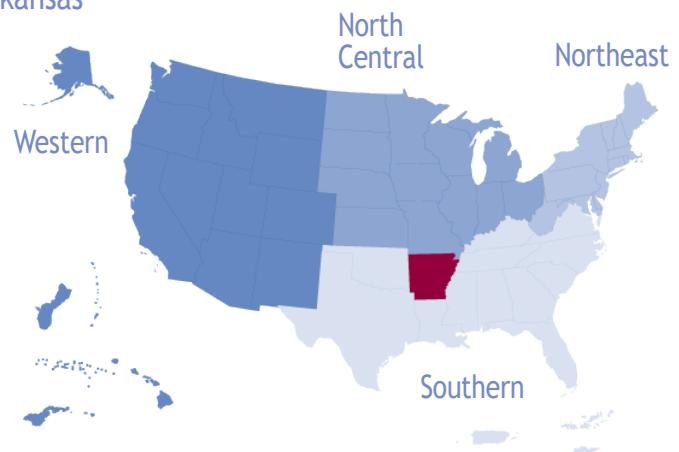
**\$6.1 million in total funding**

**89 grant projects**

(since 1988)

For a complete list of grant projects state by state, go to

[www.sare.org/state-summaries](http://www.sare.org/state-summaries)



SARE's four regional programs and outreach office work to advance sustainable innovations to the whole of American agriculture.

## 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 \$273 million to more than 6,800 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

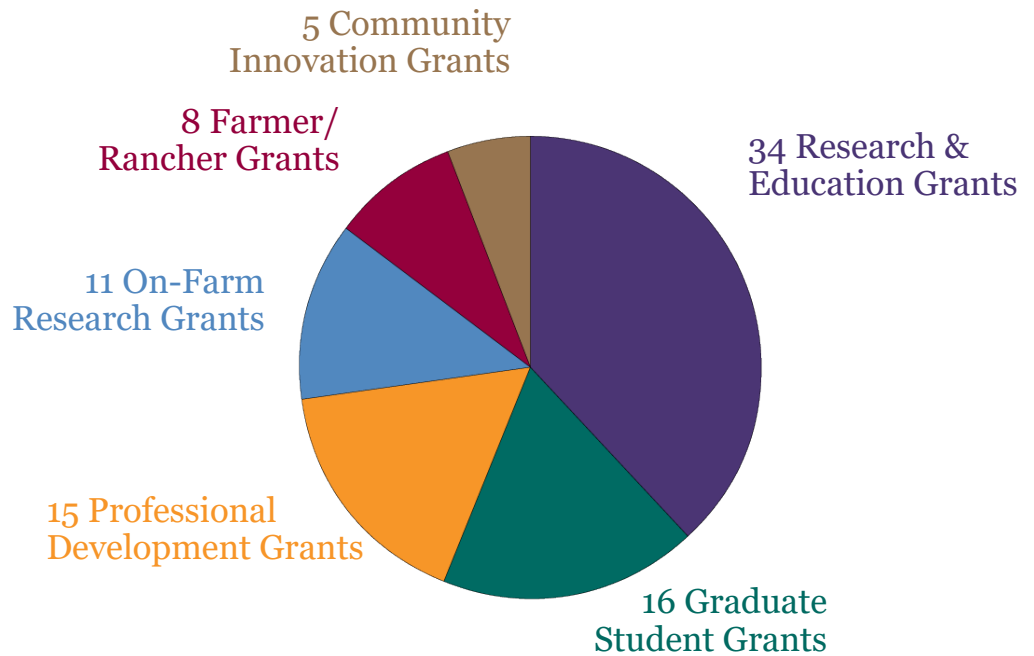
SARE shares project results by requiring grantees to conduct outreach and grower engagement; and by maintaining the SARE Learning Center—a library of practical publications, grantee-produced information products and other educational materials.



[www.sare.org](http://www.sare.org)

# SARE Grants in Arkansas

SARE has  
awarded a  
total of  
**89 grants**  
in Arkansas  
since 1988



## 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.

## 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 [www.southernsare.org/arkansas](http://www.southernsare.org/arkansas) to learn more.

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For detailed information on SARE projects, go to

[www.SARE.org](http://www.SARE.org)