



www.sare.org

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 \$18.4 million to more than 419 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...

Minnesota

Project Highlight: *Stone Creek Farm Pioneers Peach Production in Minnesota's Cold Climate*

Dan Sheild of Stone Creek Farm in central Minnesota has developed an innovative system for growing organic peaches in USDA hardiness zone 3, where winter temperatures can reach as low as -35°F. With support from an \$8,840 NCR-SARE Farmer Rancher grant, Sheild constructed a 54x34-foot high tunnel equipped with light-proof silage tarps to protect peach trees from extreme cold and mitigate issues like fruit cracking and pest damage.

In 2021, Sheild grafted 14 peach cultivars onto four rootstocks and planted them in May. By fall, some trees reached heights of up to 66 inches. The following year, he applied organic foliar nutrient sprays and soil amendments to optimize tree health and growth. Sheild discovered that snow coverage significantly impacted temperature stability, with snow surrounding the high tunnel creating a temperature difference of up to 26°F between the interior and exterior.

With this growing method, Sheild reports that peach trees can produce 70 pounds of peaches per tree within 27 months. A 1,768-square-foot high tunnel housing 24 trees could generate \$6,300 annually after Year 2, scaling to \$50,400 per acre. Sheild's efforts have drawn over 70 farmers and agricultural professionals to field days and workshops at Stone Creek Farm, and media coverage has sparked interest in high tunnel peach production in Minnesota.

"The project was such an overwhelming success that it proved again, after eight years of growing peaches at this location, peaches can be grown as far north as central Minnesota. It's exciting to think that we may have another fruit growing industry in the upper Midwest that has not been considered," said Sheild. "I envision a connective association just for stonefruit growing in the near future."

For more information on this project, see sare.org/projects, and search for project number **FNC21-1305**.

SARE in Minnesota

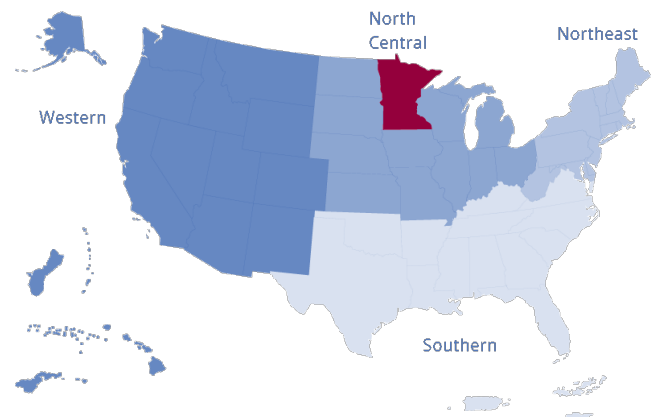
northcentral.sare.org/state-profiles/minnesota/

\$18,426,574
in total funding

419 grant projects

(since 1988 [1])

For a complete list of Minnesota grant projects, go to 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 Minnesota, 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. For a list of all projects in Minnesota visit projects.sare.org/state-fact-sheets/.

Grants awarded

Total awards: **100 grants**

- 42 Farmer/Rancher
- 10 Research and Education
- 9 Professional Development Program
- 16 On Farm Research/Partnership
- 8 Graduate Student
- 12 Youth Educator
- 2 PDP State Program [2]
- 1 Community Foods Project

Total funding: **\$5,698,847**

- \$738,849 Farmer/Rancher
- \$2,486,166 Research and Education
- \$815,872 Professional Development Program
- \$677,481 On Farm Research/Partnership
- \$134,449 Graduate Student
- \$61,550 Youth Educator
- \$290,000 PDP State Program [2]
- \$494,480 Community Foods Project

[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 Minnesota awards, visit: projects.sare.org/state-fact-sheets/

Farmer and rancher impacts

SARE grantees have reported the following impacts from their projects:

8,065 farmers participated in a SARE-funded project

713 farmers changed a practice



Photo credit: David L. Hansen, University of Minnesota

Learn about local impacts at: northcentral.sare.org/state-programs/minnesota/

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-profiles/minnesota/ to learn more.

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