



SOUTH DAKOTA STATE UNIVERSITY EXTENSION

# 2024 IMPACT REPORT

## Agriculture & Natural Resources



## Community Vitality

## Family, Food & Wellness



## 4-H

# Contents

Executive Summary . . . . . 1

Agriculture and Natural Resources . . . . . 2

Community Vitality . . . . . 4

Family, Food and Wellness . . . . . 6

4-H . . . . . 8

# Executive Summary

Whether we're hosting in-person seminars teaching communities how to create and support small businesses, sharing important agricultural resources and health information online or hosting interactive events for South Dakota's 4-H youth, we're committed to providing unbiased, research-based information for everyone. With hands-on events and interactive community initiatives to supplement our published research articles and guides, we encourage everyone to get involved with resources that will improve their lives.

This brief report highlights how SDSU Extension strengthens people and places across South Dakota through every program, contact, volunteer hour, and digital outreach effort. With eight regional offices and a presence in all 66 counties, SDSU Extension is a visible, active member of communities statewide—offering in-person workshops and events, along with 24/7 access to resources through our website to ensure quality education is always within reach.

## Report compiled by:

---

**Karla Trautman**, SDSU Extension Director

**Alexander “Sandy” Smart**, SDSU Extension Agriculture and Natural Resources Senior Program Leader/Professor

**Peggy Schlechter**, SDSU Extension Community Vitality Program Director

**Michelle Tjeerdsma**, SDSU Extension Family, Food and Wellness Program Director

**Timothy Tanner**, SDSU Extension State 4-H Program Director





# Agriculture and Natural Resources

## Impact Indicators

Total programs	525
Total participants	36,270
Direct education	74,372
Digital materials and outreach (articles, community events, media interviews, videos, etc.)	33,082,841
Master Gardener volunteer numbers	418
Master Gardener volunteer hours	13,377
Volunteer Naturalist numbers	141
Volunteer Naturalist hours	3,740
Commercial Applicator Testing number (new and recertified)	3,969
Private Applicator Training number (new and recertified)	3,643
Number of Field Specialists	24
Number of State Specialists	25
Dollar value of volunteer hours*	\$533,879

\*Based on \$31.19 for South Dakota [independentsector.org/wp-content/uploads/2025/04/vovt-report-2025.pdf](https://independentsector.org/wp-content/uploads/2025/04/vovt-report-2025.pdf)

Photo by Scott Bauer, USDA Agricultural Research Service.



## Soil Fertility Programming Across South Dakota

---

South Dakota has over 26 million acres of land in crop production and is one of the top industries, recording over \$10 billion dollars' worth of agricultural products sold in the past year. This agricultural production represents approximately 14% of the total state GDP. Products from these crops are used for a range of applications including feed for cattle, renewable fuels, and flour for cooking. Fertilizer is normally one of the largest inputs for these crop acres, needing approximately 27% of the total budget for direct inputs. It is important for SDSU Extension to provide best management information and training on using current fertilizer recommendations. During 2024, fourteen soil fertility research trials were conducted on farmer cooperator fields to compare various combinations of fertilizer rates, products, application timings, and placement methodologies. South Dakota stakeholders that benefited from SDSU Extension's educational presentations included farmers, agronomists, crop consultants, NRCS, and policy makers. Evaluations from SDSU Extension Events indicated that 80% of participants agreed that their knowledge regarding soil fertility recommendations increased as a result of attending the educational events. The improved accuracy of fertilizer recommendations reduces the potential for nitrogen and phosphorus from fertilizer to enter ground and surface waters that can negatively affect the environment and human health. Having an increased number of farmers utilizing the current fertilizer recommendations improves the overall South Dakota economy as it increases the economic return of South Dakota Farmers.



## SDSU Extension Strategies Boost South Dakota Dairies

---

South Dakota is listed among the 16 leading dairy states, contributing 13% (26.7 million pounds) of U.S. milk production (USDA, 2020). The dairy industry in South Dakota has more than doubled the number of milk cows since its historic low in 2004. In recent years, a team comprised of SDSU Extension field specialists and state specialists provided research-based information and resources to boost the health, production and profits of South Dakotas dairies. The team collaborates with stakeholders to provide essential certification trainings and as a member of the I-29 Moo University Collaboration, SDSU Extension connects South Dakotas producers with peers and industry experts across a five-state region. The SDSU Extension team developed resources and activities for the benefit of South Dakota and surrounding states dairy producers, employees, and allied industries. South Dakota and the region benefit by having more profitable dairy farms with an engaged well-trained workforce to sustainably care for the cows while providing a steady supply of high-quality milk and dairy beef.



# Community Vitality

## Impact Indicators

Total programs	44
Total participants	988
Direct education	4,849
Digital materials and outreach (articles, community events, media interviews, videos, etc.)	1,612,009
Number of Field Specialists	4
Number of State Specialists	0



## Board Development and Strategic Planning

---

The Hyde County Child Development Board, a newly created board, requested assistance in board development and strategic planning to be prepared to apply for the Community Based Child Care Grant Program through the SD Governor's Office of Economic Development.

The Community Vitality Team engaged with the 8-member Hyde County Child Development Board shortly after they formed to provide six 2-hour Building Highly Effective Board sessions. Once the board training was completed, the Board, along with 2 additional interested community members participated in the strategic planning process. Through this process, the group participated in creating an action plan for the goals they identified and began working through them immediately as they had a short window to create a new child development center.

The board shared the completed plan with stakeholders both on the local and state level to move their mission and vision forward. The Hyde County Child Development Board used the completed strategic plan as one piece of their successful bid for the 2nd and larger implementation grant submission to highlight how they will use the grant funds to further child development in their community. Because of the new center, parents will no longer have to move to be closer to childcare or look for employment closer to their childcare provider, thus keeping jobs and residents in the community. Creating a new business, utilizing and renovating an existing building, and tapping into city services and job creation are just a few other benefits and impacts that the Highmore area will see.



## Small Business Basics

---

Small Business Basics, an 18-hour program was delivered in Volga, Rapid City, Watertown, and Sturgis, SD. Over the course of six sessions, participants engaged with experts across critical areas of business management, gaining insights that are often difficult to obtain independently. The program covered a range of topics, including financial management, marketing strategies, legal compliance, and operational efficiency, giving attendees a well-rounded understanding of what it takes to run a successful business. By learning from professionals, participants were better equipped to navigate common pitfalls that can hinder new businesses. For example, they gained practical skills in managing cash flow, understanding taxes, and building effective marketing campaigns—all of which are crucial to long-term viability. The program also provided an opportunity for attendees to network with other entrepreneurs, creating a peer support system that encouraged the sharing of ideas and problem-solving strategies. In addition to acquiring knowledge, participants left with actionable steps they could implement immediately in their businesses. This combination of expert guidance and practical takeaways enabled them to make more informed decisions, improve their operations, and increase their chances of sustaining and growing their businesses in the competitive market.





# Family, Food and Wellness

## Impact Indicators

Total programs	479
Total participants	8,723
Direct education	11,750
Digital materials and outreach (articles, community events, media interviews, videos, etc.)	2,656,050
Volunteer numbers	232
Volunteer hours	1167
Number of Field Specialists	9
Number of State Specialists	2
Family, Community and Health Educators and Associates	13
Program Management and Support Staff	5
Dollar value of volunteer hours*	\$36,399

\*Based on \$31.19 for South Dakota [independentsector.org/wp-content/uploads/2025/04/vovt-report-2025.pdf](https://independentsector.org/wp-content/uploads/2025/04/vovt-report-2025.pdf)

## Community Health Workers Lead Diabetes Self-Management in South Dakota

---

Diabetes is one of the leading causes of death in South Dakota, and its prevalence—especially in rural areas—continues to rise. This growing crisis is compounded by limited access to healthcare services. Effective diabetes management and prevention strategies are critical to improving the quality of life for South Dakotans and addressing the high costs of diabetes care. In response to this urgent need, SDSU Extension developed a partnership with Huron Regional Medical Center to implement the Better Choices, Better Health South Dakota (BCBH-SD) Diabetes Self-Management Education program. The BCBH-SD Diabetes Self-Management Education Program, licensed by SDSU Extension, provides diabetes education to adults in South Dakota, with a particular emphasis on rural communities. The program is supported by funding from SDSU Extension and the South Dakota Department of Health, which has been used to train community health workers, develop educational materials, and support outreach efforts. Under the leadership of the Health Care Career and Outreach Director at the Huron Regional Medical Center, the program trained and empowered community health workers to facilitate Diabetes Self-Management program workshops. The program has reached individuals across rural South Dakota, offering them much-needed diabetes education and management tools. Participants of the program have had the opportunity to learn from peers, share experiences, and receive personalized guidance in managing their health challenges. Through this initiative, South Dakota is seeing a model of community-based health intervention that could be replicated across other rural areas of the state.



## South Dakota Master Food Preserver Volunteer Program

---

Home food preservation is a way to preserve the freshness of homegrown or locally purchased foods; it has been a longtime practice in the United States. Methods include canning, freezing and drying. Unfortunately, there are limited resources available for South Dakotans to learn about safe home food preservation methods. During 2023, the program's reach was extended by recruiting 7 additional Master Food Preserver volunteers. Master Food Preserver is a certification that individuals earn which designates that they have undergone and passed training and coursework in modern, up-to-date methods of food preservation. Canning is an economical way to preserve important vitamins and nutrients from fresh quality, locally grown fruits and vegetables while maintaining control over food additives such as sugar and salt. Individuals attending the food preservation classes obtained general food preservation education, food safety guidance and nutrition education.





## 4-H

### Impact Indicators

Enrolled youth	8,827
Outreach youth	30,557
Total youth membership	39,384
Per capita youth reached	26.3%
Educational staff	59.75
Certified volunteer	1,708
Short-term volunteers	1,729
Total volunteers	3,437
Volunteer hours	180,618
Dollar value of volunteer hours*	\$3.97 million

\*Based on \$31.19 for South Dakota [independentsector.org/wp-content/uploads/2025/04/vovt-report-2025.pdf](https://independentsector.org/wp-content/uploads/2025/04/vovt-report-2025.pdf)



## Chicks in the Classroom Bridges Learning Gaps for New Students

The Huron School District educates numerous first and second-generation students, with many learning English as a Second Language (ESL). During Summer School 2024, Beadle County 4-H collaborated with 150 kindergarten and first grade students using the Chicks in the Classroom curriculum. Participating students took an active role in the learning process by monitoring egg growth over five sessions. By hatching chicken eggs through this summer curriculum series, students increased awareness and knowledge about basic egg biology and development, created new connections to South Dakota's #1 industry (agriculture), and expanded their vocabulary as all students learned several new English words and their meanings together.



## A Piece of the Pie for All

Pennington County 4-H observed that mentorship and leadership opportunities at the local level required large time commitments, especially for older youth. Over time this led to reduced opportunities for growing young community leaders. Trying a lighter-commitment approach, local 4-H youth were empowered to co-lead a treasured county event—the annual 4-H Pie Baking Workshop. In this new approach, six older youth mentors provided a hands-on, educational program that gave 30 younger youth an opportunity to learn valuable life skills including how to safely use a knife, measure ingredients, and baking. The older youth improved important leadership skills including planning, organizing, time management, and problem solving while gaining new confidence to contribute as community leaders in the future.

