

# 2018 Utah State University PDP Project

## Final report for WSP17-014

Project Type: PDP State Program

Funds awarded in 2017: \$37,973.60

Projected End Date: 12/31/2019

Grant Recipient: Utah State University

Region: Western

State: Utah

State Coordinator:

[Marion Murray](#)

Utah State University

## Project Information

### Abstract:

Unique characteristics of Utah's geography and population base create critical needs for the development and adaptation of sustainable agriculture technologies. Utah is the 8th most urbanized state in the country, where more than 9 of every 10 Utahns live on just 1.1% of the state's total area. The state is also the second-driest in the country, where most of its arable lands are at elevations of 2,500-6,000 ft., and depend on irrigation water derived from mountain snowmelt. Due to these challenges, the protection of natural resources and human safety demands the implementation of thoughtful and sustainable management approaches, and the Utah WSARE PDP Program is committed to fulfilling the professional development goals of SARE, particularly within specialty crops and forage and rangeland systems. Utah grows over 13,600 acres of fruits and vegetables, valued at \$33 million, the majority of which (62%) are grown on farms less than 15 acres. Hay production (alfalfa and grass) comprises approximately 710,000 acres while range lands cover the majority of "wild" lands in the State (21.8 million acres). Forage and range lands systems are conducive to sustainable strategies (e.g., reduced tillage, cover crops, insect, disease, and weed issues, biological control opportunities). Professional training efforts and scholarships have helped Utah producers and ranchers overcome these challenges and implement sustainable agriculture practices.

### Project Objectives:

There were three objectives for this proposal:

- Deliver training opportunities in sustainable agriculture.
- Provide opportunities for further training of agricultural professionals by awarding travel and event hosting scholarships.
- Promote WSARE grants and SARE publications and services.

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## Education

### Educational approach:

The Utah PDP emphasizes multiple modes of education, including face-to-face, written and online, and self-exploratory. The content for the professional development and other workshops range from beginner to intermediate and consist of indoor presentations and where appropriate, hands-on activities or outdoor farm visits. The trainings also include complementary written materials and publications for attendees to review. The written and online training involves production and delivery of crop management guides and a subscription email service of seasonal, pertinent content. The self-exploratory education occurs through travel and event hosting scholarships, where agricultural producers attend or host professional development workshops to further their understanding of sustainable agriculture, and pass the information on to their constituents.

## Education & Outreach Initiatives

### **Deliver training opportunities in sustainable agriculture.**

#### Objective:

Train agricultural professionals and producers in sustainable agriculture practices.

#### Description:

In 2018-19, the Utah WSARE PDP taught or participated in five workshops. The PDP sponsored the conference proceedings and one speaker at the annual UT/AZ Range Livestock Workshop and Tour, which was held in spring of 2018 and attended by 175 ag professionals and producers. The Program also partnered on four additional workshops. With USU Extension, we held two high tunnel workshops in June and September of 2018, which were attended by 34 and 16, respectively, and one high tunnel field tour (July 2018) that was attended by 78. With USU Extension and Utah Department of Agriculture and Food, the PDP Coordinator served on the planning committee for the annual Utah Urban and Small Farms Conference (February 2018), which was attended by 215. At this conference, the PDP Coordinator organized a full-day sustainable vegetable production track, attended by 48, and provided registration assistance for 28 Extension faculty.

The PDP Program also helped in the authorship and design of three production guides (tree fruits, vegetable production, and identification of beneficial insects), which were printed and distributed at face-to-face training events to over 275 agricultural producers and professionals.

#### Outcomes and impacts:

The Western SARE PDP reached 168 ag professionals in NRCS, Utah Dept. of

Agriculture and Food, USU Extension, researchers, non-profits, and others, as well as 350 producers. In surveys that were delivered to attendees, on average, 94% of producers learned new skills or knowledge to help them farm more sustainably, and 72% of ag professionals felt that they could incorporate new knowledge learned into training for their constituents.

### **Travel or event scholarships to agricultural professionals.**

Objective:

Provide opportunities for self-training of agricultural professionals by awarding travel or event-hosting scholarships.

Description:

The Utah WSARE PDP awarded three event-hosting scholarships, and three travel scholarships in 2018-19. The educational events included the Curt Pate Stockmanship Clinics in Randolph, UT, attended by 32 ag professionals and ranchers; an Agriculture Water Conservation Field Day in Cedar City, UT, attended by 41 professionals (including one state senator and other politicians) and farmers; and a series of farm succession workshops in Brigham City, UT, attended by 48 producers. Two of these events included in-class training and field demonstrations and the farm succession workshop combined in-class training with real-world exercises.

The travel scholarships included a presentation on "A Year of E. coli Testing on Utah's Fremont River" at the National Association of County Agricultural Agents Annual Meeting/Professional Improvement Conference, where the participant learned about agricultural water quality testing from peers from across the nation. Another scholarship was given to attend an agroforestry academy, where the recipient was tasked to synthesize all the learned concepts and provide real-world recommendations to local farms. The third scholarship provided attendance to a technical brown marmorated stinkbug partnership and stakeholder seminar. The stinkbug seminar included 43 agricultural professionals from 17 states in five regions: Great Lakes, Mid-Atlantic, Southeast, Pacific Northwest, and West, and also provided opportunities for information-exchange and project-sharing.

Outcomes and impacts:

The travel and event-hosting scholarship reached 106 agricultural producers and 18 agricultural professionals.

At the Stockmanship clinics, attendees learned how to improve their stockmanship skills, resulting in less stress on livestock. It was reported that 100% of attendees plan on using the skills and information they learned in their own operations. The Water Conservation field day focused on water-saving technology in agriculture. Most of the attendees (73%) indicated that they had gained knowledge in new irrigation technology research as a result of the field day. The greatest increase in knowledge (92% of participants) occurred for presentations on ongoing irrigation research in Utah. General comments about the event were all positive, and 100% of the ag professionals in attendance indicated that the information provided at the field day would help them better serve their clientele. At the Farm Succession workshops, most attendees (86%) became more comfortable in the process of farm succession, and a few (8%) were able to complete the process for their own farms.

The recipient of the water-quality travel scholarship was able to learn more about water testing in other areas of the country from his peers from across the nation. He

shared this new knowledge with his local constituents at a Utah Department of Water Quality public input meeting, where approximately 20 people increased their knowledge on water quality and the incidence of E. coli. The ag professional that attended the agroforestry academy worked with the Utah Department of Agriculture and Food's Conservation Division and provided an introductory workshop on Agroforestry to 27 producers. And finally, the attendee to the stinkbug seminar extended training to 100 participants at the Utah State Horticultural Association Annual Convention in January 2019 and to 50 participants at the Utah Urban and Small Farms Conference in February 2019.

### **Promote WSARE grants and SARE publications and services.**

Objective:

Promote WSARE grants and SARE publications and services.

Description:

The Utah PDP Coordinator promoted Western SARE grant opportunities at four Extension presentations in 2019, reaching approximately 280 agricultural professionals and producers. The target audiences represented forage crops (alfalfa, wheat), tree fruits (apple, peach, cherry), and vegetable production (onion, melon, lettuce greens, and more). In addition, Western SARE was promoted through booth presence at two, multi-day trade shows in Utah, where an array of the major SARE publications were on display. One trade show reached over 500 general community members, and the other reached close to 175 commercial small farm producers. And finally, the PDP Coordinator advertised the grants and WSARE products through the mailing list for the IPM Pest Advisories, which reaches over 11,000 Utah citizens.

Outcomes and impacts:

A short survey submitted to participants at the four presentations revealed that 83% of agriculture professionals will be able to communicate to their own stakeholders about SARE educational products and that 23% will use SARE products in their own outreach activities. For the producer responses, close to 100% improved their knowledge of SARE offerings, and of the Western SARE PDP Program.

## **Educational & Outreach Activities**

- 3** Curricula, factsheets or educational tools
- 2** Tours
- 3** Travel Scholarships
- 6** Webinars / talks / presentations
- 8** Workshop field days

## **PARTICIPATION SUMMARY:**

- 32** Extension

- 20** NRCS
- 5** Researchers
- 15** Nonprofit
- 27** Agency
- 4** Ag service providers (other or unspecified)
- 631** Farmers/ranchers

## Learning Outcomes

**543** Participants gained or increased knowledge, skills and/or attitudes about sustainable agriculture topics, practices, strategies, approaches

**84** Ag professionals intend to use knowledge, attitudes, skills and/or awareness learned

## Project Outcomes

**1** New working collaboration

**84** Agricultural service provider participants who used knowledge and skills learned through this project (or incorporated project materials) in their educational activities, services, information products and/or tools for farmers

**631** Farmers reached through participant's programs

## Face of SARE

Face of SARE:

For face-to-face promotion of Western SARE grants and services, the State Coordinator reached approximately 280 agricultural professionals and producers through five presentations in 2018-19. The target audiences represented forage crops (alfalfa, wheat), tree fruits (apple, peach, cherry), vegetable production (onion, melon, lettuce greens, and more) and soil and water quality. In addition, the State Coordinator ordered the full SARE book and pamphlet packet and displayed them at three larger events, including the Utah Fruit School, attended by more than 126 growers, a greenhouse trade show that reached over 500 general community members, and the Urban and Small Farms trade show, which reached close to 175 commercial small farm producers and agricultural professionals. The coordinator has also promoted WSARE grants in emails to community mailing lists, the Utah Pests Facebook page, and through our quarterly newsletter delivered to over 6,000 individuals in Utah.

**455** Farmers received information about SARE grant programs and information resources

**85** Ag professionals received information about SARE grant programs and information resources

## Information Products

- [Utah Vegetable Pest and Production Guide \(Book/Handbook\)](#)

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture or SARE.



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