As 2023 begins, I am inspired by the incredible efforts of our USU Extension faculty. Our Home and Community, Agriculture and Natural Resources, and Youth Development programs are truly changing the lives of those in our communities.

In this newsletter, you will learn about programs geared toward improving the confidence and well-being of our youth, ways Extension is working to reduce the stigma surrounding mental illness, and evaluating the impact of Ag in the Classroom. In addition are highlights of the Thriving Hive Beekeeping education program and how a demonstration farm is providing opportunities for IPM.

We appreciate our Extension faculty for not only implementing and evaluating their programs, but also for sharing the impacts of their work in these newsletters so we can learn from them.

Best,

Kenneth L. White - Dean, College of Agriculture and Applied Sciences
Vice President, Extension and Agriculture

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Youth are likely to experience different forms of adversity in their lives, including body image issues, social isolation from the COVID-19 pandemic, pressure to abuse substances, and more. Confidence is a core component of resilience, and youth who have increased confidence may be better equipped to deal with life’s challenges.

USU Extension has created a six-session “Building Confidence” curriculum for youth. The USU project team piloted the curriculum during a three-day overnight camp at Bear Lake during the summer of 2021. Each of the six lessons was presented by a member of the project team. In addition to participating in the “Building Confidence” lessons, the 22 youth participants also engaged in adventure-based activities such as a rope course and paddle boarding to apply their confidence-building skills.

The “Building Confidence” curriculum has now been updated based on suggestions from participant focus groups. The revised curriculum has been made available to several organizations to facilitate dissemination, including the Utah Women in Leadership Project, Utah Discover 4-H Clubs, and the Be Epic youth e-cigarette prevention program. Future plans include adapting the curriculum to a younger audience and piloting it in an afterschool setting.

Results from a post-camp survey indicated:

- 80% of youth enjoyed the camp.
- 90% of youth would recommend it to their peers.
- 80% of youth agreed that attending the camp helped them develop at least one of the six core confidence characteristics.

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Youth with higher engagement in Utah 4-H are:

- 98% more likely to learn about problem-solving.
- 98% more likely to learn about goal-setting.
- 96% more likely to learn about being responsible for their actions.
- 98% more likely to learn about concern for others.

Engaged 4-H youth also saw higher levels of the “6Cs” of positive youth development:


Youth with higher engagement in Utah 4-H experienced a:

- 25% increase in their concern for others.
- 22% increase in goal-setting skills.
- 16% increase in problem-solving skills.

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According to the International Youth Foundation, only 11% of youth across the globe experience high levels of wellbeing. In Utah, youth mental health was identified as an urgent issue in several county-level and statewide needs assessments.

Through Utah 4-H, USU Extension is developing programs to improve the overall wellbeing of Utah’s youth by creating environments where they can thrive. An impact evaluation of Utah 4-H was conducted in 2022. The sample consisted of 442 4-H youth grades 5 to 12, and results indicated youth benefited in a variety of meaningful ways from their involvement in Utah 4-H.

Utah 4-H aims to fulfill the land-grant mission by giving young people access to opportunity. Ongoing efforts are being made to ensure an inclusive and welcoming environment in 4-H that benefits all youth.
DEMONSTRATION FARM PROVIDES EDUCATIONAL OPPORTUNITIES FOR INTEGRATED PEST MANAGEMENT

Nick Volesky & Mair Murray

Although pesticides are sometimes necessary to produce healthy crops and landscapes, the principles of integrated pest management (IPM) encourage a range of non-chemical approaches to managing pests. Implementing IPM can prevent crop and ornamental plant losses, improve profits, and protect human health and the environment.

USU Extension identified an ongoing need for IPM education as evidenced by recurring questions on the “Utah’s Gardening Experts” Facebook group about non-chemical options for managing pests and plant diseases.

In spring of 2022, the USU Extension IPM team established a vegetable farm to test and demonstrate IPM techniques. The goal of this farm is to provide a “real-life classroom” to demonstrate the cultural, mechanical, and biological control methods used to manage pests.

The team hosted an on-farm workshop for 48 individuals in July 2022. This outreach activity provided Extension clientele with the skills to identify, monitor, and manage pest problems, which can ultimately reduce pesticide use.

Moving forward, the USU Extension IPM team will continue to use the demonstration farm for tours, videos, and experiential learning opportunities.

- “THRIVING HIVES” PROVIDES BEGINNING BEEKEEPING EDUCATION -

Andree’ Walker Bravo

According to the Utah Department of Agriculture and Food apiary program, Varroa mites have caused statewide beekeepers a 20-30% decrease in hives in recent years. Because most hive deaths are attributed to Varroa, proper mite management must be a top priority for beekeepers.

USU Extension developed the Thriving Hives program in 2016 to provide hands-on educational experiences to novice and advanced beekeepers. To date, approximately 80 people have gone through the program. Due to new beekeepers’ requests for educational opportunities, the program currently focuses on facilitating beginning beekeeper classes, emphasizing Varroa mite management.

The Thriving Hive series includes lectures and hands-on learning taught by USU faculty and guest speakers. The hands-on portion of the program is held at the Wheeler Historic Farm, where USU Extension, along with the program participants, maintains a 10-15 hive apiary.

Twenty-eight individuals participated in the 2022 series. After the series, results showed a significant improvement in participants’ understanding, specifically of Varroa mites and the services performed by the county bee inspector.

Series participants responded:

28 people participated in the Thriving Hive series.

100% stated they will treat for Varroa mites when appropriate.

100% increased their confidence in being a beekeeper.

100% felt they could be a more successful beekeeper.

100% gained the confidence to start keeping bees.

73% increased their knowledge of general IPM tactics.

78% increased their knowledge of row cover use to control pests.

100% increased their knowledge of trap crop/companion planting.

32% increased their knowledge of weed control methods.

65% improved their pest identification skills.

Potential long-term outcomes of IPM adoption include:

reduced human and environmental exposure to pesticides.

reduced yield losses for producers.

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REDUCING THE STIGMA SURROUNDING MENTAL ILLNESS IN BOX ELDER COUNTY

April Litchford

In 2021, Utah reported a 40.6% rate of anxiety and depression among adults compared to the national average of 30.1%.

In Box Elder County, 25% of residents reported poor mental health, which likely contributed to a suicide completion rate of 30.1 per 100,000 people.

< 50% of those with mental illness sought treatment.

The efforts motivated 8 at-risk individuals to reach out for services.

The efforts resulted in a mental health presentation for middle school youth.

To help with reducing the stigma surrounding mental illness, USU Extension is working to educate the public and connect individuals with resources and services.

Two populations are at highest risk for suicide attempts and completions in Box Elder County: adult males ages 35-44, and youth ages 10-24.

Box Elder County Extension partnered with several organizations to create videos sharing lived experiences with mental illness and provided local mental health resources. A community trap shoot event was held in partnership with a local suicide coalition and health department to raise awareness and build partnerships.

In addition, local 4-H and community leaders were trained about the warning signs of mental health issues in youth. A women’s conference was held to educate mothers and daughters about communication in treating mental health issues. USU Extension in Box Elder County partnered with local libraries to provide children ages 2 to 6 with a workshop to help them recognize and manage their emotions.

Efforts by USU Extension in Box Elder County will continue to address the mental health needs of residents, and programs will also be implemented for agricultural producers.

EVALUATING THE UTAH AGRICULTURE IN THE CLASSROOM PRESERVICE TEACHER SEMINAR

Amelia J. Miller, Zak A. Konakis, Emily Yoshikawa-Ruesch, Debra M. Spielmaker, & Denise Stewardson

USU Extension’s Utah Agriculture in the Classroom program is part of a nationwide effort to help students develop an understanding of the importance of agriculture in their daily lives. The program hosts seminars for college students planning to become teachers. From 2017-2021, approximately 600 college students participated and were provided with agriculture-themed lessons to use as they build their classroom resources.

From 2017 through 2021, 584 future teachers responded to the short-term exit survey following the seminar. Short-term results indicated participants found the seminar informative. 23 participants completed the medium-term survey and indicated they felt somewhat comfortable using agriculture as a context to teach lessons in their classes. Most of the lessons teachers used were tied to science educational standards, nutrition/health or reading.

Seminar participants responded:

70% indicated they agreed or strongly agreed that their agricultural knowledge increased after the seminar.

98% stated it was likely or very likely they would use the resources provided in the seminar and explore the Utah AITC website for further resources.

85% rated the pace, organization, and relevance of the presentation as very good.