

USU EXTENSION

**BOX ELDER
COUNTY**

2022 IMPACT REPORT

Extension
UtahStateUniversity®





Mike Pace

County Director
Agronomy & Horticulture Faculty
435-695-2541 | mike.pace@usu.edu

April Litchford

Home & Community Faculty
435-695-2544 | april.litchford@usu.edu

Ashley Longmore

Livestock, Range Management & 4-H Faculty
435-695-2545 | ashley.longmore@usu.edu

Marci Borg

4-H Program Coordinator
435-695-2546 | marci.borg@usu.edu

Brielle Smith

4-H Program Coordinator
435-695-2543 | A01424264@usu.edu

Cheyenne Capener

Extension Staff Assistant
435-695-2542 | cheyenne.capener@usu.edu



CONTACT US

[EXTENSION.USU.EDU/BOXELDER](https://extension.usu.edu/boxelder)

Box Elder County Courthouse
01 South Main, Room 30
Brigham City, UT 84302



AGRICULTURE & HORTICULTURE

A year's overview

LOCAL RESEARCH

Safflower Research

The Utah Department of Agriculture and Food and USDA-NASS shows northern Utah and southern Idaho as harvesting over 22.1 million pounds of safflower valued at \$4.7 million. USU Extension continues to be regionally known among the western states for our safflower research. USU safflower research has identified several newer varieties of safflower that outproduce the field standard S-208 variety by 15 to 20 lbs. on non-irrigated farmland. A \$36,000 grant from the Idaho Oilseed Commission is allowing us to evaluate pre and post-applied herbicides that can be used for weed control when planting dormant safflower in the western region of the US.

Onion Research

Every winter, Utah State University (USU) Extension hosts the Utah Onion Growers Association winter meeting and summer field day for onion growers from Davis, Weber, and Box Elder Counties. Onions are an annual crop grown commercially on 1,600 to 1,800 acres in northern Utah valued at \$25-30 million. Extension conducts onion variety trials each year on local growers' fields to identify appropriate onion varieties for growing in Utah. Data is gathered on yield quantity and quality, the timing of crop maturity, pest tolerance, and storage quality. Some varieties commonly grown in Utah include Calibra, Candy, Charismatic, Crockett, Delgado, Desperado, Granero, Joaquin, Legend, Maverick, Mesquite, Rancho, Redwing, Sedona, Swale, Tequila, and Vaquero to name a few. USU Extension also researches important production problems like the Iris Yellow Spot Virus, onion thrips, pink root rot, downy mildew, bacterial soft rot and neck rot.



COVER CROPS

The utilization of cover crops to improve soil sustainability has become a topic of interest among agriculture producers across the nation with the bulk of cover crop research happening in the mid-west. USU Extension started to research the use of cover crops in Utah using different cover crop mixes and several research sites in 2019. Each site represented a different growing climate within the State of Utah. Research showed the best time to incorporate cover crops into a cropping system is after small grain harvest or after silage corn harvest well before fall tillage occurs.

Forage quality ranged

17.0% -24.9%

protein at 45 days

Cover crop yields peaked at

3.86 TONS

per acre

RESEARCH SHOWED THAT COVER CROPS CAN BE SUCCESSFULLY GROWN IN UTAH AND CAN...



Provide excellent fall grazing for livestock

Improve ground cover and erosion control during the fall and winter months

Capture and hold nutrients for the next crop

FRUIT TREE GRAFTING CLASSES

Grafting is the age-old practice of joining plants to specific root systems to get the desirable benefits of both parts. Mike Pace, USU Extension Faculty for Box Elder County taught homeowners the basics of fruit tree grafting in several hands-on workshops around the state in 2022. He taught 12 fruit tree grafting workshops along the Wasatch Front, Price, Tooele, and as far south as Cedar City to 317 participants from Utah, Wyoming, and Idaho. In addition to learning the science and techniques of grafting, participants were able to graft two apple trees on semi-dwarf and dwarf rootstocks that they took home with them at the end of the class. The estimated value of the grafted apple trees was ~\$9,750.



COMMERCIAL FRUIT TREE PRODUCTION

Every spring, USU Extension in Box Elder organizes a fruit grower meeting for commercial fruit growers from Davis, Weber, Box Elder, and Cache County. This year's meeting focused on pesticide safety and controlling pesticide drift, battery-operated pruning equipment, soil moisture monitoring, and irrigation scheduling and temperature effects on fruit tree crops. Eighty-nine percent of the surveys returned said this was a very good or excellent meeting and rated the **USEFULNESS OF THE INFORMATION** they received a **4.78 out of 5**.



WESTERN HORSE

program spotlight



The Box Elder 4-H Western Horse Program focuses on teaching youth to work with a project horse throughout the year, and be tested on their equine knowledge. The youth are given the opportunity to show their horses in multiple western disciplines including western horsemanship, showmanship at halter, western pleasure, trail, western riding, and reining. The shows also offer three speed events that may include barrel racing, pole bending, key hole, gymkhana, scurry, and quadrangle. The Western Horse Program is one of the largest project areas within Box Elder 4-H. In addition to six Summer horse shows, Box Elder 4-H hosts education nights and Summer camps that include youth who are horse enthusiasts, but do not have the same opportunity to own a horse of their own. Each year youth within the Western Horse program apply and interview to serve as County 4-H Western Horse Ambassadors. The leadership component of this program is not exclusive to youth. Box Elder 4-H proudly hosts a Horse Council comprised of elected parents who oversee bylaws, share programmatic responsibilities, and together generate and organize more opportunities for the youth within this program.



956
Active 4-H Members

145
Adult 4-H Volunteers

110
Chartered 4-H Clubs

AVERAGING 565
Youth Reached Monthly

1,400
TOTAL YOUTH ATTENDING
4-H LIVESTOCK CLINICS

220
YOUTH ATTENDED THE
MOST POPULAR CLINIC

LIVESTOCK FITTING



**OPPORTUNITIES FOR ALL
AGES & INTERESTS**

Box Elder 4-H inspires the next generation of leaders, inventors, entrepreneurs, and problem solvers. 4-H is the nation's largest Positive Youth Development Program and offer a wide variety of programs, projects, contests and events from livestock to sewing, and leadership to robotics.



HOME & COMMUNITY

Serving Box Elder County in family and consumer sciences, finance, sewing and textiles, food preservation and safety, nutrition, relationships, health and wellness, community resources, and economic development.



COMMUNITY COMING TOGETHER THROUGH COOKING CLASSES

There is a strong interest in our community to develop cooking skills that lead to easy, safe, and healthful family meals. We held three Countertop Cooking classes to 68 participants that taught alternative methods to preparing food. These classes included instruction on basic cooking skills, healthful food choices, and an opportunity to taste new foods. Home food preservation classes were also held to promote food safety, home preservation techniques, and a focus on preserving wholesome food.

A Basic Food Preservation class was offered in-person twice with 49 people attending, two virtual food preservation courses were offered on specific preservation methods with 158 attending, and a Master Food Preserver course was offered to 18 participants who attended a five-day in-depth course. Lastly, a few courses were offered to help individuals improve their health by changing eating behaviors and habits. The class offered were Transitioning to Gluten Free Eating and Healthy Eating for the Holidays. These classes were held three times and 45 individuals attended.

**FOOD
PRESERVATION
COURSES
OFFERED**
**VIRTUALLY &
IN-PERSON**
**207
ATTENDED**



BOX ELDER COUNTY ON THE BIG SCREEN

Box Elder County Extension Agent April Litchford was featured in two television spots. The first occurred on KUTV 2 Fresh Living and promoted healthy family meals in an effort to reduce underage drinking and drug use. A healthy family meal, Italian Chicken foil bake was demonstrated. The second occurred on Studio 5 and promoted a healthy family meal that would be appropriate for individuals with diabetes.

DIABETES COOK ALONG CLASSES

The Diabetes Cook Along Classes are hands on classes that encourage participants to learn how to manage their diabetes symptoms and practice these new skills by making a meal with the class. Topics discussed in these classes include carbohydrate control, the Diabetes Plate Method, protein and glucose control, diabetes and body weight, physical activity, fiber, fats, and appropriate snacks. **The virtual classes were offered 15 times this year with 472 participants joining.** A four-class in-person Diabetes Cook Along series was held in Box Elder County with 18 individuals attending.

HOME & COMMUNITY



taught **123** FACE-TO-FACE CLASSES

reached **326** INDIVIDUALS OF ALL AGES

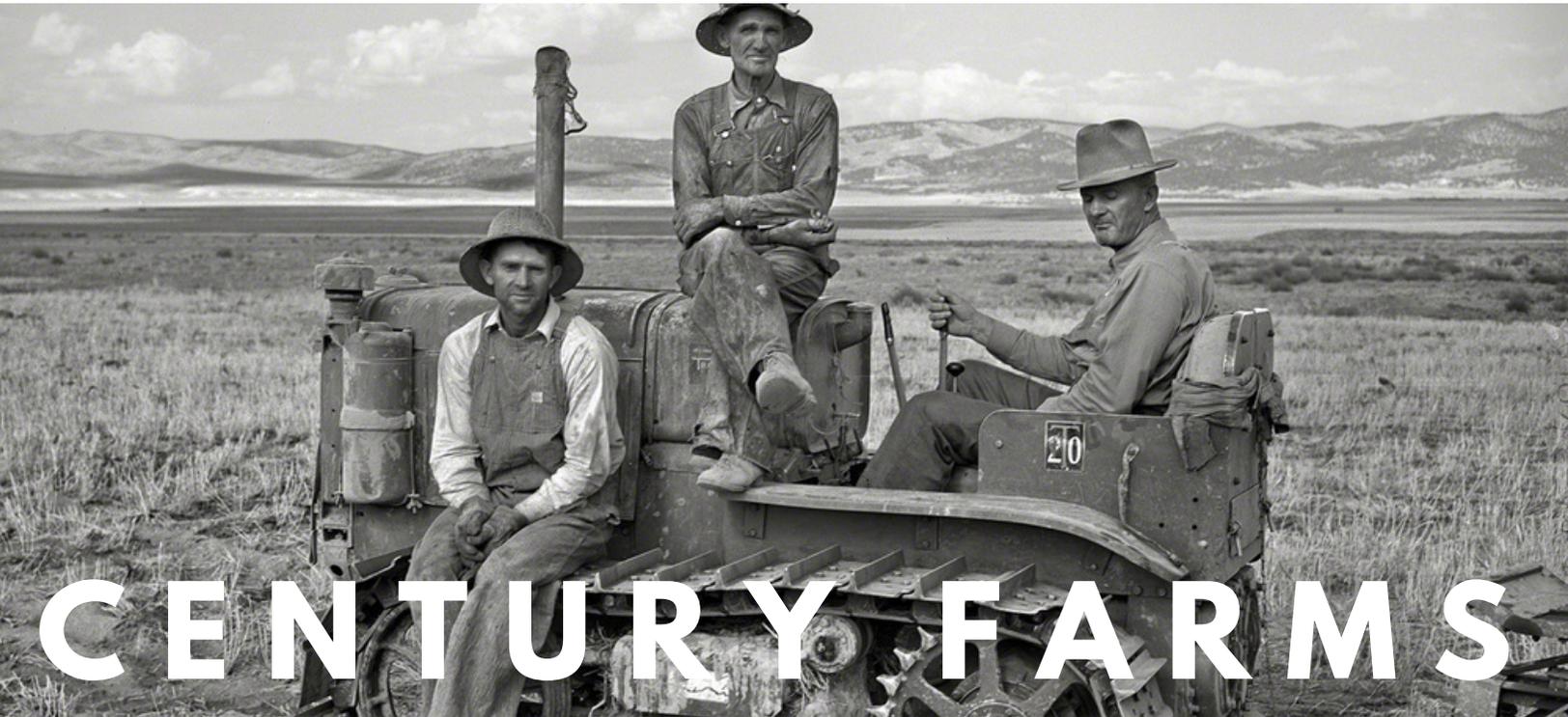
provided **35** INDIRECT EDUCATION RESOURCES

reached **53,025** WITH HANDOUTS + SOCIAL MEDIA

USU Extension - Box Elder County made changes in 5 community programs to emphasize healthy food choices and increase physical activity. Activities included planting a vegetable garden at the Boys and Girls club in Tremonton, working in a community garden in Brigham City, donating fresh produce to 6 Acts Soup Kitchen, Tremonton Food Pantry, and the Box Elder Food Pantry, and installing tags to highlight healthy food choices and providing healthy recipes for food pantry patrons.

They also provided 123 face-to-face classes classes were taught to 326 individuals of all ages. This includes classes at two elementary schools, the Bear River Valley Senior Center, the Brigham City Senior Housing, Sunrise High School, the ILCS (Independent Life Skills Center for Disabled Adults), and a United Way play group. Lastly they provided indirect education 35 times with a reach of 53,025 individuals. This includes recipes and healthy living handouts at the Tremonton and Brigham City Farmer's Markets, social media posts on Instagram and Facebook, and healthy recipes, and activities during summer school lunch at most county public schools

PRESERVING HISTORY



CENTURY FARMS

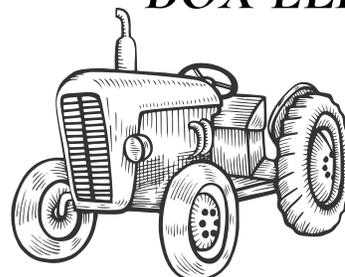
USU Extension - Box Elder County proudly assists with and reviews the Century Farm Applications in partnership with the Utah Farm Bureau. The state's agricultural industry conducts an annual search for family-owned farms and ranches, which have stood through 100 years, as hallmarks of our agricultural heritage. The Utah Century Farms & Ranches Committee searches for farms and ranches which have remained in the hands of the same family unit for one hundred years or more. The Utah Century Farm & Ranch Designation will honor the commitment of Utah farm and ranch families to the state's agricultural industry, the bold determination farmers and ranchers have exhibited throughout the development of our state's customs and culture, and their affirmation of the vision of the pioneers in assisting the desert to "blossom as a rose."

BOX ELDER COUNTY HAS

64 *CENTURY FARMS*
Over 100 years old



2022 CENTURY FARMS IN BOX ELDER COUNTY:



Thorne Orchards
Kennedy River Ranch
Holmgren Brothers Farm
Ballard Farm & Ranch
Weidman Farm

LIVESTOCK & RANGE

Clinics Offered To Producers

TRICHOMONIASI WORKSHOP

The local trichomoniasis breakout exposed nearly 10 cattle herds to the venereal disease that spreads between cattle during breeding. In response to the breakout, USU Extension Box Elder County coordinated an education workshop in collaboration with the State Veterinarian. This workshop taught testing protocol and preventative practices regarding Trichomoniasis.

FARM & RANCH SUCCESSION COURSES

The transition process of farms and ranches presents many unique challenges to producers. In response, USU Extension - Box Elder County has utilized resources to form a farm succession course to provide a unique Extension-driven program that offers educational training, tools, and strategies for Box Elder County farm and ranch producers.



**BOX ELDER COUNTY
CURRENTLY SPENDS
\$10,000 - \$15,000 A
YEAR SPRAYING
PHRAGMITES**

On the Horizon

USU Extension - Box Elder County is seeking funding to use Virtual Fence to target graze phragmites. Changing climates and extended drought conditions in Utah have created a need for producers to find innovative ways to find and utilize alternative forage sources. Phragmites is a wetland invasive species that causes dense mats of vegetation in open water. Once established Phragmites will eliminate native vegetation by causing changes in the biotic and abiotic environment. Thick stands of Phragmites create impenetrable conditions that are unsuitable for many of the wetland species which prefer open water habitats. Grazing has been proven as an effective tool in reducing and managing Phragmites, it is also a valuable feed resource for cattle and can mitigate loss of forage during drought conditions. One of the obstacles encountered when grazing Phragmites is fencing. Permanent fencing is costly and has a reduced operational life span in aquatic conditions. Moreover, with changing climates and ever-changing water levels of the Great Salt Lake, it has been difficult to establish pastures using permanent fence. With receding lake levels, Phragmites has continued to spread and becomes increasingly costly and difficult to manage and treat, along with that the cost of materials to build permanent fence has skyrocketed in the last several years. This project addresses the question of whether virtual fencing can be used as a tool to increase flexibility in management when grazing Phragmites, we will also be examining the economic costs and benefit compared to traditional fencing.



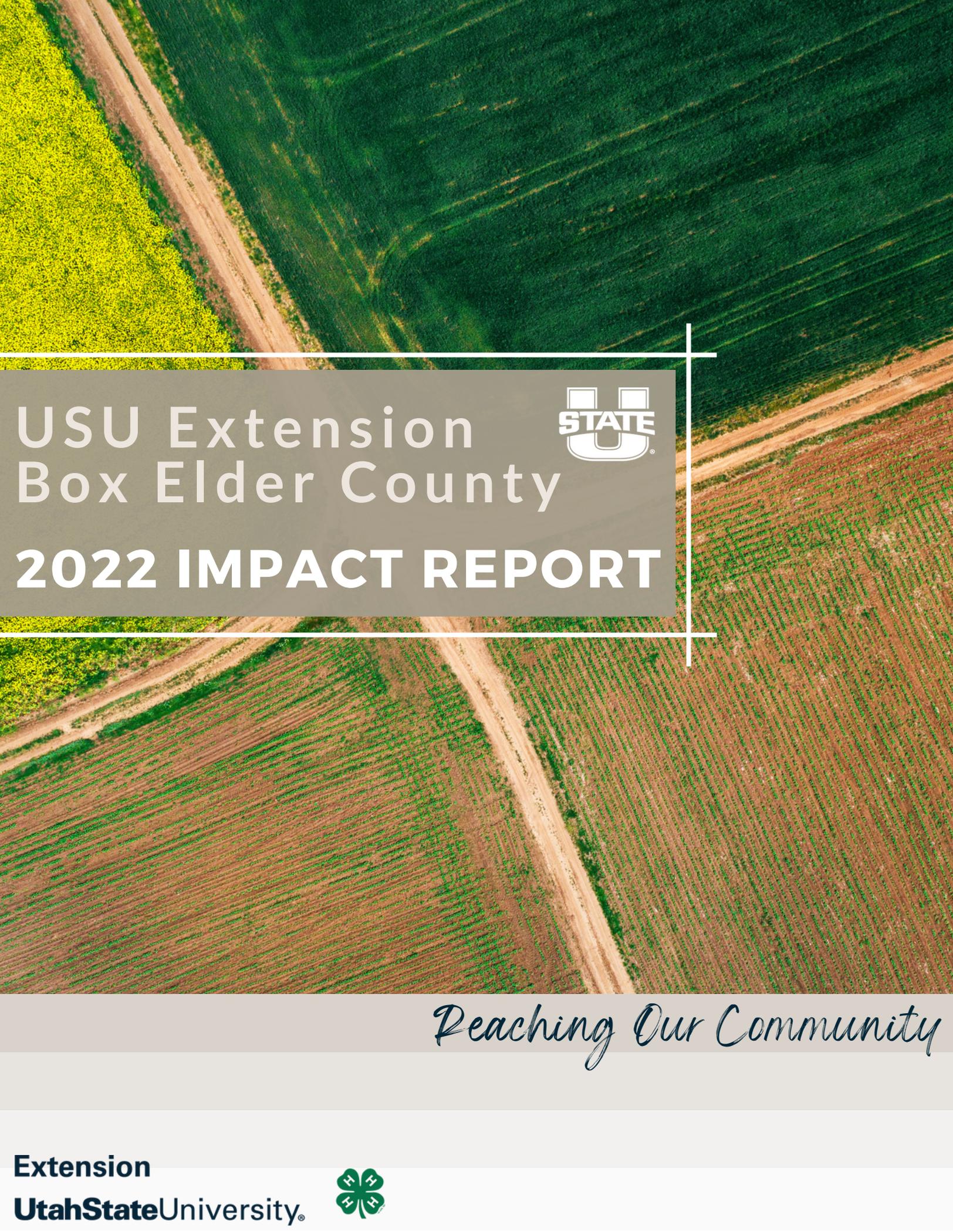


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Reaching Our Community





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