USU Extension

Davis COUNTY

Mission Statement

- The hallmarks of the extension program — openness, accessibility, and service — illuminate how cooperative extension brings evidence-based science and modern technologies to farmers, consumers, and families in Davis County. Through extension, land-grant universities such as USU reach out to offer their resources to address public needs. These services improve the lives of consumers and families through modern agricultural practices, water conservation, home horticulture help, nutrition education, food safety training, and 4-H youth leadership development.

Prior Year Inputs/Outputs

FTE (2022):

- 3 staff assistant FTE's paid from Davis County funds
- $691,530 for 7 FTE faculty salary and benefits paid by Utah State University
- $108,780 for 2 FTE 4-H Program Coordinator paid by Utah State University
- $771,286 worth of grant funding obtained in 2022 by Davis USU Extension faculty for programs to better the lives of Davis County residents.
- **Total of $1.57 million contributed by Utah State University in 2022** for the benefit of Davis County citizens.

Core Functions & Services

- Translate science for practical application
- Identify emerging research questions, find answers and encourage application of science and technology to improve agricultural, economic, and social conditions for the citizens of Davis County
- Prepare people to break the cycle of poverty, encourage healthful lifestyles, and prepare youth for responsible adulthood

Current Year Projected Outcomes

- Further applied research and subsequent publications available to the public on water conservation, improved fruit and vegetable varieties, urban agriculture, and use of native landscape plants.
- Further expansion of 4-H youth programs, especially in the areas of science, engineering, technology, shooting sports, youth mental health, suicide prevention, and agriculture programs such as Jr. Livestock and 4-H Horse programs.

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Performance and Measurement Standards (Extension Outcomes from 2022)

Public Horticulture Education and Urban Agriculture Program Highlights

- Garden Guys and Gal, a social media program designed to teach basic horticulture skills to a broad audience in Utah, has been very successful in both reach, education efforts, and bringing awareness to USU Extension and the USU Botanical Center and the services we offer.
    - Garden Guys and Gals Posts have reached 714, 611 people and has 4,882 followers.
    - 54 USU Extension Facebook Videos created by Davis Extension faculty have reached 1.9 million people
    - Over the past 5 years Sheriden Hansen has done 31 segments on KSL Studio 5 with an approximate reach of 1.7 million views.

Water Conservation

- A statewide drought management website was developed and launched by USU Extension in Davis County. This website is the central location for all information related to drought mitigation for the State of Utah. This website continues to expand and has become the go to resource for anything drought related. The website is drought.usu.edu
- Davis Extension faculty have worked tirelessly with local nurseries, businesses, cities, and residents to deal with the effects of drought in Davis County. This has been done utilizing a multitude of platforms to educate including the Garden Guys and Gal Facebook and Instagram accounts, KSL Greenhouse Show, KSL Studio 5, and in-person classes targeted to the topic (Park Strip Redesign, Irrigation Changing from Spray to Drip, Waterwise Landscape Design, and more).
- Park Strip Redesign Garden
    - Ongoing research regarding water conservation in park strips. The only park strip research taking place in Davis County.
    - Demonstration garden that is highly visible and visited often with data display and design ideas
- Pollinator Garden
    - Installed in June 2021 and received additional grant funding to expand the fall of 2022.
    - Demonstration garden with emphasis on preserving pollinators, native edibles, and water conservation through irrigation design

Master Gardener Education and Plant/Pest Diagnostic Clinic

- Our Diagnostic Clinic has been very busy in 2022 with nearly 500 inquiries on landscape problems (an average of 5 questions/day). Most questions have been regarding trees, drought, and how to manage landscapes in this difficult year. We have managed to mitigate and answer these important questions, providing a valuable resource to residents of Davis County. Sheriden Hansen has worked with the Utah State pathologist Claudia Nischwitz to solve problems regarding tomato crop losses with our agriculture producers and home gardeners in Davis County (some of our producers have lost up to 50% of their tomato crop). Root rot pathogens and curly top virus have both been identified and action has been taken to provide solutions to both growers and residents who have been affected.

- The Master Gardeners (from January 1 to July 31, 2022) have provided 1,330 hours of service at the USUBC, 70 hours at the Davis Heritage Festival, and 100 of hours of community service in Davis County.

Urban Farming
Number of classes/presentations: 6
Number of participants: Over 1,000
Urban demonstration farm located at the USU Botanical Center is the only one of it's kind along the Wasatch Front.

New Programs related to Public Horticulture Education

- **Foundations for Growing Cut Flowers:** this was a course that Sheriden Hansen developed that teaches cut flower production from A to Z. The course is designed specifically for those who are considering becoming cut flower producers and spans 7 months, covering the full production cycle of most cut flowers. The course was sold out with 23 enrolled coming from as far away as Brigham City and Genola.
- **Diagnostic Clinic Application and Program:** Sheriden Hansen has been working with a computer coder to establish a diagnostic tracking program that can help us improve our clinic and service and identify trending problems in Davis County and across the state. The program was written and trialed in Davis County in 2021 and in 2022 was funded by a USU Extension Grant to expand the programming. The program is now being used in Davis and Cache Counties as well as the main Plant Pest Diagnostic Lab in Logan. The application can be viewed here: https://jp-sandbox.shinyapps.io/USU_DIAG_CLINIC1/
- **Create Better Gardens:** This is an expanded program in partnership with Clearfield City and Windsong Community Apartments. This program is in cooperation with Create Better Health and targets low-income families and groups with poor access to fresh produce. It also targets new and first time gardeners to teach basic gardening principles. In 2022, Clearfield City remodeled and refreshed the community garden. USU Extension installed a pollinator garden at the entrance to the garden to use for education and to beautify the area. In return, Clearfield expanded the area dedicated to USU. Windsong Apartments did something similar and expanded the gardening area to better serve the 60 families that live in the area. Both sites receive monthly classes on gardening and cooking with fresh produce.
- **Scarecrow Walk:** We are currently planning the 2nd annual Scarecrow Walk at the USUBC. This event ran for 10 days in 2021 and was well attended with 1,200 people attending opening night and a total of 4,000 over the whole event. We purposely ran the event at the same time as the USU Farmers Market and were able to successfully boost attendance and awareness of the market while also improving on-site visitation to the USU Botanical Center.

Pesticide Education (Dr. Michael Wierda is housed in Davis County and in addition to serving Davis County citizens has become the statewide expert and main producer for Utah Department of Agriculture of Pesticide license study guides and exams)

Production of 2 online Respiratory Safety courses. Which

- are nationally applicable,

- supports Pesticide Safety Education Programs (PSEPS) nationally as well as statewide
- generates funds for USU Extension, USU PSEP, and other PSEPs

- The USU Pesticide Safety Education Round Tables on FaceBook continues to be popular and grow in size.
- Dr. Wierda recently created a USU PSEP Youtube channel.
  - He has posted screen recordings of the new respiratory safety online courses on this channel. He intends to post many pesticide safety education recordings he has here.
- Working closely with UDAF he is producing 2 pesticide exam study guides and 3 exams for the Fumigation category.
- Dr. Wierda's work is a critical component of industry and private pesticide applicators. Without the materials he produces thousands of individuals of Utah would not be able to spray pesticides due to mandatory testing and holding a pesticide applicator license.

Home and Community/Health and Wellness Program Highlights

Create Better Health (CBH) SNAP-Ed: ***2021 federal fiscal year Oct. 2021 – Sept. 2022***

- Total Direct participants: 1,200
  - Total estimated indirect education reach: 117,175
- Direct Program activities: 59
- PSE (Policy, Systems, Environment changes) Sites:
  - 11 sites; 13 total changes adopted
  - Reach through PSE: 3,297 so far
- Partnerships: 28
- CBH has delivered both in-person and virtual education to our low-income and underserved population in Davis County throughout 2022. The CBH Ambassadors have done an outstanding job of utilizing social media to deliver online programming, creating pre-recorded classes to send to partners, and creating or reconnecting with partners to provide in-person classes. We were able to teach in every single Head Start class in Davis County this year and continued our partnership with Sheriden Hansen and her Master Gardeners for a "beautification project" of a Clearfield community garden where we taught the curriculum Create Farm Fresh Gardens. We were also able to hire a third Ambassador to further our nutrition education reach and she will be getting her Tai Chi certification this next year to increase PA education as well.

New Programming:

Marathon Kids: Marathon Kids is a volunteer-led coaching model that combines technology and evidence-based practices to build a structured physical education program. The program promotes youth and adult physical activity via family, school, and community-based activity clubs or programs. Participants set goals to run, jog, walk, or perform other physical activities equivalent to one or more marathons over the course of the program and coaches (faculty) track their progress. Davis County will have its own MK program and Woods Cross City Recreation has already adopted the program and will

be implementing it this fall through next Spring for their residents with Extension's support and guidance.

Impacts: Not yet available, but outcomes from the summer statewide program include:

- 209 total participants
- 3976 miles reported (151 marathons)
- One parent has shared that her kids couldn't believe how many miles they were able to complete in just two months (one completed 12 marathons and the other did 15 marathons). They also encouraged her to complete and submit her own miles as well.

Davis Wellness Walks: a walking lecture series that highlight different trails throughout Davis County every other week June-August. Each month, we introduced how to boost overall wellness followed by a group stroll around the ponds with time for Q&A. This year we partnered with EFNEP and had their nutrition educators provide a brief lesson on nutrition and how it impacts our wellness. Purpose: increase physical activity, social interaction, connection to nature and gratitude/mindfulness.

- Participants: 180
- Impacts:
  - 90% of respondents agree that their physical and emotional well-being was improved by participating in the wellness walks
  - 90% of respondents agree that participating in the walk helped them feel connected to nature, connected to others, feel a greater sense of gratitude and feel a greater sense of mindfulness.
  - 100% of respondents would recommend the walk to others.

Success story: we heard from multiple participants that despite being Davis county residents, they had never visited many of the trails we highlighted. Some families were not able to start the walks at the designated start time, but still went to the walk because "they wanted to explore more trails" in their community.

4-H Youth Program Highlights

Horse

- Horse program had a total of 5 shows this year.
- Western horse program has 70 youth participants
- English horse program has 15 participants.
- This year we added 2 new horse clubs to the program which added 10 youth to the program
- There is a total of 19 club leaders, 45 adult volunteers and 14 horse youth ambassadors in the horse program

Livestock

- There was 98 youth who showed a market animal in the livestock show. This is including all market species: beef, lamb, swine and goats.
- We also had 13 participate in the Dairy Goat show.
- The sale brought in over $157,000 for the youth in the program, this is a record high for the sale in Davis County.
- There is a total of 6 people on the jr. livestock committee, 10 superintendents, 38 adult volunteers and 10 youth livestock ambassadors in the jr. livestock program.

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General 4-H Program

Grants or any other External Funds received in 2022

- Utah House Outdoor Classroom Grant ($10,000 + $10,000 combined cash and in-kind matching)
- Wings and Water Grant renewed for another 3 years in conjunction with the Nature Conservancy
- Hands in the Garden Grant

Program Impacts

- Wings and Water reached 587 students from 6 schools. Lower numbers than past years, but it's important to consider that this programming is starting again after a COVID hiatus with reduced programming from previous years. It will return to full time (3 days a week) this fall. Feedback from teachers was positive.
- iSEE program reached over 2,500 students from over 30 schools. There was no official impact survey used for this program, but anecdotal reports from teachers suggest that the iSEE program was a helpful way to review for end of year testing and provided a fun way to introduce information not usually covered in the school year.
- 2 schools visited the Utah House to conduct water quality monitoring field trips. Students were able to collect and take home data, which is also being stored as a data ledger for the Kaysville Ponds which may become helpful for future water quality purposes.
- The Junior Master Gardener Program provides participants with an increased knowledge in agricultural science, where their food comes from, why nutrition is important. It provides food security for youth in under privileged communities and gives youth the opportunity to provide food for themselves. This program uses service learning as a main component – so while providing a service they are learning a new skill that will help them in the future.
- Davis Heritage Festival – 4-H was able to come into contact with thousands of youth and parents who have never heard of our programs or what we do. This increased our numbers in our Teen Council and Cloverbud programs.
- Summer Camps – We were able to serve 180 youths in the county with our various summer camps. Youth that participated in our camps were exposed to many different scientific principles and were able to make meaningful connections with other campers and their leaders. Many of our camps were ran by members of the Davis County 4-H Teen Council/Project Ambassadors. By having youth run our camps we were able to provide leadership learning experiences while also providing a fun and interactive camp for those in attendance.

New Programs Started

- iSEE program 3 year legislative pilot started with 2021-22 school year
- Junior Master Gardener Program started with Hands in the Garden Grant

Expanded Food and Nutrition Extension Program (EFNEP) Highlights

In 2022, EFNEP, DAVIS COUNTY reached **93 adults** and **1086 youth** directly and **348 family members indirectly**.

ADULTS FEMALE	ADULT MALE
61	32

RACE/ETHNICTY - ADULT	# OF PEOPLE

AI or AN	0
Asian	1
Black	4
NH or OPI	0
White	81
Hispanic	7

EFNEP ADULTS

DEFINING THE PROBLEM

- Obesity, poor nutrition, and limited physical activity are significant health concerns. Poor health disproportionately affects minority and low-income populations. Educational opportunities and resources are limited.

INVESTING IN THE SOLUTION

- EFNEP brings together federal, state, and local resources to target two primary audiences: Low-income families with young children and low-income youth. The program operates in all counties across Utah.

REACHING LOW-INCOME FAMILIES

- **67%** of EFNEP participants **who reported income** are at or below 100% of poverty, earning $26,500 a year for a family of four.

REACHING DIVERSE POPULATIONS

- At least **13%** of all EFNEP adults are **minorities**.

CHANGING ADULT BEHAVIORS

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DIET QUALITY

- **98%** - Percentage of adults improving **diet**, including consuming an **extra cup of fruits and vegetables**

FOOD SECURITY

- **1%** - Percentage of adults improving in food security indicators (not eating less than they wanted so there was more food for family members, or having enough money to get food)

FOOD SAVINGS

- **99%** - Percentage of adults bettering **food resource management** practices

FOOD SAFETY

- **83%** - Percentage of adults improving **food safety** practices

PHYSICAL ACTIVITY

- **90%** - Percentage of adults with positive change in **physical activity**

ZIP CODES	# OF PEOPLE - ADULTS
84010 - BOUNTIFUL	17
84014 - CENTERVILLE	2
84015 – SUNSET/CLINTON/CLEARFIELD/WEST POINT	37
84025 - FARMINGTON	1
84037 - KAYSVILLE	5
84040 - LAYTON	4
84041 - LAYTON	24
84054 - NORTH SALT LAKE	0
84067- ROY	0
84075 - SYRACUSE	1
84087 - WOODS CROSS	0
84403 – SOUTH OGDEN	2

EFNEP YOUTH

YOUTH FEMALE	YOUTH MALE
512	574

YOUTH RACE/ETHNICTY	# OF PEOPLE
AI or AN	8
Asian	26
Black	29
NH or OPI	18
White	829

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Hispanic	176

DIET QUALITY

- **84%** - Children and youth improve their abilities to choose foods according to Federal Dietary Recommendations or gain knowledge

FOOD RESOURCE MANAGEMENT

- **48%** - Percentage of children and youth improve their ability to prepare simple, nutritious, affordable food or gain knowledge

FOOD SAFETY

- **59%** - Percentage of children and youth use **safe food handling** practices more often or gain knowledge

PHYSICAL ACTIVITY

- **49%** - Percentage of children and youth improve their **physical activity** practices or gain knowledge

FOOD SECURITY

- **50%** - Youth acquire skills to be food secure or gain knowledge

ZIP CODES – YOUTH SCHOOLS
84015 - SUNSET
84015 - CLINTON
84015 - CLEARFIELD
84015 - SUNSET
84037 - KAYSVILLE
84041 - LAYTON
84087 - WOODS CROSS

WHY IT WORKS

EFNEP educators follow a research-based learning model that allows them to effectively reach and educate program participants. Educators are:

- **Members of the communities** they support;
- **Trained/supervised** by university and county-based faculty;
- **Skilled** in using hands-on, interactive teaching methods;
- **Committed** to delivering sound instruction;
- **Able** to influence changes in behavior and impact the lives of those they teach; and,
- **Dedicated** to reaching diverse, low-income populations.

Next Year Budget Initiatives

Budget Items and Anticipated Expenditures for Term

Please note variances: Rows 1-8 and Row 10 are an increase of 5% from the previous year. Row 9 is an increase of 10% from the previous year due to increased utility costs.

DESCRIPTION	DOLLAR AMOUNT
1. Salaries and benefits for support staff (3 FTE's)	$188,126 (includes projected 5% or $8,958 COLA increase)
2. Office supplies and operating expenses (copy machine, general office supplies, fuel expenses for Extension vehicle, and outdated computer upgrades)	$6,200
3. 4-H Agriculture Program Support (Jenna Aldrich)	$5,400
4. Family and Consumer Science Program Support (Emma Parkhurst)	$5,400
5. Agriculture/Pesticide Safety Program Support (Dr. Michael Wierda)	$5,400
6. Horticulture Program Support (Sheriden Hansen)	$5,400
7. General 4-H Program Support (Dr. Palak Gupta)	$5,400
8. Food Sense nutrition education support	$1,050
9. Operating and Maintenance (O&M) for Extension building	$36,032 +$1,801=$ 37,833 (please refer to supplemental invoice that shows O&M

	expenses billed. Extension pays 45% of these costs plus an additional contingency amount of $1,801 or 5% requested for unexpected repairs (air conditioning, heating, broken restroom equipment, etc.) Extension shares the building with USU Distance Education. Formula for calculating Extension's share of O&M is: $80,073 total building O&M x 45% (Extension's portion of the building)= $36,032
10. Summer intern, staff assistant, volunteer travel and support	$2,100
Total	**$262,309 (budget amount requested for 2023)**

Future Challenges

- Staffing continues to be a challenge to maintain a 130 acre Botanical Garden, growing Extension programs especially in the area of Public Horticulture Education, and a new Agricultural Heritage Center with anticipated construction completion date of June 2023.
- The Davis Heritage Festival attracted over 7,000 people. Challenges will be convincing the public that this is the new County Fair. The date of the Heritage Festival has been changed to August 2023 and the name will be Davis Heritage Fair to help calm those citizens of the county that are upset the traditional County Fair was cancelled.
- Operating and Maintenance (O&M) costs continue to rise and constitutes a large portion of our budget which limits expanding programs.

Kaysville Education Center

Estimated Operating Costs 2022

	Kaysville City Corp Electric, Water, Sewer	Dominion Energy Natural Gas	Waxie-Supplies Janitorial	Stratus Janitorial	Robinson Waste Garbage Service	Utah Botanical Landscape	Utah Botanical Snow Removal	Netcom BC & KEC 90% Long Distance	Netcom Botanical 10% Long Distance	UEN KEC 80% Network	UEN Botanical 20% Network	First Digital BC & KEC 90% Long Distance	First Digital Botanical 10% Long Distance	Fire Protection Fire Alarm	CCI Mechanical HVAC	Total
January	$1334.55	$1085.29	$536.37	$1,499.70	$111.09			$90.00	$10.00	na	na	$261.95	$29.11		$963.50	$5,921.56
February	$1339.81	$927.11	$187.36	$2,173.00	$110.92			$90.00	$10.00	na	na	$275.22	$30.58			$5,144.00
March	$1328.87	$826.52	$300.75	$1,733.00	$111.82			$90.00	$10.00	na	na	$271.73	$30.19			$4,702.88
April	$1476.82	$667.22	$244.24	$1,733.00	$125.86			$90.00	$10.00	na	na	$275.48	$30.61		$963.50	$5,616.73
May	$1266.73	$448.01	$301.49	$1,733.00	$126.89			$90.00	$10.00	na	na	$288.12	$32.01			$4,296.25
June	$1981.69	$384.46		$1,733.00	$128.59			$90.00	$10.00	na	na	$285.17	$31.69			$4,644.60
July	$2248.29	$220.79	$543.02	$1,733.00	$156.36			$90.00	$10.00	na	na	$274.47	$30.50			$5,306.43
August	$2300.00	$171.44	$117.52	$1,733.00	$156.36			$90.00	$10.00	na	na	$275.00	$31.00			$4,884.32
September	$2100.00	$290.00	$500.00	$1,733.00	$156.36	$17000.00		$90.00	$10.00	na	na	$275.00	$31.00	$500.00	$1000.00	$23,685.36
October	$1800.00	$435.00	$300.00	$1,733.00	$156.36			$90.00	$10.00	na	na	$275.00	$31.00			$4,830.36
November	$1500.00	$650.00	$500.00	$1,733.00	$156.36			$90.00	$10.00	na	na	$275.00	$31.00			$4,945.36
December	$1400.00	$950.00	$300.00	$1,733.00	$156.36		$1650.00	$90.00	$10.00	na	na	$275.00	$31.00			$6,595.36
TOTALS	$20,076.76	$7,055.84	$3,830.75	$21,002.70	$1,653.33	$17,000.00	$1,650.00	$1,080.00	$120.00	$0.00	$0.00	$3,307.14	$369.69	$0.00	$2,927.00	**$80,073.21**