

# UC CE

# Central Sierra

## El Dorado County Annual Report | 2022 - 2023

The Central Sierra stretches from the foothills above the Sacramento Valley, through rugged mountains to Lake Tahoe, south through the wine country in the foothills of Amador and Calaveras counties, and to the edges of Tuolumne County. These "Golden Counties" of California have terrains as diverse as their populations. The pioneering spirit that drew gold-seekers West still thrives in the mother lode where our Central Sierra counties remain rich in opportunity and prosperous through their people.

The University of California Cooperative Extension of the Central Sierra territory provides science-based information and educational programs to solve local issues in areas of agriculture, natural resources, nutrition, and youth development that improve social, economic, and environmental quality for all residents of El Dorado County.

We are grateful for the community participation, partnerships, and support of our programs and activities that made 2022-2023 a success. On behalf of our entire team, we are pleased to share our Annual Report with you.



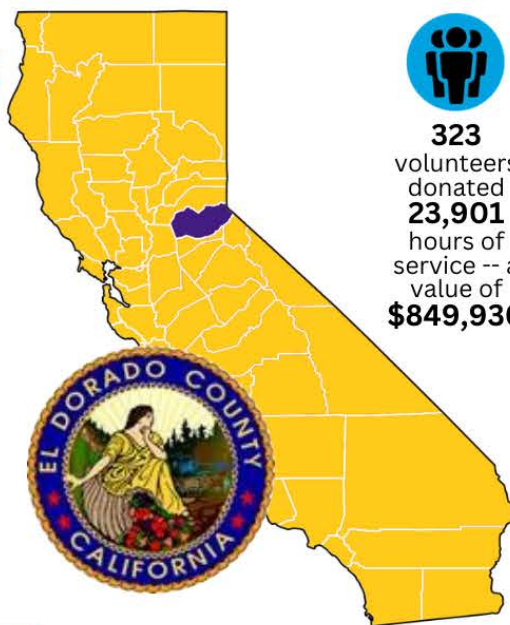
## UCCE Funding

**920,004**  
University (2021)

**\$325,755**  
County

**\$848,799**  
Advisor-Generated  
Gifts and Grants

**\$80,659**  
Raised by Volunteers to  
Support Local Programs



**323**  
volunteers  
donated  
**23,901**  
hours of  
service -- a  
value of  
**\$849,930**



**10,779**  
total  
educational  
interactions  
with the  
public



**7**  
peer-  
reviewed/  
audience-  
requested  
publications



**37**  
academ-  
ic-  
workshops,  
field days,  
and classes



**10**  
news media  
programs/  
mentions



**5,634**  
residents  
reached by  
UC Master  
Gardener  
volunteers



**507**  
participants  
attended  
academic-  
field  
days/classes



**425**  
youth in  
UC 4-H Youth  
Development  
Program



**1,764**  
people  
reached by  
CFHL, UC





## UC CALFRESH HEALTHY LIVING

### Safeguarding sufficient, safe & healthy food

#### Improved food safety

CFHL, UCCE collaborates with the Boys and Girls Club of South Lake Tahoe and the Foothill Indian Education Alliance to offer cooking lessons using the 4H Cooking 101 curriculum. In total, 62 sessions of cooking lessons were offered to youth in El Dorado County in FFY23. Before addressing any cooking techniques or recipes, Cooking Academy focuses on knife, equipment, and food safety. Food safety topics include handwashing, cleaning produce, equipment sanitation, time and temperature control, safely storing leftovers, sanitary cooking practices, and clean up. Students not only get a chance to learn these lessons, they put them into action by serving healthy food options to their peers and families during community events. Learning safe food handling at a young age instills positive, life-long habits in youth as they provide meals for themselves and their families.

### Promoting healthy people & communities

#### Improved health for all

CFHL, UCCE educators in El Dorado County provided nutrition lessons to 2,090 participants over 492 sessions, totaling 373 hours of direct education lessons.

After a 3-lesson series of the Learn! Grow! Eat! Go! curriculum, 5th Grade students at Tahoe Valley Elementary School were prompted “What, if anything, is one thing that you learned from these classes?” and “What, if anything, is one thing that you do differently because of these classes?” One student responded with the following (verbatim): “I learned the five different food groups such as protein, darie, grain, veggies, fruit” and “one thing that I do differently is I don’t snack as often + I have more protien with meals.” This demonstrates an increased awareness of food groups, daily eating behaviors, and the nutrient value of food. Not only is this student aware of healthy eating habits, they are taking steps to incorporate these habits into their lives.

In FFY23, CFHL UCCE educators facilitated 6,174 individual tastings in El Dorado County. Evaluations show that during these tastings, 46% students had never tried the item before. After completing the tastings, 77% students were willing to try to food item again and 70% students were willing to ask for the item at home. This data is significant as it demonstrates that a large proportion of participants are being exposed to new foods, and that a majority are interested in continuing healthy eating behaviors at home.



*Teens as Teachers at Boys and Girls Club of South Lake Tahoe make a healthy trail mix to share with community members at a Holiday Tree Lighting event. November 2023. Photo credit Cristina Luquin, Alejandra Giron.*



**Noah Cooke**  
CalFresh Healthy Living



**Kitty Oppliger**  
Community Health & Nutrition Advisor





# AGRICULTURE

## Promoting economic prosperity in California

### Increased agriculture and forestry efficiency

Information derived from assessments guides extension professionals in focusing their research and extension programs on relevant issues. A needs-assessment survey, created by Hardeep Singh, Local Food Systems Advisor in the Central Sierra, aims to address local needs in terms of crop production. Results of the survey indicated a total of 31 complete responses, with 42% of respondents being low income/beginning farmers, and 29% being women farmers. The respondents comprised an almost equal proportion of conventional and organic farmers, including those practicing organic methods without certification. Survey asked respondents to rate various topics in terms of the need for research and extension. Sustainable food systems/organic agriculture emerged as the top priority, followed by insect pest weed and disease control, technical assistance with grant programs/regulatory compliance, and irrigation management. In summary, the survey provided valuable insights into the needs and priorities of local farmers, guiding future research and extension efforts to address critical issues in the Central Sierra.

## Safeguarding sufficient, safe & healthy food

### Improved food security

Local Food Systems Advisor conducted numerous farm visits, disseminating science-based practices for integrated pest management, irrigation scheduling, nutrient management, and resource sustainability. Advisor delivered educational presentations to growers and master gardeners on topics such as irrigation management, cover crops, vertebrate pests, endemic, and invasive pests. In total, 28 individuals attended these educational presentations and meetings, experiencing a positive change in knowledge. Over the period from October 1, 2022, to September 30, 2023, advisor received 17 farm calls from different farms in El Dorado County. As a result, 4 individual growers changed their practices and decision-making, 2 intended to change their practices, and 11 experienced changes in learning/knowledge



Picture from a farm visit to Sanborn orchards in Placerville to diagnose fruit damage in Angelcots on June 16 2023.

*Farmers in El Dorado County cultivate a diverse range of crops year round, catering to a clientele that includes new/beginning farmers lacking agricultural experience and those who have relocated to the region to initiate new agricultural enterprises.*



**Hardeep Singh**  
Local Food Systems Advisor



**Mackenzie Faith Patton**  
Integrated Pest Management Advisor





## LIVESTOCK & NATURAL RESOURCES



*164 livestock producers completed this survey which showed there is high interest for a USDA Meat Processing Facility in the Central Sierra*

### Safeguarding sufficient, safe, & healthy food

Improved food security

Access to a USDA Meat Processing Facility is limited and challenging in the Sierra Nevada. Since COVID, we learned that our American Meat Supply Chain has some significant limitations as illustrated by a meat supply shortage that occurred.

In August and November 2023, a survey was sent out to understand the needs of the Central Sierra livestock producers (focus on cattle, sheep, goats and pigs) for a new USDA Meat Processing Facility in the area. The survey was focused on Amador, Calaveras, El Dorado, and Tuolumne Counties but reached 12 different counties.

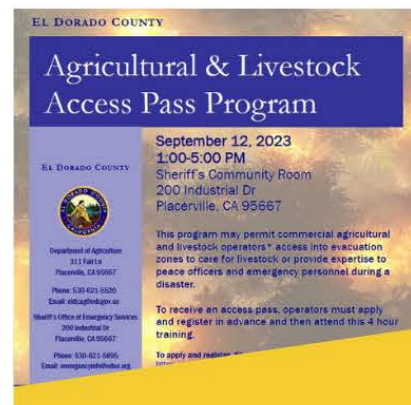
This project will help tremendously local livestock producers, but also the local communities via the access to local food. It would also have an impact on tourism via potential restaurants serving local meats.

### Protecting California's natural resources

Increased preparedness and resilience

In 2021, California Assembly Bill AB 1103 established a statewide livestock pass program for producers to access their property to check on livestock during a disaster.

The Livestock / Agriculture Disaster Pass Program develops a protocol that may permit commercial agricultural and livestock operators access into evacuation zones to care for livestock/crops or provide expertise to peace officers and emergency personnel during a disaster. In 2023, UCCE worked with local law enforcement, Cal-Fire, Office of Emergency Services and the County Department of Agriculture in El Dorado County to develop and implement a 4 - hour initial training for agriculture producers. UCCE staff recorded the training, edited the footage and made the video recording available.



*In El Dorado County, UCCE administered the Livestock & Agricultural Access Pass Program to prepare farmers and ranchers for the opportunity to return to their property in emergency situations.*



**Flavie Audoin**

Livestock & Natural Resources Advisor



**Scott Oneto**

Farm Advisor





# WOODY BIOMASS & FOREST PRODUCTS

## Building climate-resilient communities/ecosystems

Raised public awareness toward forest biomass-derived products

Innovative utilization of biomass-derived products plays an important role in increasing community resilience against forest wildfires in a changing climate.

Raising public awareness and knowledge on alternative biomass treatment technologies promotes community engagement and relevant policy changes that support the realization of fuel reduction goals.

Newsletters focusing on forest biomass, bioenergy, bioproducts, and wood products were distributed among the Central Sierra residents through the Forest Stewardship Program and reached about 350 people with an open rate of 56%. A biomass and bioenergy webinar with approximately 30 participants was co-hosted with the Forest Stewardship Program. Other outreach activities, including talks at the Master Gardeners extended education meetings in Tuolumne, Calaveras, Amador, and El Dorado Counties and one-on-one conversations via phone calls, led to increasing awareness toward wood products and biomass treatment options. Residents expressed through conversations and surveys that they have gained additional knowledge and willingness to participate in future events.

These events that aimed to raise public awareness helped develop a foundation for future efforts toward improving community resilience against climate change through better utilization of forest resources.

## Protecting California's natural resources

Improved industry representation and stakeholder collaboration on regional projects

Protecting natural resources and promoting economic prosperity are complementary to each other and UCCE continued to work toward these goals by bringing together stakeholders in the biomass and forest products sectors.

Needs assessment was developed to determine immediate needs and long-term challenges among the forest and biomass products sectors through in-person meetings and surveys. Collaborations were developed aimed to help promote local bioenergy and wood products projects. Several grant proposals, for example, the CalFire Workforce Development grant and the USFS Wood Innovations grant are underway aimed to address some of the challenges described during the needs assessment development, including workforce training, industry partners engagement, and feedstock reliability.



*A webinar in collaboration with CAL FIRE and USFS Region 5 sought to inform and engage participants around bioenergy research and avenues of economic development regarding biomass and bioenergy.*



**Cindy Chen**

*Woody Biomass & Forest Products Advisor*



# FORESTRY & FIRE

## Improved management and use of land

Landowners learned how to conduct prescribed fires on their own property

A UCCE Advisor and Community Education Specialist assisted landowners with prescribed burns on their lands through the El Dorado Amador Prescribed Burn Association. The goal of the PBA is to help landowners become more comfortable with the use of prescribed fire to manage flammable landscapes. We hosted 13 classroom and field based workshops and events for landowners reaching 178 people in 2022-23. Since 2018, this totals 46 workshop days/events reaching 1142 people with prescribed fire technical assistance.

We developed a permitting guide and a fuel weather monitoring guide specific to El Dorado County posted on the PBA website at <https://forests.berkeley.edu/el-dorado-amador-prescribed-burn-association>.

## Developing a qualified workforce for CA

Helping El Dorado County residents develop resilient careers in forestry

Lake Tahoe Community College forestry classes at UC ANR Blodgett Forest Research Station in Georgetown, El Dorado County with costs covered by funds from the Federal Economic Development Administration's Good Jobs Challenge through the Foundation for California Community Colleges (FCCC) to see the variety of different forest management practices there including salvage logging after the 2022 Mosquito fire and talk with experienced forest managers and workers. They learned about prescribed fire as a forest management tool and took part in a broadcast burn. The FCCC has a rigorous tracking and evaluation program to identify whether students involved in training programs such as ours are able to get good jobs. We are providing information for that evaluation and will be following up with students in collaboration with other subawardees.

## Protecting California's natural resources

Increased forestry efficiency

The Forest Stewardship workshop series empowers private landowners to improve the resilience of their forests. Eight El Dorado County landowners had their initial RPF site visit covering 880 acres. The RPF visit typically leads to the development of a forest management plan and implementation of forest management activities, improving overall forest health and resiliency, and reducing the negative effects of wildfire.



*Landowner lights the first broadcast burn on his property to consume invasive blackberries with a PBA volunteer. February 19th, 2023. Photo by Susie Kocher.*



**Susie Kocher**

*Forestry & Natural Resources Advisor*



**Katie Reidy**

*Post-Fire Academic Coordinator*





## UC MASTER GARDENERS

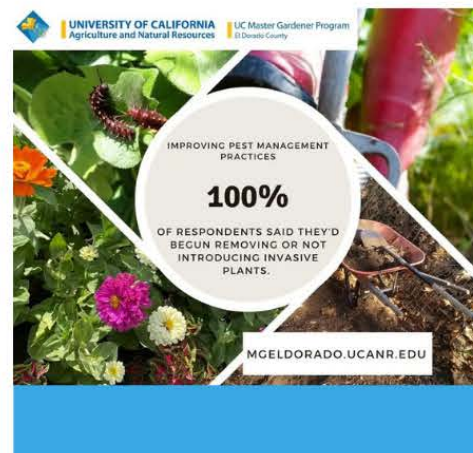
### Promoting healthy people and communities

Students develop healthy eating habits when exposed to school gardens. UC Master Gardener Volunteers, in collaboration with UC CalFresh Nutrition Educators and school staff, completed hands-on lessons in growing microgreens to about 650 students during the school year. Lessons were provided to 26 classrooms, including the thrill of eating the harvested microgreens. Master Gardener Volunteers also providing support to kindergarten classes in multiple schools districts to plant and harvest potatoes and garlic. Students collected data on the plantings and enjoyed eating their harvest. Research shows that students who are given the opportunity to help with a school garden are more likely to eat fresh fruits and vegetables.

### Improved community health and wellness

UC Master Gardener volunteers donated 11,757 hours to the El Dorado County community in the 2022-23 program year through 93 in person events and activities. Master Gardeners provided education or services to 9,785 participants.

Community members who engage with Master Gardeners are changing their behavior by making sustainable choices in their gardens and landscapes. Post evaluation results from Master Gardener public education classes show that 67% are adding more edible plants to their gardens. 50% of participants began composting which reduces food waste going to landfills and 60% are using mulch for soil amendment and water conservation.



*According to post-class surveys, participants takeaway and implement valuable gardening practices at a high rate.*

## UC MASTER FOOD PRESERVERS

### Safeguarding sufficient, safe & healthy food

Participants adopted home food safety practices

UC Master Food Preserver Volunteers teach in the community to improve food safety to prevent food-borne illness.

UC Master Food Preserver Volunteers participate in the bi-monthly food bank Elder Outreach distribution in El Dorado County, sharing information on properly storing food to prevent spoilage and providing simple recipes that use the food distributed to the senior community members that month. Participants return and report success and satisfaction with the recipes.



*Master Food preserver volunteers participate in food bank elder outreach in El Dorado County.*



**Tracy Celio**

*Master Gardener Program Coordinator*



**Sue Mosbacher**

*Master Food Preserver Program Coordinator*



University of California  
Cooperative Extension  
Central Sierra  
Multi-County Partnership

El Dorado County

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**Advisors**

Cindy Chen, Woody Biomass & Forest  
Products

Susie Kocher, Natural Resources & Forestry  
JoLynn Miller, 4-H

Scott Oneto, Farms & Agriculture

Kitty Oppliger, Comm. Health & Nutrition

Mackenzie Patton, Integrated Pest  
Management

Hardeep Singh, Local Food Systems

Recruiting: Livestock & Natural Resources

Recruiting: Indigenous Disaster Resilience

**Academic Staff**

Katie Reidy, Post-fire Academic Coordinator

**UC Master Gardener Staff**

Tracy Celio, Community Education Specialist

**UC Master Food Preserver Staff**

Sue Mosbacher, Program Director

**UC CalFresh Healthy Living Staff**

Noah Cooke, CHFL-UC Program Coordinator

Mariana Garcia, Nutrition Educator

Elissa Bunn, Nutrition Educator

Cailin McLaughlin, Garden Coordinator

Carmela Padilla, Region 5 Community Ed. Mgr.

**4-H Youth Development Staff**

Vera M. Bullard, Region 6 Program Coordinator

**Administrative Staff**

Angela Johnson, Administrative Assistant II

Lindsey Harwood, Fiscal Assistant III

Robin Martin, Administrative Assistant II

Visit us online for a complete staff  
directory with contact information.



## 4-H YOUTH DEVELOPMENT

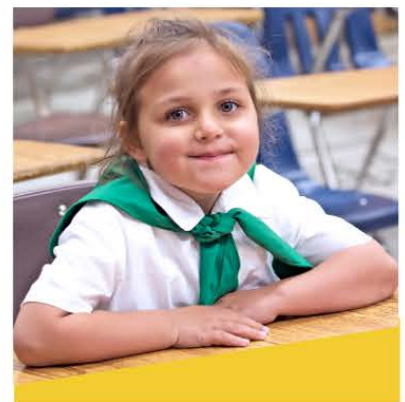
### Grant-funded projects promoted agricultural career opportunities

El Dorado County received a portion of grant funds awarded to California 4-H from National 4-H and Corteva to implement a Pollinator Ambassador Project. Teens installed pollinator habitats and taught younger youth about the importance of pollinators to our ecosystems. Teens were also able to attend the national 4-H Ignite conference where they meet other 4-Hers from across the country and learned ways to get involved in science and agriculture. 63% of teens who responded to an evaluation survey said because of this project they are more interested in science and agriculture. 100% say they understand why protecting pollinators and increasing their habitat is important to our food supply. In addition, 88% say they now understand how they can create and protect pollinator habitats. This project got teens interested in advocating for agriculture issues in our world and increased their desire to find jobs related to agriculture.

El Dorado County 4-H Ambassadors led a Seed Bomb Service Project at Farm Day. 300 participants made seed bombs to bring home and “explode” in their gardens.



Eight Central Sierra youth attend the Ignite 4-H summit in Washington, D.C. to learn about pollinator habitats and develop a service project to implement in their communities. The goal for the next several months is to teach hundreds of local students about pollinators and increase pollinator awareness.



425 El Dorado County youth participated in the county's 4-H program in 2022 - 2023.



**JoLynn Miller**

4-H Youth Development Advisor

