### Sutter & Yuba Counties

Today's UCCE Sutter-Yuba Mission remains similar to that of 1918: extend research-based information to people at the local county level to achieve their goals. This is accomplished through applied research, educational programs, and events. In Sutter and Yuba Counties, programs are conducted related to agriculture, natural resources, youth development, home gardening, and nutrition education subject matters.

# In The Community By The Numbers

#### 2.086

youth in 4-H Club and In/After School Programs

#### 6,554

residents assisted by UC Master Gardener volunteers

#### 320

volunteers donated 16,096 hours

#### 2,907

participants at 113 academic-led workshops, field days, and classes

#### 23,729

people reached at UCCE events and educational deliveries

It is estimated that for every



Invested in agricultural research and extension there is a return of

\$20

to the community

Alston, Anderson et al (2010)

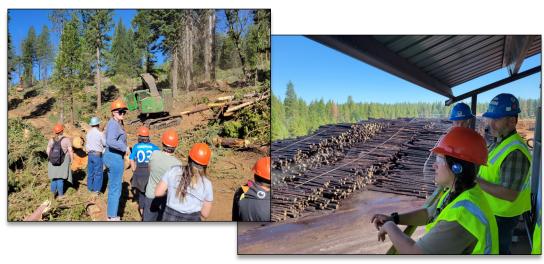
## **Forestry Education Program**

The Forestry Education program, based out of UCCE Sutter-Yuba, proudly collaborated with the California Society of American Foresters to bring the Forestry Institute for Teachers (FIT) to PreK-12 California educators this summer. Serving teachers from formal and non-formal education for 30 years, FIT is a weeklong professional learning program that weaves field-based learning from resource management professionals with environmental education to support educators confidently teach about key issues facing California's forests and their management.



Funded in part by CAL FIRE's Business and Workforce Development grant program, FIT supports educator environmental literacy and understanding of forestry concepts and career opportunities in resource management. FIT helps educators think critically as they process their learning through the design and implementation of classroom lessons. Of the 96 teachers who completed the program, four teach in Sutter and Yuba counties. One teacher from Yuba county has already begun to implement her FIT lesson with students using activities derived from her FIT certification in Project Learning Tree (PLT) and Water Education Today (WET). Through service-learning, she is guiding students to develop and present a plan to create a school tree farm that will benefit their campus and community.

"The FIT program really opened up some great ideas that help students to understand why forests are important and how they are stewards of forest success. I personally learned how to go about teaching lessons that are fun, educational, and applicable. Students are inspired to get outdoors more and care for the planet we live on by monitoring the forests, using them for recreation and educating the public." - Yuba County Educator, 9-12th grade



#### Rice/Wild Rice - Whitney Brim-DeForest, Advisor

Whitney supports rice and wild rice growers through field visits, newsletters and blog posts, as well as field days and workshops, with a focus on weed management issues. In 2023, she started research on cover crops in rice systems, finished up trials on registration of herbicides in wild rice, and is working on several projects related to new rice management systems with the UCCE Rice Team. These include no-till drill systems, no-till water-seeded systems, and tadpole shrimp and weed integrated pest management.

#### **Orchard Systems - Clarissa Reyes, Advisor**

Clarissa is the new Orchard Systems Advisor in Sutter-Yuba, Butte, and Placer, specializing in walnut, peach, and kiwifruit crops. She is assessing the needs of growers in each of these crops, conducting farm calls, and continuing existing walnut research projects and extension evaluating rootstock trials and whole orchard recycling practices.

#### Prunes/Almonds - Franz Niederholzer, Advisor

Franz focuses on almonds and prunes in variety and rootstock trials, fertility management, and safe and effective spray application. Franz continued bloom tracking and completed a fruit thinning timing trial begun in 2021. He also supported research on bark cankers in prunes along with grower talks at meetings and on-farm visits with almond and prune growers.

#### **Livestock and Natural Resources - Dan Macon, Advisor**

Dan's program focuses on rangeland drought management strategies, helping the commercial ranching community plan for and respond to wildfires and other emergencies, increasing capacity for using grazing to mitigate wildfire, and protecting livestock from predators. His efforts include hands-on field days and workshops as well as virtual webinars and a weekly podcast ("Sheep Stuff Ewe Should Know").

#### Forestry and Natural Resources - Ricky Satomi, Advisor

The Forestry program works with residents and resource managers to improve the production, health, resilience, and management of local forests. 2023 research activities include development of interagency survey tools, technical guidance on reforestation practices, and evaluation of silvopastoral systems. Extension activities have focused on home and landscape hardening trainings, GIS training for forest professionals, and directed workforce trainings on core forestry concepts.

#### Field Crops - Sarah Light, Advisor

Field crop production research includes integrating livestock and grazing into annual cropping systems; the impact of almond shell application to alfalfa fields on soil moisture, yields, weeds, and soil; and increasing nitrogen use efficiency in wheat. Sarah continues to develop extension materials on cover crop management for the region.

#### Dairy - Betsy Karle, Advisor

The dairy program has been evaluating manure management technologies, dairy calf management and health, and disease prevention and treatment strategies that improve antibiotic stewardship. Results from studies were presented at local meetings, World Ag Expo, and in various industry publications and papers were published in scientific journals. Heading into 2024- economic and feasibility analyses of management practices that are supported by research will be a priority.

#### 4-H Youth Development - Matthew Rodriguez, Advisor

Sutter-Yuba 4-H partnered with local educators with in-school and after-school enrichment programs. The 4-H Embryology program was very popular with both youth and teachers. Teachers expressed that hatching chicks and teaching the life cycle curriculum is the best program they teach all year. The youth especially enjoyed watching the chicks grow from the embryo inside the egg to a live chick. Additionally, 4-H clubs started their year with a Kick Off, Club Officers Training, in person 4-H Presentation Day and County Fashion Revue. In March 4-H hosted their annual 4-H Color Me Green 5K, which was open to the public, and encouraged healthy living.

#### Nutrition Education Program - Veronica Van Cleave-Hunt, Advisor

The CalFresh Healthy Living - UCCE Nutrition Education Program works with local public school teachers and organizations to provide research-based nutrition, gardening and physical activity programming. Over summer, Family Soup's TEEM-G group partnered with CalFresh Healthy Living, UCCE to plan and implement a 10-week garden enhanced nutrition education series using the curriculum, Teams with Intergenerational Support. The goal of this series was to provide opportunities for participants to socialize during the summer months while learning how to grow and prepare food.

#### Master Gardener and Master Food Preserver Program - Cheryl Hoke, MG and MFP Community Education Specialist

UC Sutter-Yuba Master Gardeners diagnosed home garden and pest problems for the community in the office, Farmer's Market, Yuba-Sutter Fair, and at the Be Prepared Yuba County Fair. Public workshops were conducted on garden preparation and fundamentals at the Learning Garden at the Yuba-Sutter Fairgrounds. Collaborations expanded with Habitat for Humanity Harmony Village, Casa De Esperanza, Yuba county school gardens, and YES Charter Academy for the Farm to school program. The Master Food Preservers began their inaugural year by answering questions regarding safe and correct food preservation techniques and practices. They partnered with the Master Gardeners in giving dual workshops at the Learning Garden and various community workshops.

#### Integrated Pest Management (IPM) - Sudan Gyawaly, Advisor

Sudan began monitoring critical almond, walnut, and peach pests to track their development and provided the degree day information to his clientele. He provided integrated pest management services to growers through newsletter article publications, one-on-one farm calls, and presentations at grower meetings or conferences. Sudan's pest management research efforts involved i) surveying the web-spinning spider mite populations and ii) evaluating the mating disruption of navel orangeworms in walnuts.

#### **Climate Smart Agriculture - Heather Montgomery, Community Education Specialist**

Heather provides technical assistance, outreach, and education to Sutter -Yuba growers for the CDFA's Climate Smart Agriculture Incentive Programs. These programs benefit growers while also reducing water use, improving soil health and promoting the reduction of greenhouse gases.











