

Mid-Year Review

2024

Rice: Climate-Smart Ag Practices

The UC Rice Team has several new practices we have begun investigating in the past few years. A couple of highlights:

Cover Cropping: Over the past two years, we have been testing several cover crop species and varieties at three grower-collaborator sites over the Sacramento Valley as well as in San Joaquin. The variety testing is to determine which species/varieties survive best in rice field soils over the winters, which are normally waterlogged and sometimes even flooded. We are also looking at nitrogen and carbon biomass content for each of the species/varieties. In larger trials at each of the same sites, we are evaluating a cover crop mix for soil nitrogen and carbon cycling. These trials will continue for one more year (winter of 2025).

Hedgerow: We started the first hedgerow demonstration in California rice this spring (2024). The hedgerow is on a levee next to a collaborating growers' field in Colusa County. We used a variety of native species: trees, shrubs, and grasses. We will be collecting data about beneficial insects from inside of the hedgerow, compared to the insects we find in the neighboring rice fields. We will also collect data on weed control on the levee where we planted the hedgerow, as well as the effect of the rice herbicides on the hedgerow. Soil health characteristics are also being looked at and compared to those of the non-planted area of the levee.

Drill-Seeding and No-till Practices: For many years, we have been trying to find ways to reduce water usage in California rice. Drill-seeded rice with no spring tillage seems to have the potential to do so. We are in the preliminary stages of evaluating these practices (started in 2023). The UC Rice Team is evaluating weed control, nitrogen management, insect and disease control, and of course, the exact amount of water savings possible in these systems. We are also evaluating different straw management techniques and their impacts on these no-till drill systems, including straw removal and chopping.

Stay tuned for more details about each of these practices in the next few years! A Hedgerow Field Day will take place August 14th in Colusa County. Contact Whitney Brim-DeForest at wbrimdeforest@ucanr.edu for more information.

UCCE Sutter-Yuba Rice Team:

Whitney Brim-DeForest, Rice and Wild Rice Advisor
Taiyu Guan, Research Assistant Specialist
Troy Clark, Staff Research Associate
Consuelo Baez Vega, Jr. Specialist
Jaskirat Singh Pandher, Ag Technician
Victor Barragan, Jr., Ag Technician



A partnership between Sutter and Yuba Counties and the University of California bringing science-based research and programming to the community. Programs are related to agriculture, natural resources, youth development, home gardening, and nutrition education. One of the oldest of the 64 Cooperative Extension offices located in California, established in 1918!



Cooperative Extension Sutter-Yuba Counties
Bi-County Farm Advisor

142A Garden Highway, Yuba City, CA 95991
Office (530) 822-7515 <http://cesutter.ucanr.edu/>

Master Gardener Program

The Master Gardener program, a valuable resource for homeowners and the public, not only educates about horticulture and gardening basics but also actively supports local gardens. This year, our community service work was recognized with a proclamation from the mayor and board of Yuba City, a testament to the significant impact we've had. We also successfully conducted the 2024 Master Gardener training program, adding 21 new Master Gardeners to our dedicated membership base.

In 2023-2024, we collaborated on several gardening projects across the community, including Casa De Esperanza, Sutter County Library at the Sutter Branch, Harmony Village, Prestige Senior Living Center, Park Avenue Elementary, Olivehurst Elementary, and Abe Lincoln Elementary. We regularly provide information booths at local events such as the Yuba-Sutter Fair, the Home and Garden Show, the Yuba County Office of Emergency Services Be Prepared Fire preparedness event, Be Well Sutter County, and local farmers markets.

One of our ongoing and upcoming events is hosting monthly public workshops at the Learning Garden located at the Yuba-Sutter Fairgrounds. The produce grown from the Learning Garden is donated to local non-profits to feed vulnerable populations within both counties. Summer garden workshops are held on the third Saturday morning of each month from 9am-11am.

Our weekly public office hours are Tuesdays, 9am-12pm, and Thursdays, 1pm-4pm, at the UCCE Sutter-Yuba Office. We are happy to answer all your gardening questions!

Cheryl Hoke
Communication Education Specialist



Welcome New Staff!

Adam Yandel joined CalFresh Healthy Living UCCE Sutter-Yuba Counties as a Community Education Specialist II. He is a proud alumni of CSU Chico and holds a Bachelor of Science degree in Agriculture Business. Adam farmed almonds, walnuts, and rice before joining UCCE. Aside from the community outreach work, Adam has an agricultural background and is excited to share his knowledge with the community! Outside of work, Adam enjoys mountain biking, snowboarding, fishing, and discovering new recipes in the kitchen to share with his friends and family. He is excited and honored to participate in such important educational experiences.



Adam Yandel
Community Education
Specialist

Mary Zoller became the 4-H Regional Program Coordinator for Region 3 which covers Sutter-Yuba, Colusa, Glenn, Butte, Tehama, Shasta and Trinity counties in May 2024. She is an alumni of the Colusa 4-H club where she grew her leadership and communication skills. She is also a past 4-H volunteer leader for swine, primary and poultry projects. She lives in Colusa with her husband and two sons. This year she took on a new role as a 4-H parent getting to watch her son experience 4-H as a member of the Colusa 4-H Club. She is looking forward to supporting 4-H staff, members and youth in her region.

Mary Zoller
4-H Regional
Program Coordinator



Whole Orchard Recycling

This year the orchards program has started a new whole orchard recycling (WOR) research project in walnut, with two sites in Sutter and San Joaquin counties. Typically, orchard trees are pulled out then burned in-field when they reach the end of their lives. Whole orchard recycling is an alternative orchard removal practice that involves chipping old trees after they are pulled from the ground and reincorporating their biomass into a new orchard site, which reduces air pollution, recycles carbon and other nutrients from the old trees into the soil, and provides several other soil health benefits. This project aims to develop fertilization guidelines for implementing whole orchard recycling in walnut orchards, thanks to support from the California Walnut Board & Commission.

Clarissa Reyes
Orchard Systems Advisor



Forestry Education Program

UCCE's Forestry Education program continues its collaboration with the California Society of American Foresters to bring the Forestry Institute for Teachers (FIT) program to California educators. For 31 years, FIT has provided experiential professional development to PreK-12 educators that equips them to introduce students to forest management concepts and career opportunities. FIT networks educators with natural resource professionals and provides certification in Project Learning Tree and Project Water Education Today (environmental education curriculum), teaching resources, a stipend for implementing forestry lessons in the classroom, as well as Continuing Education Units from UC Davis or Cal Poly Humboldt.

Austin Roughton
Forestry Youth Education Program Coordinator



4-H Youth Development

On Saturday, March 16th, Sutter-Yuba 4-H hosted a 4-H Color Me Green 5K Walk/Run at the scenic Sierra Foothill Research and Extension Center in Browns Valley. The Color Me Green event is designed to encourage youth and community members to increase their physical activity while also having fun! During the race participants were showered with colored dye as they passed through marker points. Since its founding, 4-H has addressed national issues including nutrition, fitness, and safety in its programs, as well as social, and emotional well-being.

4-H in-school and after-school programming had another successful year with our 4-H Embryology program. We were in over 29 schools, 50 classrooms, and had 940 students participate in Sutter and Yuba Counties. The teachers love teaching the curriculum, and homes were found for all chicks. Due to some very generous local farms, we had all the fertilized egg donated with a very successful hatch rate.

Mathew Rodriguez, 4-H Advisor
Rene McCrory, 4-H Secretary



Climate Smart Agriculture Grants and Technical Assistance

The Climate Smart Agriculture Program provides outreach, education, technical assistance, and implementation to local growers and ranchers for CDFA's Climate Smart Agriculture Incentive Programs.

- **The State Water Efficiency and Enhancement Program (SWEET)** – water savings and energy savings. Did you know that this includes going solar?
- **The Healthy Soils Program (HSP)** – Provides grants to assist with improving soil health from a list of practices to choose from.
- **Updates on Grants:** Get information on grants that are currently available. These grants are in addition to the CDFA grants. If you don't qualify for one, we can see if you qualify for another.

Climate Smart Agriculture Website:

<https://cesutter.ucanr.edu/CSAProgram/>

- **Interest Survey:** Fill out the survey on the website to let us know what you are interested in.
- **California Climate Smart Agriculture Team Blog:** articles are written from Community Education Specialists all over the state. Even though each region is vastly different, it's nice to see how others are adapting and succeeding in today's challenges.

These programs benefit producers while also reducing water use and improving soil health. These steps aid in the collective management of our environment and making sure that we have sustainable agriculture for years to come.



Heather Montgomery
Climate Smart
Agriculture Community
Education Specialist



Garden and Nutrition Collaboration!


The UC CalFresh Healthy Living program partnered with the UC Master Gardener program to deliver educational workshops on nutrition and gardening to elementary schools, parents, and teachers. This collaborative effort was both engaging and beneficial, fostering an understanding among students and educators about the importance of growing their food, promoting nutritious eating habits, and acknowledging the positive impact on overall well-being. To enhance participation, participants were incentivized with certificates of completion and prizes for the exceptional growth of potatoes and summer squash, injecting an element of fun and creating anticipation for future sessions.

Cheryl Hoke, MG Communication Education Specialist
Melissa Ussery, CalFresh Healthy Living, Supervisor
Kenia Estrada, CalFresh Healthy Living, CES
Adam Yandel, CalFresh Healthy Living, CES



In the Community.....

THIRD THURSDAYS: THINGS FROM THE FIELD




WHAT IS IT?

The Sac Valley orchard advisor team is hosting a new event in 2024 on the **Third Thursday** of every month: come meet your orchard advisors and other industry members in a casual setting and get timely updates on issues we encounter in the field!

Each session features an interactive UCCE talk and Q&A on orchard topics relevant to the time of year. Grower input has largely influenced the topics thus far:

- Bacterial blast in almond (Jan)
- Fleabane & weed management (Feb)
- Carpophilus beetle (March)
- Start of irrigation in walnut (April)
- Almond varieties and rootstocks (May)
- Weather issues affecting walnut quality (June)

Location alternates between UCCE Glenn and UCCE Sutter-Yuba offices, with lunch (and depending on the topic, CE units) provided. Look for e-mail announcements or check SacValleyOrchards.com for event details each month.



UC Master Gardeners Learning Garden Summer Workshops



When: Third Saturday of the Month 9am - 11am

Where: UC Master Gardener Learning Garden, Yuba-Sutter Fairgrounds 422 Franklin Avenue, Yuba City, CA 95991

Free! No Registration Required



July 20th

- Managing weeds in your Garden
- Common diseases in fruit trees
- Let's talk summer composting



August 17th

- What we've learned about using wool at the learning garden.
- What to do with white flies and powdery mildew
- Separation of rhizomes and other flower bulbs



September 21st

- Harvesting, saving and storing seeds
- Preserving your summer harvest
- What do the roots of your vegetable plant tell you about your soil.

Questions: ☎ 530-822-7515 ✉ sutteryuba@ucanr.edu

University of California Agriculture & Natural Resources (UC ANR) is an equal opportunity provider.



Catch Us on 93Q Community Radio!

8:00am on the first Monday of the month on 93.3 FM or on Facebook live.


Monday, August 5th
Clarissa Reyes, Orchard Systems Advisor

Monday, September 2nd
Whitney Brim-DeForest, Rice Systems Advisor

Monday, October 7th
4-H Youth Development Program

Monday, November 4th
Ricky Satomi and Austin Roughton
Forestry Education Program

Monday, December 2nd
Sarah Light, Field Crops Advisor




UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources UC Master Gardener Program

UC MASTER GARDENER PRESENTS

SUMMER GARDEN STROLL

AT YOUR LOCAL UC MASTER GARDENERS' DEMONSTRATION GARDEN.

Come take a summer stroll with local UC Master Gardener's to see, learn and ask questions about...

Dates: July 3rd, August 7th, September 4th

Time: 6:00pm - 7:30pm

Location: UC Master Gardener Demonstration Garden, Yuba-Sutter Fairgrounds, 442 Franklin Ave, Gate 7

- Companion Planting
- Soil and pest management
- Hot/Cold composting or Vermicomposting
- Gardening vertically, raised beds or no till row

FREE worm tea to attendees until the bucket is empty

QUESTIONS: 530-822-7515 | sutteryuba@ucanr.edu

Rice/Wild Rice - Whitney Brim-DeForest, Advisor

Whitney supports rice and wild rice growers through field visits, newsletters, blog posts, and field days and workshops, focusing on weed management issues. In 2024, she is focusing her research on alternatives to double propanil applications for watergrass management, as well as continuing to focus on emerging weed species in rice.

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 tracking prune bloom and bloom weather in 2024. He also supported new research on potassium fertilizer application timing in prunes along with grower talks at meetings and on-farm visits with almond and prune growers as well as PCAs working with them.

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 forestlands. 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 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 to served 4,612 youth (K to 8th grade). Teachers strongly agree that youth were excited to participate in the 4-H science lessons and learned something new about science. Additionally, 4-H clubs started the year with a 4-H 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. From October to April the CalFresh Healthy Living, UCCE Butte Cluster provided fresh produce tastings from local farms to over 3,500 elementary school students in Sutter and Yuba Counties. During the '23 - '24 school year, students tasted Asian pears, jicama, mandarins, kiwis, Romanesco, and purple sugar snap peas.

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 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 answered 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

The integrated pest management (IPM) program conducts education and research programs to support growers, pest control advisers, and other clientele on pest management issues. I'm monitoring important pests and their populations in almonds, walnuts, and peaches and provided the degree day information to my clientele. In 2024, in collaboration with other UC colleagues, I am surveying the invasive carpophilus beetle and invasive brown marmorated stink bug in almonds and coordinating the field testing of a new walnut husk fly lure 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.

