**Rice Farming Systems Advisor: Luis Espino**

During 2021, the rice project continued research and outreach focused on arthropods, diseases, and weeds of rice. We started the year with our first-ever virtual winter meeting, with more than 150 participants. The valley wide monitoring of armyworms and blast showed that pressure of these pests was very low; similarly, kernel smut was not a problem this year. Two trials were conducted to test the response of current varieties to aggregate sheath spot and stem rot. Weedy rice continues to pop its ugly head, with a few new finds. We were able to conduct an in-person weedy rice workshop this summer, where 40 attendees were updated on the weedy rice situation and the latest research.

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**Orchard Systems Advisor: Luke Milliron**

Orchard education and research plows forward. Walnut freeze mitigation and recovery has been a major focus this year after a sudden autumn freeze hit some walnut growers for a third year in a row in November 2020. Several walnut growers whose orchards were severely damaged in previous years and who have since adopted the UC recommended practice of maintaining soil moisture in November, reported that their fields survived the 2020 freeze largely unscathed. In the midst of drought, the irrigation management approach of “listening” to the tree’s water needs with a plant-based approach like the pressure chamber technique continues to be a major focus of research and grower education, leading to water and electricity savings while benefiting tree health and longevity.

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**Nutrition Education Program: Jona Pressman and Veronica VanCleave-Hunt**

The CalFresh Healthy Living, UC Program and the Expanded Food and Nutrition Education Program are reaching school-age students and adults in-person and virtually. This year UCCE Butte nutrition staff will be engaging teachers and students in school-wide Carrot Walks, a healthy version of the beloved Cake Walk at elementary school playgrounds throughout Butte County.

Other outdoor activities will include reinvigorating edible school gardens. Weeding and preparing soil for winter gardens occurred at Little Chico Creek Elementary School in September thanks to teachers, Master Gardener volunteers and CalFresh Healthy Living, UC staff. More virtual and in-person classes will be scheduled to explore ways to prepare food fresh from the garden and local markets.

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**4-H Youth Development Community Education Specialist: Ryan Cleland**

In the 2020-2021 program year, over 380 youth and 100 adult volunteers in the UCCE Butte County 4-H program learned, grew, and worked together. Our county program morphed to meet the needs during this virtual era. As the year unfolded, our traditional public speaking events were made virtual including Presentation Day, Foods Fiesta, and Rainbow Craft Field Day. 4-H Club meetings were held virtually while smaller project meetings were held both virtually and in-person depending on social distancing guidelines at the time. After nearly a ten year hiatus, we were ecstatic to bring back a successful Butte County 4-H Horse Show in the summer of 2021! 4-H Summer Camp resumed in-person, but in a new form - day camp held at Durham Park. Our new program year started in August with socially distanced in-person meetings. Our 4-H community is happy to come together after so much time apart!
Master Gardener Program Coordinator: Karina Hathorn

Volunteers have been getting their hands dirty as they develop the Edible Food Garden at our one acre demonstration garden located at the Patrick Ranch Museum in Durham. The Edible Food Garden includes a wide variety of edible plants and shows what an average homeowner can accomplish in a backyard setting. In addition to demonstrating how to feed our bodies, the Edible Food Garden is also providing food for thought: three of its garden beds are part of an experiment measuring how amending the soil with activated biochar can improve plant growth and yield. Results from the experiment and an informational lecture series about biochar will be presented in the Spring of 2022. Volunteers continue to support our mission by offering the Fall 2021 Workshop Series. Visit our website for more information.

Dairy Advisor: Betsy Karle

The dairy program serves producers and allied industry by conducting research activities to guide on-farm management decisions. Research projects include evaluating the effects of milk quality on shelf life, housing practices for dairy calves, managing manure and compost for environmental quality & regulatory compliance, and researching antimicrobial use and stewardship practices and protocols.

Livestock and Natural Resources Advisor: Tracy Schohr

Schohr is conducting extension, education and applied research focusing on livestock production, economics, and sustainable range and pasture management. She is developing solutions to the complex issues facing commercial livestock producers in the region. A research program highlight for 2020-2021 is collecting annual forage production data in relation to remote sensing to provide a better indicator of drought impacts. Schohr also worked with the Butte County Ag Department in 2021 to develop the Commercial Ag Disaster Access Program and facilitated it during the Dixie Fire. Schohr also develops technical resources for livestock producers on local topics and hosts educational events.

UCCE Butte County
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We are growing!

UCCE will be hiring Forestry, Integrated Pest Management, and Orchard advisors in the next few months to lead research and education programs in Butte County.

Support Group of Butte County UCCE

The Support Group of Butte County UCCE works to promote and support Butte County Cooperative Extension programs and services. Funds raised by the Support Group are used to support UCCE’s research and extension activities in Butte County. Thanks for your donations!