



UC Cooperative Extension Placer and Nevada Counties
2022 Annual Report

UC
CE

University of California
Agriculture and Natural Resources

Cooperative Extension

Cooperative Extension is a nationwide system for non-formal education. Established by Congress in 1914 to improve America's agriculture and strengthen families and communities, Cooperative Extension is a partnership between the United States Department of Agriculture (USDA), the state land grant universities, and county governments.

The mission of the University of California Cooperative Extension (UCCE) is to serve California through the creation, development, and application of knowledge in agricultural, natural, and human resources. UCCE was established in Placer and Nevada Counties in 1917. We provide university-paid programs and professionals; our county partners provide support staff, office space, and equipment. Today, funding for our research and educational programs comes from county, state, and federal governments, as well as from competitive grants awarded to county-based advisors.

Also known as the 4-H and Farm Advisor, UCCE Placer-Nevada serves as a local problem-solving center. We work to strengthen and ensure the sustainability of our land, our environment, and our local communities. We are catalysts, collaborators, educators, and researchers, living in the communities we serve.



In Placer and Nevada Counties, we are expanding our ability to serve the needs of our community by providing unbiased, research-based information and training. Our research and extension programming in Livestock and Natural Resources, Horticulture and Small Farms, and Nutrition Education are ongoing. New advisors in 4-H Youth Development, Forestry, Local Food Systems, and Environmental Horticulture will expand our ability to meet community needs. And collaborations with other UCCE advisors and specialists support rice production, wildfire resiliency, livestock health and welfare, orchard crop production, and weed management. Finally, our 4-H Youth Development and Master Gardener programs are facilitated by hundreds of community volunteers.

From the County Director

As California and the United States have emerged from the COVID-19 pandemic, UCCE Placer-Nevada has blended the virtual education and outreach efforts developed over the last several years with a return to the hands-on, learn-by-doing model that has been the backbone of our efforts to support and strengthen our communities. Our advisors and staff continue to provide locally-focused research and educational programs in the following areas:

- Livestock and Natural Resources
- Horticulture and Small Farms
- CalFresh Healthy Living, UCCE
- Forestry
- 4-H Youth Development
- Master Gardeners

In the coming year, we're excited to be adding additional advisors to serve Placer and Nevada Counties. These new advisors will bring expertise in youth development, local food systems, wildfire resiliency, community health and nutrition, and environmental horticulture.



Our partnerships with county government, community organizations, local farmers and ranchers, and our wonderful 4-H and Master Gardener volunteers makes this possible! Thank you!

Dan Macon

County Director, Placer and Nevada Counties.

Livestock and Natural Resources



Program Highlights 2021-22:

- More than 740 producers, land managers, and agency staff attended 27 virtual and in-person workshops, gaining hands-on skills in using prescribed fire, improving livestock management and welfare practices, and increasing economic sustainability.
- More than 120 foothill ranchers were trained in wildfire safety, emergency management systems, and disaster planning. 74 ranchers received Livestock Disaster Pass certification through a collaboration between UCCE, county agricultural departments, local law enforcement, and CALFIRE.
- Working with land managers, fire planners, and targeted grazing companies, UCCE helped expand 10 locally-owned targeted grazing businesses and increase fuel reduction activities on public and private land in Placer and Nevada Counties.
- The New Foothill Rancher newsletter, the Ranching in the Sierra Foothills blog and YouTube Channel, the Placer-Nevada-Sutter-Yuba Livestock and Natural resources website, and our weekly podcast provided locally relevant production and land management information to a total audience of more than 10,000 individuals.

Most commercial livestock production in Placer and Nevada Counties is rangeland-based. These beef cattle, sheep, and goat operations generate significant economic activity while managing extensive landscapes. In addition to serving these commercial livestock producers, UCCE provides research-based information to local, state, federal, tribal, and nongovernmental land and resource managers with a focus on rangelands. Our research and extension programs emphasize ongoing and emerging issues impacting rangelands and livestock producers, including climate change adaptation, livestock production systems, and livestock-predator conflict.

Our hands-on training for both new and experienced livestock producers includes practical information on protecting livestock from predators, managing pasture and rangeland forages, adopting new production technologies, planning for wildfire and other emergencies, and using prescribed fire to protect resources and communities. We also develop resources to help ranchers cope with the economic and ecological impacts of California's ongoing drought, and to incorporate targeted grazing into their business models.

Our locally-focused research efforts are providing both short-term benefits and long-term opportunities. We completed a 2-year study of the costs and benefits of ranch-level drought mitigation strategies. Collaborating with advisors and specialists from across the University of California, we expanded our understanding of the interactions between livestock protection tools and predator and nonpredator wildlife. We initiated a survey of agricultural water use across the Sierra Foothills and are pioneering several efforts to help land managers assess the value of grazing for fuel-reduction and invasive weed management. Finally, we are part of a statewide network of advisors and specialists who are developing new drought and forage production forecasting tools.



Contact info

Dan Macon

Livestock and Natural Resources Advisor
and County Director

530.889.7385

dmacon@ucanr.edu

ucanr.edu/sites/Livestock



Horticulture and Small Farms



Program Highlights 2021–22:

- Delivered 4 virtual and 13 in-person workshops, providing 56 hours of training to 350 producers.
- Directly assisted 152 farmers to implement sustainable practices including mulching, cover crops, and/or integrated pest management practices that reduce water use, conserve soil, and manage pests with less pesticide.
- Provided tools and assisted 49 new and beginning farmers to plan their new farm businesses, increasing the probability of success.
- Reached 43,340 producers with research-based information through our Foothill Farming website and blog.

Small-scale family farms in Placer and Nevada Counties feed the growing demand for high quality local produce. These farmers produce a wide range of horticultural crops including fruits, vegetables, nuts, and nursery crops. However, economic viability is challenging because of the small scale of most local farms.

UCCE programs help growers meet these challenges. We develop and deliver area-specific training to new and experienced farmers. Our programs help farmers build to scale; improve their business and risk management skills; and implement sustainable practices to manage soil, water, pests, and our variable climate conditions. We also provide individual assistance to commercial producers through farm calls, phone and e-mail consultations. We provide on-demand information on our Foothill Farming website and blog.

We conduct applied on-farm research with local growers to develop appropriate practices for the foothills. Our research on mulch in citrus orchards over the last 6 years has demonstrated that mulch reduces water use, improves soil health and tree health by reducing stress, and prevents yield loss due to fruit drop. Mulch mitigates many impacts of the current drought and variable weather conditions, leading to healthier and more productive orchards.

The Horticulture and Small Farms Advisor took academic sabbatical leave for six months in 2021-22 to study citrus varieties and production practices in the Mediterranean. Working with citrus breeders in Sicily and the USDA provided an opportunity to import new citrus varieties that will help our foothill citrus growers diversify their markets and products.



Contact info

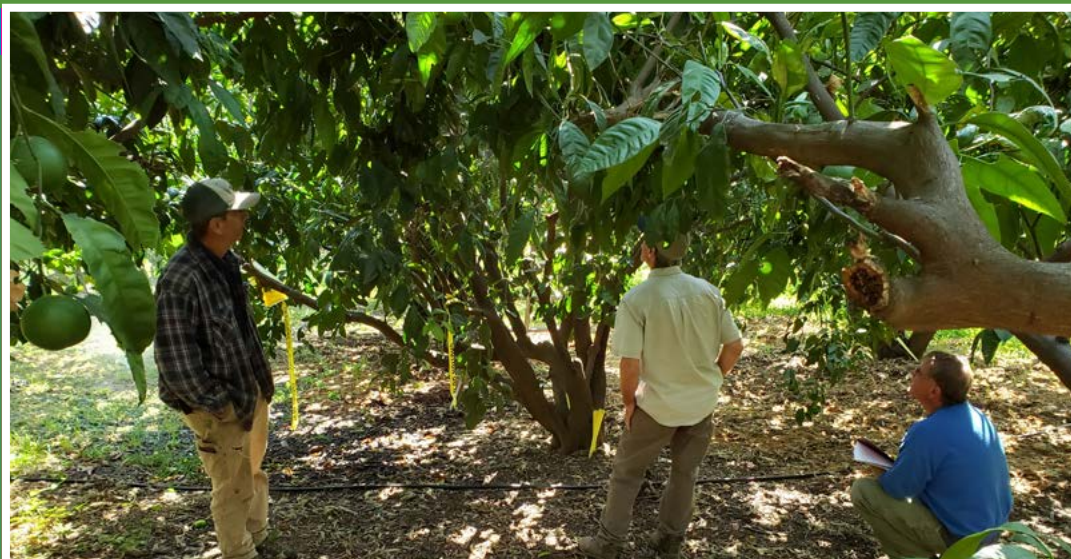
Cindy Fake

Horticulture and Small Farms
Advisor

530.889.7385

cefake@ucanr.edu

[ucanr.edu/sites/
placernevadasmallfarms](http://ucanr.edu/sites/placernevadasmallfarms)



Forestry and Natural Resources



Program Highlights 2021–22:

- North State Forest GIS Training on ArcGIS Pro.
- Home Hardening Design Training with Yuba County Fire Safe Council.
- Three statewide FIT trainings with participation from Penn Valley Union Elementary and Foresthill Union School District educators.
- 30 students participating in Forestry Career Mentorship Program Mentorship.
- Program expansion of Project Learning Tree with new Northern Region Coordinator (<http://ucanr.edu/plt>).
- Forest Stewardship Workshop (<http://ucanr.edu/forestryworkshops/>).

Forests and woodlands encompass over 65% of acreage in Placer County and 85% in Nevada County. These systems continue to face unprecedented mortality from drought, bark beetle and wildfire. To ensure the persistence of our ecosystems and their residents, UCCE works with private forest landowners, professional forest practitioners, local agencies, and rural householders to tackle major issues of concern.

Workforce shortages represent a significant barrier to increasing resiliency of local forests. To improve local capacity, we provided targeted forest stewardship, home hardening and GIS trainings to landowners and resource professionals. We also expanded our career mentorship program to help collegiate forestry students work with local professionals throughout Nevada and Placer Counties.

Developing career pathways for future generations of natural resource managers is also critical to sustaining our rural communities. This year, we worked with several youth-focused education efforts including the Forestry Institute for Teachers (FIT) K-12 educator training and California Project Learning Tree program (PLT). FIT prepares California's K-12 teachers with resource expertise to effectively teach about forest ecology, resource management, and natural resource careers in their classrooms. The weeklong program applies science-based curricula compatible with the Next Generation Science Standards to explore many subject areas including environmental science, physical science, social science, biology, forestry, and history.

Changing markets and a growing emphasis on small diameter fuels reduction necessitate alternative silvicultural practices to ensure that forest management remains ecologically and economically sustainable. We are currently collaborating with various universities, state and federal agencies on the Adaptive Management Experiment (www.adaptive-forest-management-experiment.com). Initial treatments at the Grouse Ridge Field Station have been completed including establishment of a seedling provenance study.



Contact info

Ricky Satomi

Forestry and Natural Resources
Advisor

530.822.6123

rpsatomi@ucanr.edu

ucanr.edu/woodmap

[ucanr.edu/sites/
westernsierraforestry](http://ucanr.edu/sites/westernsierraforestry)



Nevada and Placer Counties 4-H Youth Development



Program Highlights 2021–22:

- 4-H volunteer leaders and 4-H staff provide a supportive network for youth mental health through the connections and belonging experienced in 4-H clubs and 4-H projects.
- A regional Livestock Evaluation clinic for 4-H youth and adult volunteers was held in cooperation with California State University Chico.
- County Presentation Day was offered virtually to all Placer-Nevada 4-H youth. 25 youth members participated. These youth were then able to go on to Regional and State 4-H Presentation Day.
- In-person training sessions were held for volunteers and youth officers.
- The Placer and Nevada 4-H programs offered more than \$20,000 in scholarships to graduating seniors. These funds were raised by 4-H volunteers and staff.
- UC ANR programs are open to all participants, regardless of their ability to pay. 4-H enrollment fee support was provided to all youth with economic need through Council funds.

The 4-H Youth Development Program provides a variety of enrichment activities that support the development of life and leadership skills for young people. The focus of 4-H programs is positive youth development through science, healthy living, civic engagement, and leadership. 4-H programs are accessible and open to all youth!

A recent study of 690 California 4-H alumni between the ages of 19 and 35 asked participants to describe how 4-H impacted their lives. The purpose of the study was to explore how 4-H experiences shaped early adult outcomes. The study assessed long-term outcomes (economic stability, health and wellbeing, and community involvement.) Ninety-three percent said 4-H helped them develop character, 96% said 4-H fostered their sense of responsibility, 94% said 4-H boosted their confidence, 93% said 4-H helped them develop their leadership skills, and 84% said 4-H helped them succeed in their career. In comparing UC 4-H alumni to the general population, the study found that UC 4-H alumni are two times more likely to feel financially stable, two times more likely to be optimistic about their future, and 1.8 times more likely to graduate with a bachelor's degree.

Nevada County:

8 Clubs

348 youth members

114 adult volunteers

Placer County:

10 Clubs

436 youth members

81 adult volunteers



Contact info

Matt Rodriguez

4-H Youth Development Advisor
530.889.7385

mro@ucanr.edu

ucanr.edu/sites/placercounty4h
ucanr.edu/sites/nevadacounty4h

Kayla Tofte

Placer County Community
Education Specialist
530.889.7385

ktofte@ucanr.edu

ucanr.edu/sites/placercounty4h

Jill Simmons

Nevada County Community
Education Specialist
530.273.4563

jcsimmons@ucanr.edu

ucanr.edu/sites/nevadacounty4h





CalFresh Healthy Living UC

Program Highlights 2021–22:

- Delivered direct education to 9 elementary schools in Placer/Nevada Counties.
- Over 2,200 students received direct nutrition education.
- Delivered CATCH physical activity program to 3 afterschool sites.
- Managed 3 school garden sites.
- Delivered adult education in-person and virtually to 8 sites.
- Delivered 4 electronic newsletters throughout the year to program participants.
- Cooking enrichment First Street Elementary – 61 student participants.

The vision of CalFresh Healthy Living, UCCE Placer and Nevada Counties is to teach CalFresh eligible children and adults about good nutrition, how to stretch their food dollars, and how to be physically active at any age. Effective, evidence-based nutrition education, garden education, and physical activity classes are aligned with policy, systems, and environmental (PSE) change strategies to create long-lasting community change.

Students and teachers in qualifying schools receive direct education on nutrition, physical activity and garden topics with USDA approved nutrition curricula, resources, and trainings. CalFresh eligible adults receive direct education through classes and trainings. Indirect education is also provided through newsletters, educational literature, and online resources.

In 2021-2022 the CalFresh Healthy Living, UCCE program activities and numbers looked very similar to a normal pre-COVID year. We resumed in-person lesson delivery to youth and adults. While in-person delivery is clearly the best option for youth we discovered virtual lessons are still a good option for adults. We were able to educate more CalFresh eligible adults on a more consistent basis this year, and therefore have continued the delivery of virtual education. We were able to reconnect with school administration, staff, students, and other community partners to ensure renewed program delivery. We continued our indirect education delivery through newsletters, social media, and other virtual materials.



Contact info

Michele Fisch

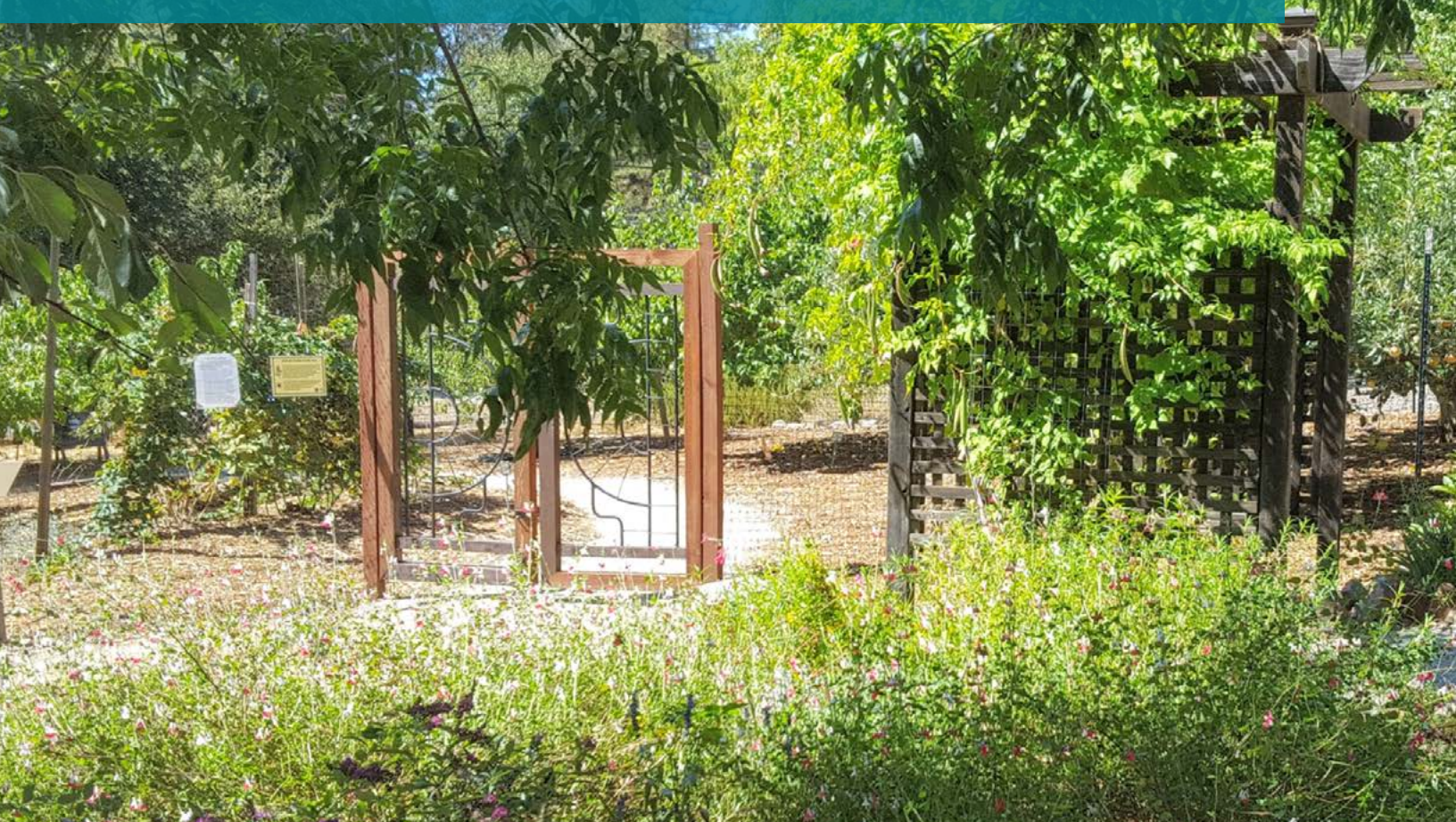
Community Education Supervisor

530.889.7350

mafisch@ucanr.edu

ucanr.edu/sites/letseatthehealthy/

Master Gardeners of Nevada and Placer Counties



Program Highlights 2021–22:

- 270 certified Master Gardener volunteers provided over 15,000 hours of service.
- Master Gardener outreach and education reached over 12,000 people with gardening and composting information.
- Volunteers delivered 30 workshops on various topics, including: Water Wise Gardening, Firesafe Landscaping, Pest Management, Vegetable Gardening, Pest Prevention and Diagnosis, Recycling Garden Waste, School Gardens, Perennials and Flowering Shrubs, Soil and Irrigation, Community Gardens.
- Trained 70 new Master Gardeners Volunteers.

The UC Placer and Nevada Master Gardener Program provides volunteer training and horticultural knowledge to enhance home landscapes and garden experiences while striving to improve and preserve the quality of our natural environment.

Our Placer and Nevada County programs were initiated in 1983 to meet the demands of the growing population and to provide home gardening and related information.

Interest in home gardening and urban horticulture continues to grow. Gardening is the most popular hobby in the United States, and landscape/nursery crops are now the third largest agricultural crop in California. UC Master Gardeners identify issues and needs of Placer and Nevada County residents and develop educational activities to address these concerns in the areas of home horticulture and composting.

With the goal of shifting public perceptions of yard and garden debris from “wastes” to “resources,” UCCE’s volunteer Master Composters have engaged the public in recognizing the importance of organics management through composting, vermi-composting, and shredding/chipping/mulching. These activities alone can divert between 20 and 35 percent of a family’s garbage from the landfills and have helped Placer and Nevada Counties meet state mandated diversion rates.

In the 2021-22 year, the Master Gardeners were able to get back to in person public workshops as well as continue to deliver online public workshops. The Master Gardeners decided that combining both outreach methods allows greater community reach, giving folks a virtual option if they cannot attend in person. The Master Gardeners gave 30 public workshops on a variety of topics reaching over 5,000 people, in person and online. From January through April 2022, two separate Master Gardener volunteer trainings were held – one for Placer County with 40 in the class and one in Nevada County with 30 in class. This is the first time a volunteer training was done separately in each county to take advantage of the increased interest in the program.



Contact info

Kevin Marini

Master Gardener/Composter
Community Education Specialist

530.889.7385

krmarini@ucanr.edu

Placer County MG Hotline

530.889.7388

mgplacer@ucanr.edu

pcmg.ucanr.org

Nevada County MG Hotline

530.273.0919

ncmg.ucanr.org



Connecting Placer and Nevada Counties to the University of California

Our local advisors are recognized as regional, national, and international experts in citrus production, small farm economics, targeted grazing, and livestock-wildlife interactions. In addition, UCCE Placer/Nevada connects our communities to the resources and scientific knowledge of the entire University of California system. Collaborating with colleagues from surrounding counties, as well as with campus-based specialists, we provide world-class, science-based information and assistance on a wide variety of topics, including rice production, nut crops, integrated pest management, irrigation management, oak woodlands, wildfire resiliency, and forest management.





Expanding our Programs!

UCCE Placer-Nevada is expanding our programs, adding new advisors and academic coordinators to better serve the communities and people of Placer and Nevada Counties.

Olivia Henry, Food Systems Advisor (Capitol Corridor / Placer-Nevada)



Olivia Henry (she/her) is a UCCE Regional Food Systems Advisor serving Solano, Yolo, Sacramento, Placer and Nevada Counties. Her focus is on issues related to marketing, resilient supply chains, and infrastructure for processing and distribution. She has a master's degree in community development from UC Davis, where she focused on employee- and community-owned enterprises. Olivia's background is in journalism, having worked in communications and outreach roles with the USC Annenberg Center for Health Journalism, KALW Public Radio, San Francisco Public Press, the Institute for Nonprofit News and Mother Jones.

Contact info: Office: Solano County ■ omhenry@ucanr.edu ■ 707.389.0723

Katie Low, Statewide Fire Academic Coordinator



Katie Low is the Statewide Coordinator supporting UC Cooperative Extension's Fire Team. In her role, she will work with the network of Fire Advisors to develop and deliver wildfire-related science and outreach materials for all of California's communities. Prior to this role, Katie completed her Master of Forestry from UC Berkeley where she researched the short- and long-term ecological impacts of fuel reduction and forest restoration treatments on California's Sierra Nevada mixed-conifer forests. She also holds bachelor's degrees in forestry and geography from UC Berkeley. Katie looks forward to collaborating with local natural resource professionals and communities in Nevada and Placer Counties on projects centered around community and ecosystem resilience to wildfire and climate change.

Contact info: Office: Placer County ■ katlow@ucanr.edu ■ 530.889.7385

Dr. Matthew Rodriguez, 4-H Youth Development Advisor (Placer-Nevada-Sutter-Yuba)



Matthew Rodriguez joined UCCE the 4-H Youth Development Advisor for Placer, Nevada, Sutter, and Yuba Counties in 2022. He earned his PhD from the University of Maryland's School of Public Health in the Department of Family Science. As a family scientist, Rodriguez specializes in father-child involvement in underrepresented families. He also provides expertise in 4-H positive youth development and volunteer engagement. He is a UCLA alumnus and is grateful to be "back home" in California.

Contact info: Office: Placer County ■ mrro@ucanr.edu ■ 530.889.7385



Programs



Livestock & Natural Resources

Dan Macon

Livestock and Natural Resources Advisor and County Director
530.889.7385
dmacon@ucanr.edu
ucanr.edu/sites/Livestock



Horticulture and Small Farms

Cindy Fake

Horticulture and Small Farms Advisor
530.889.7385
cefake@ucanr.edu
ucanr.edu/sites/placernevadasmallfarms



Forestry and Natural Resources

Ricky Satomi

Forestry and Natural Resources Advisor
530.822.6123
rpsatomi@ucanr.edu
ucanr.edu/woodybiomass
ucanr.edu/westernsierraforestry



Food Systems, Community & Cooperative Development, Distribution, Processing, Marketing.

Olivia Henry

Food Systems Advisor
omhenry@ucanr.edu

4-H Youth Development

Matthew Rodriguez, PhD

4-H Youth Development Advisor
530.889-7385
mrrro@ucanr.edu



Kayla Tofte

Placer County 4-H Community Education Specialist
530.889.7386
ktofte@ucanr.edu
ucanr.edu/sites/placercounty4h

Jill Simmons

Nevada County 4-H Community Education Specialist
530.273.4563
jcsimmons@ucanr.edu
ucanr.edu/sites/nevadacounty4h



CalFresh Healthy Living, UCCE Nutrition Education Program

Michele Fisch

530.889.7350
mafisch@ucanr.edu
ucanr.edu/sites/letseathealthy

Master Gardeners of Nevada and Placer Counties

Kevin Marini

Master Gardener/Composter
Community Education Specialist
530.889.7385
krmarini@ucanr.edu



Placer County MG Hotline:

530.889.7388
mglplacer@ucanr.edu
pcmg.ucanr.org

Nevada County MG Hotline:

530.273.0919
ncmg.ucanr.org

It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at ucanr.edu/sites/anrstaff/files/215244.pdf). Inquiries regarding ANR's nondiscrimination policies may be directed to UCANR, Affirmative Action Compliance & Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1397.