

University of California Cooperative Extension

Sonoma County 2016 Annual Report



University of California

Agriculture and Natural Resources

Cooperative Extension

A message to the County of Sonoma Board of Supervisors – Shirlee Zane, Chair; James Gore, Susan Gorin, Lynda Hopkins, and David Rabbitt:

[University of California Cooperative Extension \(UCCE\)](#) is honored to partner with the County of Sonoma. Our innovative programs address critical issues that help to maintain and increase the sustainability of agriculture and natural resources in Sonoma County.

The 2016 Annual Report focuses on California’s healthy watersheds (working landscapes) which include: rangelands, forests, agricultural lands, wetlands; and provide goods and services ranging from food, forage and fiber to clean air, clean water, and carbon sequestration. Because it has been historically difficult to measure the value of services that lands offer and the economic benefits they provide to local communities, many are at risk of being converted to other uses that threaten local communities with the loss of agricultural income, impact public health and add to the destruction of natural infrastructure critical to climate adaptation.

UCCE’s strategic initiatives help with recognizing and valuing the services provided by Sonoma County’s healthy watersheds and assist landowners and policy makers on land use decisions.

UCCE has the talent on our team to address the challenges facing the agricultural industry, expand opportunities for our youth, and develop leaders in our rural and urban communities. With the UCCE and County’s continuing partnership, these opportunities will endure for generations to come.

Sincerely,



Stephanie Larson, Ph.D.
County Director



University of California
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4-H Youth Development Program

Judy Ludovise, 4-H Program Representative
Diego Mariscal, UC 4-H Outreach Coordinator
Jesenia Mendoza, 4-H Administrative Aide
Steven Worker, Ph.D., 4-H Youth Development Advisor



The 4-H Youth Development Program engaged over 1,000 youth (aged 5 to 18) with 340 adult volunteers (3:1 ratio) in long-term, high quality 4-H Clubs. These experiences helped youth reach their fullest potential through science, healthy living, leadership and civic engagement. Additionally, 4-H offered two weeks of 4-H summer camps to 250 youth at the historic 1930's Las Posadas Camp where they developed an affinity for nature, positive relationships, and life skills. Efforts to grow and diversify 4-H with new underserved audiences resulted in 309 new youth, 48 new volunteers, a 90% increase in Latino youth involved with 4-H, and strong partnerships with the Sonoma County Library, seven elementary schools, and several high schools.

Furthermore, 4-H staff tapped into the power of UC to begin exploring access to, equity in, and practices that promote positive youth development with Latino youth and families. This applied research will strengthen program effectiveness and contribute to improved access and equity to youth development programs.

"I met pretty amazing people that I consider life-long friends in 4-H. I feel very proud to let people know how wonderful 4-H is and how much 4-H has to offer kids in the community." – Amy, age 17, Lytton Springs 4-H Club.

"4-H has taught me a lot about giving back to the community and helping others. I feel very lucky to belong to such a great 4-H Club." – Cooper, age 12, Lytton Springs 4-H Club



[Agriculture Ombudsman](#)

Karen Giovannini

[The Ag Ombudsman](#) works with farmers and ranchers starting new ventures to understand and navigate the permitting process. She also works to help modify regulations that no longer serve the best interests of farmers, ranchers and the public, and to support the growth and sustainability of local agriculture. The Ag Ombudsman has built a website filled with resources and fact sheets on a wide variety of topics to help farmers and ranchers expand their offerings, including: Farm Stays, Making Value Added Products, Selling Local Meat and more. In 2016, she worked on over 80 agricultural projects, and continues to work on a variety of local and state ordinances in an effort to simplify and streamline processes for agricultural enterprises.



[Environmental Horticulture](#)

Steven Swain, Environmental Horticulture Advisor



UCCE conducted field trials on bark scribing, the practice of lightly cutting the appropriate marks into the bark of the tree, a common method used to control Sudden Oak Death. Research found bark scribing alone is not any more effective for treatment of SOD than no treatment at all, despite the fact that bark scribing is widely used by commercial applicators to treat infected trees. Research findings will assist in finding a cure for SOD and reduce the loss of our oak woodlands. This work was done in conjunction with UC Berkeley, Sonoma Land Trust, California State Parks, and the US Army Corps of Engineers.

Homeowners collaborate on managing private forested land

Collaborating with the Sonoma County Forest Conservation Working Group, local Resource Conservation Districts, private foresters, and concerned landowners, UCCE provide land management expertise, links to potential state and federal funding sources, and other benefits to local small-parcel forest landowners. UCCE conducted workshops in the Mayacamas Mountains and Cazadero, focusing on ways to synergistically manage forests to help reduce the intensity of wildfires. These efforts will help communities and forests themselves, be more fire resilient, reduce erosion, and for local communities to become more water efficient. To this end, UCCE helped local forestland owners obtain approximately \$25,000 in state and federal grants aimed at rainwater capture, and to install shaded fuel breaks.

"Thank you, Steven. The website you referred me to with the information on how to control Scotch broom will be very helpful. You are a great resource, and we're lucky to have you." Caerleon Safford, Fire Safe Sonoma, Inc.

[North Bay Food Systems](#)

Julia Van Soelen Kim, North Bay Food Systems Advisor

[The North Bay Food System program](#) supports innovative changes that focus on a more socially just, economically viable, and environmentally sustainable food system for Sonoma County and the North Bay.

In 2016, a variety of educational opportunities for small-scale and diversified farmers were offered, including a workshop series in June on **Food Safety for Small-Scale Produce Farmers**. A partnership with local non-profits—Farm To Pantry, Petaluma Bounty, Sonoma Food Runners, and Sonoma Valley Gleaning Project—to host the **Community Jam: a Northern California Gleaning Summit** where leaders from gleaning and food rescue organizations from across Northern California came together to share best practices.

A study by the **County Food System Alliance**, of **Food Policy Councils** and the roles they play to enhance local food systems planning, coordination, and policy development is underway.

One upcoming project will pilot “**Farm Fresh Food Boxes**” in rural grocery stores to examine the efficacy of a direct marketing channel for local farmers, with potential economic impacts for them and retailers, plus greater access to healthy and local food for rural consumers.



[Farming 101 workshops & Incubator Farm](#)

Linda Peterson, Coordinator, Farming 101 & Incubator Farm

In January 2016, Marin Organic offered UCCE their [FARMING 101 workshop series](#). UCCE agreed and took over in February 2016. Nine varied workshops and panels were offered on topics such as: family farming models, honor farm stands; irrigation; value added; ranching & grazing; fresh cheese making; flowers and herbs; and heritage grains.

On-going efforts to establish an Incubator Farm in Sonoma County continue. An incubator farm offers an opportunity for new farmers to hone their skills with access to land, equipment and mentoring for a limited period of time. As a team (UCCE, Sonoma County Agricultural Preservation & Open Space District, a Board of Supervisors’ representative and Prununske Chatham consultants) numerous meetings were held with Rohnert Park neighbors and city council members, which ultimately led to revisions of the farm plan. We do hope this project will go forward, so that we can support aspiring farmers who need training, access to land, and mentoring at an affordable rate.

“The full-time job I received is the direct result of my participation in the beginning farmer class through UCCE. Our products provide 20 dozen eggs to three restaurants weekly in Healdsburg, and an average of 60 tons of wine grapes to two wineries annually.” Rick Kaye



Livestock and Range Management

Stephanie Larson, Ph.D., Livestock & Range Mgmt. Advisor

Benefits of Grazing

In 2016, US Fish and Wildlife Service opened grazing permits for the first time in four years, allowing grazing on several properties in the Santa Rosa plains. UCCE facilitated efforts to return grazing to these properties, as the removal had caused non-native vegetation to increase, reducing habitat for endangered species. Grazing creates the habitat needed for endangered species such as California tiger salamander (*Ambystoma californiense*). Below are two examples of grazing benefits.



Conservation Easements:

Protecting land for future generations

UCCE Sonoma conducted research to examine whether additional opportunities, in addition to conservation easements, made to landowners will provide greater benefit to both the landowner and conservation groups. In the last 10 years, land that has been protected through conservation easements have higher values for carbon storage, sediment retention and water yield than developed properties. Preliminary findings suggest many landowners prefer these alternative payment structure options.

UCCE's current research and outreach focus on areas in which landowner and conservation group incentives overlap, with a goal of determining what payment structures might suit some landowners more than a traditional lump sum. Both alternative structures would stay attached to the land indefinitely, and potentially align more with landowner as to financial stability for future generations, and preservation of rural lifestyles.

Ecosystem Services – protecting food, water, climate

UCCE evaluated ecosystem services (food production, carbon sequestration, water quality and quantity) in Sonoma County, in particular, [rangeland](#); analyzing their ability to store carbon, retain sediment, nutrients, and increase water yield. Payments for ecosystem services may benefit landowners and all of Sonoma County as more land can be protected, providing a viable stream of revenue to ensure ecosystem services are provided for those who need it.

“UCCE Sonoma County continues to be an integral and valuable partner in the effort to maintain and grow a strong agricultural economy in Sonoma County. Through 4-H and youth development, gardening, research dissemination, and production management programs the personnel at UCCE provide essential information to the community about the value of our working landscapes and the importance of keeping farmers on the farm.” Kim Vail, Executive Director, Sonoma County Farm Bureau

UC Master Gardener Program of Sonoma County and Community

Food Systems & Food Recovery

Mimi Enright, Program Manager

The UC Master Gardener Program of Sonoma County (UCMGSC) serves as a resource to provide science-based, sustainable horticultural information to all of Sonoma County's residents. We strive for diversity. In 2016, over 300 active Master Gardeners provided 30,684 volunteer hours to teach county residents about sustainable landscaping, food gardening, composting, integrated pest management, water conservation and more. We reached over 11,056 people directly and over 275,000 via the UCCE-Sonoma MG website. We launched an "Español" page with Spanish language resources on our website at <http://sonomamg.ucanr.edu/es/>.



UCMGSC has partnerships with the Sonoma County Water Agency to promote landscape water conservation practices, with the Sonoma County Waste Management Agency to promote home composting & vermicomposting, and with the USDA Forest Service and UC Berkeley Forest Pathology Lab to help educate about and work towards limiting the many impacts of Sudden Oak Death in Sonoma County.

"The Master Gardeners are members of Bayer's community 'knowledge' crop. We appreciate the skills and inspiration they bring us which will have a lasting impact." Jonathan Bravo, Farm Garden Coordinator, Bayer Farm

Food Systems & Food Recovery

UCCE Sonoma has been leading a dialogue and solutions development on the issue of edible food waste in Sonoma County. The Sonoma County Food Recovery Coalition, facilitated and hosted by UCCE Sonoma, is developing a community resource listing to promote the connection of edible food to our local non-profits involved in food recovery & distribution to people in need. This on-line map & resource listing is being developed in partnership with CROPMOBSTER.



Viticulture & Integrated Pest Management

Rhonda Smith, Viticulture Advisor
Lucia Varela, North Coast IPM Advisor

These programs address pest management challenges growers face by conducting research and extension programs on insect pests and diseases. These include Pierce's disease (PD) which is caused by a bacterium that kills grapevines. The UCCE Advisors are members of a team with UC Berkeley researchers investigating the cause of a recent increase in vineyards in which a significant number of vines have died due to Pierce's disease.



A few sucking insects, usually sharpshooter species, feed on grapevine leaves and introduce the bacteria into vines. High disease incidence often occurs in vineyards adjacent to riparian vegetation - the habitat for blue-green sharpshooters.



The team is monitoring disease incidence and several species of insect vectors in 32 research sites. The long-term goal is to develop PD management strategies for grape growers.



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