

Viticulture Advisor, Karl Lund—I started my job as the UC Cooperative Extension Viticulture Advisor for Mariposa, Merced and Madera counties in January of 2018. I have had the pleasure to handle several farm calls in Mariposa county during my first year, and I hope to continue working with local growers to advance the viticulture of the county. My main research effort over my first year is looking at the viticultural characteristics of nematode resistant rootstocks. Nematodes are a root pest that can directly damage grapevine root systems, or act as virus vectors moving diseases throughout a vineyard. Several breeding programs have produced new rootstocks with advanced nematode resistance. While the nematode resistance of these new rootstocks has been studied, much of their viticultural traits remain unknown. My current research is focused on understanding the strength and weaknesses of these new nematode resistant rootstocks. The hope is that they can be adapted into the local viticultural landscape. I am located out of the UC Cooperative Extension office in Madera. Please feel free to contact me at my office phone number (559-675-7879 ext. 7205) or by email (ktlund@ucanr.edu).

4-H Youth Development Program Advisor, Russell Hill—During the 2018 program year Mariposa County 4-H focused its efforts on Club delivery and school enrichment programs. Six clubs represent 146 youth and 47 adult volunteers. Well over 900 school-age youth, 15 teachers and 9 schools participated in short term projects including embryology, entomology (eg. butterflies, honeybees, praying mantis) and gardening projects. We were also proud to work directly with El Portal afterschool program to deliver 4-H gardening, nutrition and cooking projects. 4-H projects, events and activities are developed to help explore and improve skills in citizenship, leadership, science literacy and healthy living. Our 4-H youth are learning leadership and goal-setting skills and how to become community-minded adults through youth / adult partnerships.

Mariposa County 4-H youth participated in service-learning opportunities, including a Veteran's Day tribute called the Field of Service. Through its pledge of "hands to larger service," 4-H has historically given back to the community by encouraging young people and adults to volunteer. In 4-H, service is commonly defined as the voluntary action of an individual or a group of individuals without pay. Service to the community – through food drives, raking the yard of an elderly neighbor, adopt-a-highway programs, teens teaching younger youth, teens mentoring children or youth determining community needs and helping solve community problems – helps young people learn caring, leadership and citizenship.

Mariposa County 4-H is, as our motto states, striving "To Make the Best, Better". We have been challenged to do better and to improve service to our clientele under the recently adopted 5 year business plan that is a roadmap to increased participation, volunteer enrollment and expand our reach into the school system.

UCCE Mariposa Staff:

Fadzayi Mashiri

Mariposa County Director / Livestock & Natural Resources Advisor for Mariposa, & Merced Counties
 209-966-2417
fmashiri@ucanr.edu

Karl Lund

Viticulture Advisor for Madera, Mariposa, & Merced Counties
 559-675-7879 ext. 7205
ktlund@ucanr.edu

Maxwell Norton

Emeritus Fruit, & Nut Advisor for Mariposa & Merced Counties
 209-385-7403
mnorton@ucanr.edu

Russell Hill

4-H Youth Development Program Advisor for Madera, Mariposa, & Merced Counties
 209-385-7403
rdhill@ucanr.edu

Donna Wice

4-H Youth Development Program Coordinator
 209-966-4829
dswice@ucanr.edu

Sheri Mace

Master Gardener Program Coordinator
 209-966-2417
smace@ucanr.edu

Debbie Wass

Office Manager
 209-966-2417
dswass@ucanr.edu



UCCE Mariposa County 2018 Annual Report

Issued March 2019

Across California, the University of California's 64 Cooperative Extension offices are local problem-solving centers. We are the bridge between local issues and the power of UC research. Our county-based staff is part of the community – we live and work in the areas we serve.

More than 300 campus-based specialists and county-based farm, home and youth advisors work as teams to bring practical, unbiased, science-based answers to solve problems across California.

As part of the agricultural community, we help farmers develop more-efficient growing methods, solve pest management problems and develop crops and irrigation methods that use less water.

As stewards of the land, we help develop smart water-use strategies, develop wildfire education and help preserve natural areas and farmland.

As advocates for healthy communities, we promote healthy diets and exercise for better health, and help shape the citizens of tomorrow through the 4-H Youth Development Program.

And thousands of volunteers extend the reach of our work through the Master Gardener Program and the California 4-H Youth Development Program.

We work in full partnership with federal, state, county and private resources.

We are stewards, problem-solvers, catalysts, collaborators and educators.

We are UC Cooperative Extension.



Our funding is from "cooperative sources". The University of California, Mariposa County, and the USDA.

UCCE Mariposa County Office

5009 Fairgrounds Road
 Mariposa, California 95338
 209-966-2417 Phone
 209-966-5321 Fax

Visit our Website:

<http://cemariposa.ucanr.edu>

Livestock & Natural Resources Advisor, Fadzayi Mashiri

Medusahead Control: Some colleagues and I published an article titled "Timing Aminopyralid to Prevent Seed Production Controls Medusahead (*Taeniatherum caput-medusae*) and Increases Forage Grasses" in the Invasive Plant Science and Management journal. The article shares results of a 3-years study where we evaluated the effectiveness of fall and spring application of Milestone® (aminopyralid) herbicide as a control agent on medusahead. Fall application of Milestone® reduced medusahead by inhibiting seed germination, while spring application reduced subsequent season populations of medusahead to near zero by reducing production of viable seeds. We found out that spring application of milestone was more effective at reducing medusahead at lower rates of 3oz/acre, compared to 7-14oz/acre required for fall applications. Based on these results, spring application will make more economic and ecological sense for ranchers and land managers to adopt because it is more affordable and will result in less environmental impact compared to prior recommended rates of 7-14oz/acre fall applications.

Forage production and Residual Dry Matter (RDM) monitoring: I continue to work with Natural Resource Conservation Services (NRCS) and UC Merced Vernal Pool and Grassland Reserve (MVPGR) program, collecting forage production and residual dry matter (RDM) data respectively. Forage production data is critical for landowners to decide on stocking rates and making necessary stocking adjustment and is also used by Farm Services Agency (FSA) for drought determination. The RDM data has been used to create forage utilization maps that indicate animal grazing patterns across the vernal pool pastures. I was invited by the MVPGR help review the reserve's grazing management system and make recommendations to help better meet their multiple objectives of research, educational programs (e.g. university class, K-12 classes, public field trips), and maintaining ecological integrity. In response to our recommendations, UC Merced has taken the first steps to replace the dairy grazing cows with beef cows.

Research projects and proposals: The year 2018 was our second year of my clover rangeland improvement trial, where I am testing the productivity of 11 varieties. About 8 varieties are showing promise, and the next steps will be to perform more in-depth evaluation of the highest performing varieties on larger areas.

We also got funding for two projects that I will start working on this year in 2019, where the goals are (1) to assess the effects of ground squirrels on forage availability and (2) to quantify the effects of rangeland conversion on ecosystem functions

Rangeland Management Course for Ranchers and Land Managers

I am developing 2-day course aimed at providing managers with comprehensive science based information to help improve their economic and ecological decision-making processes. We expect managers to gain information and skills about:

1. Basic plant identification and
2. Rangeland and soil health monitoring skills and why they are important.
3. Diverse ecosystem services provided by working rangelands
4. Basic animal husbandry
5. Low-stress animal handling
6. Animal behavior and how this can be applied to everyday management.
7. How to use integrated weed management approaches to increase efficiency and effectiveness

The course will involve teaching hands-on skills and field visits. The first class will be held in May 2019 and will be offered in other parts of the state every year after that.



4-H Youth Development Program

Program Expansion

El Portal 4-H Afterschool SPIN club—El Portal

Elementary has a new afterschool 4-H SPIN Club. It began last fall and continued until the end of the school. In the spring they began planting seeds such as melons, pumpkins, beans and squashes. It came up beautifully. We meet in the high school room where there is a small kitchen and the students learn nutritional facts about the food they are growing.



NatureBridge in Yosemite—On June 12, 2018 4-H members along with chaperones took a trip up to the NatureBridge Yosemite Valley sites. We hiked around 5 miles and totally enjoyed ourselves. Hope to go again next year!



Camp Tweety—This weekend camp held at the Camp Sugar Pine is for 4-H members and also an outreach camp for non-4-H members in grades 4-8th. Workshops and activities this past year were BB guns, archery, paddleboards, canoeing, tie-dying, campfire & more. This camp was established in 2001 and has been going strong ever since.

Ironstone Concours d'Elegance—Ironstone Foundation 4-H fundraiser where 4-Hers from the five foothill counties; Amador, Calaveras, El Dorado, Mariposa, Tuolumne, and also San Joaquin County did presentations, impromptu speeches, had project displays, and handed out awards to the car winners.

Donna Wice
4-H Youth Development Coordinator
209-966-4829 phone
209-966-5321 fax
dswice@ucanr.edu

Visit our Website:
http://cemariposa.ucanr.edu/4-H_Program/
Find detailed information on the programs that we offer and upcoming events, as well as other resources.

School Enrichment Program—“Ag in the Classroom” is a 4-H program coordinated with school personnel with use of selected 4-H learning materials as well as some California Ag in the Classroom materials as part of the school curriculum during school hours. In 2018, over 900+ students were able to have a 'hands-on' learning experience. This program has been sponsored by Mariposa County Farm Bureau and Mariposa County since 2001.

Olympic Day—This was the first “Youth Olympics” and was held at the Mariposa County Park on Saturday, May 5th during the Butterfly Festival. The event featured fun games for all youth and was sponsored by the Hi-4H project. We had over 45 youth and 20 adults, the majority of participants were non 4-H members.



Summer Fun / 4-H Appreciation Day—In July, Mariposa Hi-4H and Citizenship projects hosted a free BBQ Tri-Tip Dinner for all 4-H Donors, Sponsors, Volunteers, Leaders, Parents, and 4-Hers Past and Present, at the Mariposa County park. There was swimming, games, and food, with lots of fun for the whole family. The left over food was donated to the fire fighters battling the Ferguson Fire.



Color Me Green Run—Mariposa County had their first annual “Color Me Green Run” in October 2018. This race was held in Historic Mariposa and started in front of the Mariposa Courthouse. There were 25 runners from youth to seniors and also one from Switzerland. We plan on doing this run again in October 2019 during the National 4-H Week.



Field of Service—Mariposa County’s 4th Annual Field of Service was proudly coordinated by the 4-H Citizenship Project, Hornitos 4-H, and Hornitos Patrons Clubs. This event honors all those who’ve served, and all those we love. Paying tribute to all military, law enforcement, fire personnel, first responders, and special people in our lives.



Mariposa County 4-H Program was selected as the 2018 Volunteer Organization of the Year for their countless volunteer hours and excellent work ethic.

Mariposa County Chamber of Commerce



Master Gardener Program



Increased Educational Outreach Efforts:

- Provided monthly gardening interviews to our local KRYZ radio station.
- Updated and maintained our UC Master Gardener website.
- Submitted monthly articles to local publications on seasonal gardening topics.
- Continued to add daily UC and MG garden-related information on our Facebook page, reaching over 700 visitors.
- Researched and responded to over 180 community questions to our Master Gardener Helpline.
- Continued community outreach efforts through 23 weekly Farmer’s Market informational tables and 5 local educational booths.
- Expanded outreach to local events such as the Coyote Fest in Coulterville, Earth Day in Yosemite National Park and Earth Day activities at public schools.

Partnerships:

- Collaborated with Cal Fire MMU to design and implement fire-safe, drought tolerant demonstration gardens at Cal Fire MMU Headquarters in Mariposa.
- Supported and publicized pilot programs such as the Central Sierra UCCE outreach effort to bring a series of three food preservation workshops to Mariposa County.
- Continued to support the Mariposa County Resource Conservation District and the Mariposa Fire Safe Council as well as our county and community partners.
- Supported tourism by hosting a booth focused on tree mortality during Coyote Fest and on pollinators and beneficial insects at Yosemite National Park.
- Supported local agricultural events through collaboration with the Agri-Nature Association.

Community Response:

- In response to community needs, Master Gardeners started a Community Garden project in 2018 that services a fire-safe, water-wise demonstration garden in collaboration with Cal Fire, 2 current school gardens (with 2 more joining us in 2019), and 2 community garden start-ups.
- Joined local schools for Earth Day activities focused on garden and nature projects.
- Propagated and sold over 1,500 plants at our annual Spring and Fall Plant Sales, featuring annual vegetables, natives, perennial landscape plants, fruit trees, succulents and more.
- Supported local Habitat for Humanity efforts by planting two garden beds at the 2018 Mariposa Habitat for Humanity house.

Local Response to Fire, Flooding, and Drought Issues:

- In response to the devastating 2017 Detwiler Fire and tree mortality issues, Master Gardeners hosted a Fire Response Information Center at our 2018 Spring Plant Sale. Community members were able to connect with representatives from Cal Fire, Blue Ridge Services, the Mariposa Fire Safe Council, the Mariposa Resource Conservation District, the Mariposa County Landfill, and Pacific Gas & Electric alongside the Master Gardener Fire Response and Remediation information center.

- In March of 2018, Master Gardeners responded to the devastating erosion and flooding by offering educational research to community members on erosion control and remediation strategies.
- In response to continued drought concerns, Master Gardeners hosted a native grass and lawn replacement workshop, offering suggestions on how to promote native, non-invasive and drought tolerant landscaping.

Accomplishments for 2018

- UC Master Gardeners in Mariposa served 2,793 community members in 2018, bringing our 23-year total to over 51,900 community members served.
- We offered a total of 13 public events, including free public workshops and demonstrations, presenting topics requested by community members.
- Our 55 members in 2018 gave over 4,940 hours of volunteer time, which totals 60,605 service hours since our inception in Mariposa County 23 years ago.
- Increased visibility at the fair by providing six fair demonstrations for community members on composting and vermiculture, soils and amendments, and plant propagation. Worm composting bins demonstrated ways to recycle food scraps and create compost for their vegetable gardens at the same time.
- Continued training for volunteers to deal with continuing questions related to tree mortality, water conservation, pest identification, invasive weeds, fire-scaping and other related foothill gardening issues.

Stories

In July 2018, many in Mariposa County were evacuated for the Ferguson Fire, wondering about the fate of their properties. Cal Fire, protecting a well-maintained hilltop property off Vista Lago, noticed a 2018 UC Master Gardener Garden Tour plaque in their yard. Through the Master Gardeners, Cal Fire provided pictures and an all-safe report to the property owners, thanking them for their hard work in creating a defensible space in difficult terrain.



Sheri Mace
Master Gardener Coordinator
Phone: 209-966-2417
Fax: 209-966-5321
smace@ucanr.edu

Master Gardener’s Helpline:
209-966-7078

Visit our Website:

http://cemariposa.ucanr.edu/Master_Gardener

Find detailed information on the programs that we offer and upcoming events, as well as technical resources.