UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources



Practical. Connected. Trusted.

or over 100 years, UC Agriculture and Natural Resources (UC ANR) has been the local UC connection, delivering the power of UC research in agriculture, natural resources, nutrition and youth development to Californians in their own communities to improve lives and livelihoods.

UC ANR achieves its land grant mission through the work of several hundred UC Cooperative Extension academics conducting research at six UC campuses, nine Research and Extension Centers (RECs) and serving all 58 counties from 70+ locations throughout the state. By working and living among those we serve, UC ANR expands UC's reach to engage all people and communities in California ensuring equal access to the UC system. In many regions, UC ANR provides access to UC resources for residents who may never set foot on a UC campus.

Improving the lives of all Californians

Our statewide network of UC Cooperative Extension academics connects with research faculty to support healthy communities with science-based strategies and technologies. These efforts safeguard healthy and affordable food, provide clean drinking water, support the economic vitality of our state, protect natural resources, prevent wildfires, improve college readiness, develop future leaders through 4-H, prevent childhood obesity, deliver culturally relevant materials and workshops, and develop proactive policies to increase diversity and inclusiveness.

UC ANR delivers its mission through 11 statewide programs including 4-H Youth Development, UC Master Gardeners, UC Integrated Pest Management, and the Expanded Food and Nutrition Education Program. UC ANR's Nutrition Policy Institute is integral to developing research-based public policies related to nutrition and physical activity, and our California Institute for Water Resources is the state's hub that develops and communicates research-based solutions to water resources challenges.

IMPACT: Preparing tomorrow's leaders

The 4-H Youth Development program provides experiential learning to help culturally diverse youth reach their full potential by developing leadership, citizenship and life skills in supportive environments. Youth can participate in 4-H clubs, camps, after school programs and events that are offered throughout the state in both rural and urban centers. The program also provides STEM Teen Teaching, robotics, leadership development and civic engagement opportunities. In addition, Latino participation in California 4-H has achieved parity with the county demographics.

Youth who participate in 4-H have better outcomes than youth in other programs:

- 2 times more likely to have better grades
- 1.7 times more likely to take courses/pursue STEM careers



IMPACT: Wildfire prevention and recovery

Ranchers and rangeland managers dealing with the devastating loss of productive rangeland from wildfires rely on UC ANR's science-based publications and online tools to help them calculate forage loss across a wide variety of growing conditions. Resources shared through workshops further aid managers in knowing how to value their forage, submit insurance claims and develop adaptive strategies to deal with growing fire risks.

In 2017 and 2018 wildfires burned through more than 1.3 million acres in California.

Northern California experienced unprecedented wildfire seasons in 2017 and 2018. UCCE academics hosted workshops for citizens and public officials to help communities develop a science-informed recovery approach. Topics included fire recovery timelines, partners, grants and practices to reduce the likelihood of future catastrophic fires. Researchers are also using technology, including drone-based video, to better understand the patterns that led to the loss of so many homes and buildings. UC ANR academics are sharing this data with fire safe councils and homeowners to integrate potential fire hazards into land use and landscape plans.

Partnership is in our DNA

To further our reach, UC ANR builds partnerships based on deep and long-lasting relationships with local, state and federal governments, community-based organizations, schools, nonprofits and private industry.

IMPACT: Improving health for low-income families in California

The Expanded Food and Nutrition Education Program (EFNEP) helps low-income families improve their nutrition practices and teaches food-budgeting skills. EFNEP serves 30,000 youth and adults, with 91% improving nutrition practices and 85% improving their skills in managing food resources. EFNEP graduates

Studies have shown that for every \$1 invested in EFNEP, more than \$8 is saved in current and future healthcare costs.

reported an average \$38.20 monthly food cost savings; in one year, California EFNEP families collectively saved nearly \$3 million in food costs.

The CalFresh Healthy Living, UC (California SNAP-Ed) nutrition education program empowers under-served Californians to improve their health by promoting awareness, education, and community change through diverse partnerships, resulting in healthy eating and active living. By

partnering with schools and community stakeholders, CalFresh Healthy Living, UC has reached 144,000 school-aged children in 31 California counties.





IMPACT: Effective, safe pest management

In 2009, Napa Valley wine grape vineyards infested with European grapevine moth lost 50-100% of their crop. UC ANR academics worked with public and private partners to develop a comprehensive pest management approach. EGVM declined from over 100,000 moths in 2010 to none in 2015 and 2016; EGVM was declared eradicated from California and the United States.

The citrus disease, huanglongbing (HLB), has great potential to devastate the California citrus industry as well as kill cherished neighborhood and backyard citrus trees. There is no cure for this disease and the only way to slow its spread is by removing infected trees and controlling the Asian citrus psyllid (ACP), the insect that spreads the disease. While UC ANR scientists research longterm solutions, UC Cooperative Extension and UC Master Gardener volunteers partner with local agencies and businesses to educate citrus growers and home gardeners on mitigating the spread of ACP and HLB.

