# UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

# **Practical. Connected. Trusted.**

For 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 it's land grant mission through the work of
UC Cooperative Extension academics conducting research at nine
UC Campuses, nine Research and Extension Centers (RECs) and also
through 14 statewide programs including 4-H Youth Development,
UC Master Gardeners, UC Integrated Pest Management, and CalFresh
Healthy Living, UC. 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.

- 262 Cooperative Extension Advisors and Specialists
   1.2 million direct contacts/ educational exchanges
- 16,650 community volunteers
- \$46.9 million: value of volunteer hours donated annually

West Side REC

Lindcove REC

Hansen REC

UC Riverside

South Coast REC

Desert REC

## **Impacting California**

### **Growing 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. In FY 2023/24, over 65,600 California youth benefited from high-quality 4-H

trained adult volunteers who devoted 720,000 hours of services valued at \$27.8 million.

UC 4-H Advisors work with youth living in juvenile detention centers to provide valuable real-life skills that inspire future careers and workforce opportunities. Hands-on projects include building raised vegetable gardens and raising chicks, both which provide youth a sense of accomplishment and responsibility. Youth also learn about mindfulness and gain valuable, life-changing coping and communication skills.

programming efforts which were supported by over 7,430

# Compared to their peers, 4-H youth are:

Intermountain RE

Sierra Footbill REC

**UC** Berkeley

- 4 times more likely to make a positive contribution to their communities
- 1.7 times more likely to take courses/pursue STEM careers

- UC Cooperative Extension
- Research and Extension Center
- UC Ag Experiment Station Campus

### **Avian Flu and Food Security**

The rise of avian flu in California has greatly impacted the price and availability of eggs and continues to raise serious concerns for animal and human health. To minimize livestock and poultry exposure, UC researchers developed the Waterfowl Alert Network app which uses data gathered from satellites, weather radar, and land sensors help track the movements of wild birds who can carry avian influenza. This tracking system serves as an early warning tool, helping commercial poultry and dairy operations minimize waterfowl interactions and implement preventative measures against the virus.













#### Wildfire prevention and recovery

California faces increasing risks from catastrophic wildfire and impacts are felt across a variety of land-scapes. The UC ANR Fire Network is an interdisciplinary team that brings research and education to California's communities and policymakers. Areas of expertise include home hardening and defensible space, vegetation management (prescribed fire, prescribed grazing), emergency preparedness, and community collaboration. Due to this coordinated Network, UC can respond to disasters – like the recent LA fires – as they unfold.

Since 2017,
wildfires have
burned through
over 12 million
acres in California.

#### Improved water-supply security

A collaborative study led by a UC Cooperative Extension specialist at UC Merced found that covering California's 4,000 miles of water canals with solar panels could save 63 billion gallons of water annually and generate 13 gigawatts of solar power. The findings led to the Turlock Irrigation District constructing solar panels over its water canals with \$20 million in funding from the California Department of Water Resources.

#### Managing pests and increasing agricultural productivity

As a result of UC ANR's Almond Pest Management Alliance Project, use of mating disruption as an ecologically sustainable pest management practice tripled over two years by growers and pest control advisers who influence over 400,000 acres of almonds in the San Joaquin Valley. The Navel Orangeworm is the most damaging pest of nut crops, with significant economic loss to farmers every year. UC IPM research showed that crop loss could be halved (saving \$18 per acre) when a new 'green' technology is applied to disrupt mating in the Navel Orangeworm. If adopted by 25% of California's nut acreage, this technology could save nut growers \$10 million annually.

# Improving food security for low-income families in California

In 2024, CalFresh Healthy Living, UC, worked to reach over 119,000 youth and adults in 34 California counties through policy, systems, and environmental change efforts that increase access to healthy food and/or physical activity. In addition, EFNEP served more than 10,800 adults and youth. They reported saving an average of \$44.70 in monthly food costs, which equals \$536 savings per year. In one year, California EFNEP families collectively saved over \$2 million.

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