August 1, 2026

UCCE Ventura County Q4 Report

During the fourth quarter, UCCE in Ventura County conducted applied research and education reflecting the highest priorities in agriculture, natural resources, and youth development in the county. Q4 applied research projects included:

- investigation of **pest management in gerbera daisies** in support of the county's floriculture industry, (Production Horticulture Advisor)
- expansion of the county's **weather station network to improve real time irrigation decisions** for local growers, (Irrigation & Water Resources Advisor)
- **nitrogen management in celery** to devise an optimum level of fertilization and support regulatory compliance, (Irrigation & Water Resources Advisor)
- best practices for **biocontrol of diamond back moth** which is the most damaging pest for brassica crops in California, (Entomology Advisor)
- **high density planting trials for GEM avocados** (Subtropicals Advisor)
- evaluation and **demonstration of cover crops** for soil health and climate resilience (HAREC Director), among many other projects

Notable changes since Q3: Moved out of 555 Airport way to 1923 Eastman Suite A2 in Ventura

Agriculture and Food System Research & Education Programs

- Entomology
- Irrigation & Water Resources
- Strawberry & Vegetable Crops
- Soils, Water, & Subtropicals
- Production Horticulture
- Food Policy & Systems
- Integrated Pest Management
- Agricultural Economics

Natural Ecosystem and Working Landscapes Research & Education Programs

- Prescribed burn to control invasive weeds
- Natural resources, climate resilience & tree health
- Climate Smart Agriculture
- Disaster Resiliency Planning and Policy
- UC Environmental Stewards

Mission: UCCE in Ventura county improves the lives of local residents by working with growers, families, volunteers, and partners to advance science-based solutions in agriculture, natural ecosystems, community health, and youth development.

Community Education & Youth Development Research & Education Programs

- 4-H Youth Development
- UC Master Gardeners
- Agriculture Awareness and Education Programs

Q4 Highlights

Supporting youth and community thriving

4-H enrolled over 370 youth in community clubs with 45 project opportunities during the 2025-26 program year. There are 10 chartered clubs from Simi Valley to Ventura to Ojai where youth lead and learn to develop knowledge and skills while serving the community. 4-H launched a new Teens as Teachers project, training seven youth leaders, age 12-18, to teach hands-on lessons for younger youth. Teens were provided 12.5 hours of instruction and training on curricula to support social-emotional learning, mindfulness, and healthy relationships. Classes for younger youth will begin in Q1 26/27. For all youth engagement trainings provided, participants from Ventura County who completed workshop evaluations (n=21) reported gaining useful information (90%), and indicated a plan to use or share what they learned (80%).

Promoting fire and drought resilience, increasing community health

Master Gardeners hosted over 35 community classes across the county from Oxnard to Simi Valley and Ojai. These classes help the public prepare their homes for fire, grow food to increase food security and healthy living, support pollinators, conserve water through plant selection and drip irrigation, and much more. Follow-up evaluations from Q3 (Q4 data not yet available) show that two months after attending a workshop, participants report adopting new practices to reduce pesticide application (67%, n=9), use plants that attract pollinators (76%, n=41), select low water-use plants (59%, n=80), clear plants and organic materials 0-5 feet from the home (67%, n=6), and felt more connected to their community (78%, n=187). The Master Gardener program reaches over 6,000 local residents annually.

Improving efficiency and profitability of agriculture

Subtropical Crops Advisor Ben Faber completed harvesting on a GEM avocado high density trial at Pine Tree in Santa Paula. High-density planting can increase the profitability of avocado production due to decreased land and water requirements. The trial will assess the yield outcomes of the high-density plantings. Some preliminary findings suggest changes to harvesting methods (i.e. using two hands to snap the fruit off vs. clippers) could increase harvesting efficiency. Yield data from this trial will be published and shared extensively with growers in Ventura County in late 2026.

GEM fruit hiding behind a branch. Photo: Faber

Evaluation and demonstration of cover crops

A demonstration field day was held at the Hansen Agricultural Research and Extension Center (HAREC) on April 17, 2026 for farmer cooperators of a multiyear California Farm Demonstration Network project on healthy soil practices. The event was led by HAREC Director Annemiek Schilder with Advisor Ben Faber, Agricultural Education Specialist Kristen Mussack, and collaborators from the UC Davis Cereal Breeding Program, Rodale Institute California Organic Center, and the Ventura County Resource Conservation District. Demonstrations included 20 types of winter cover crops, the effect of planting date, new cereal varieties from UC Davis, functional cover crops for orchards, and orchard floor management (crimping versus mowing). Of the 12 participants, 100% indicated that they had gained new knowledge and 92% indicated they intended to apply it in their operations. The event also stimulated farmer-to-farmer learning. One participant commented on the "demonstration and wealth of knowledge and experience shared by hosts and other farmers"

Photo: Dr. Alicia del Blanco describing new varieties of wheat, barley, oats and triticale at HAREC in Camarillo. Dr. Blanco is a Project Scientist and cereal breeder at the UC Davis Department of Plant Sciences, specializing in oat and malting barley improvement. Her work focuses on developing new climate-adapted and disease-resistant small-grain varieties for California agriculture.

Protecting Ventura County Oaks and Natural Resources

Natural Resources and Tree Health Community Educator, Julie Clark, collaborated with local and state partners to support community outreach and education around emerging tree diseases and

pests that are a threat to our natural ecosystems and agriculture. Working with Ventura County Agriculture Weights and Measures, Cal Fire Forestry, and several local community partners (Friends of Oak Park Open Space, Ojai Valley Trees, etc.) Clark conducted outreach at three public events reaching 740 people, three intensive trainings attended by 70 participants, and collaborated on two new research projects addressing natural resources management during Q4. These efforts help raise awareness of emerging pests which threaten our local environment, including Gold Spotted Oak Borer, Invasive Shot Hole Borer, and Asian Citrus Psyllid.

Goldspotted oak borer (GSOB) attacks and kills coast live oak, California black oak, and canyon live oak. Since its discovery in California, GSOB has killed tens of thousands of oaks in Southern California and caused major impacts in natural areas, parks, and residential communities.

GSOB is most commonly spread through the movement of infested firewood. To help slow the spread of GSOB and other invasive pests, residents are encouraged to avoid moving firewood long distances and to follow the "Buy it where you burn it" recommendation by purchasing and using firewood locally. (Beatriz Nobua-Behrman & Julie Clark)

Educational and published materials by or about UCCE Ventura during Q4:

Agriculture

AgAlert Moth damage rises as growers await new insecticides. *June 3, 2026 Impacts of diamondback moth infestations on the central coast and Ventura and UC guidance on using available pesticides.*

Topics in Subtropics: Over 35 articles published on the blog during Q4 (selected examples linked below)

- Citrus Plant Growth Regulators June 18, 2026
- The Beetles That Could Threaten California's Avocados June 17, 2026
- Winter 2026 Topics in Subtropics Newsletter Available in English (Spanish coming soon)

Natural Resources & Fire

PNAS. Egress thresholds and wildfire fatalities. June 1, 2026 (Moritz). Wildfire fatalities drop sharply as communities gain more outward road access, but only up to about six exits. Beyond that point, additional roads offer little further protection. Article quoted in YourCentralValley.com, Santa Barbara Independent, Sierra Sun Times and the Mercury News.

Earth's Future. Evolving fire frequency in the western United States and its links to human influence. Also in AGU Western U.S. Wildfires Have Gotten Less Frequent, Though Larger. April 2026 (Mortiz)

4-H Youth Development

Our Ventura TV. From livestock to robotics: Exploring the Diverse World of 4-H. Interview with Ventura 4-H Advisor Melissa Guillen. June 16, 2026

Community Education

Future. A Pilot Study of a Youth Gardening Retrospective Survey Tool: Evaluating Outcomes of School-Based, Garden-Enhanced Nutrition Education Programs. April 2026 (Soule, Marrs).

American Society for Horticultural Science. Adapting Needs Assessments to Detect Distinct Target Audiences and Tailor Program Delivery. April 2026 (Cohen)

UCCE Ventura publishes four newsletters. Subscribe here or visit our home page for events and information. Community members with home gardening questions can visit the UC Master Gardener website and events page.