

National 4-H Week Proclamation. September 2026

UC Cooperative Extension
University of California
Agriculture & Natural Resources

November 2026

Santa Barbara County Quarter 1 Report 2026-27

Prepared for

Santa Barbara County Agricultural Commissioner & Board of Supervisors

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Our local mission:
UCCE in Santa Barbara 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.



Santa Barbara 4-H youth observing their embryology project.

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EFFORTS & OUTCOMES FROM 2025

At a glance



Different fertilizer application treatments for Gerbera daisy production.
Photo: E Volk

$692K

Value of volunteer service hours

6,286

Community education participants

2,884

Growers, land managers, and agency partners at Advisor-led workshops & trainings

555

Youth enrolled across 11 county 4-H clubs

2025 Impacts:

Increased productivity and efficiency of agriculture and working landscapes

Improved water quality, water use efficiency, and soil health

Improved food and nutrition security and food safety

Increased civic engagement and readiness for post-secondary education and careers

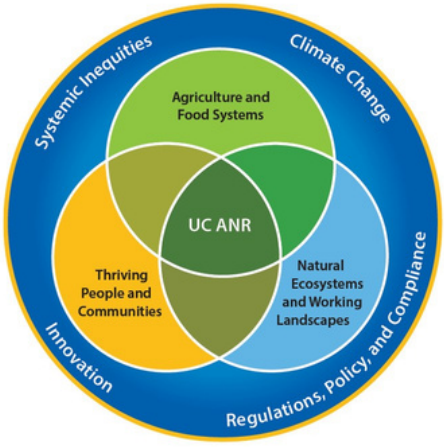
BACKGROUND

UC in Collaboration with Local Counties

Partnering with Santa Barbara County since 1927

The University of California Cooperative Extension (UCCE) and Santa Barbara County have been partnering for close to a century to provide educational programs to county residents in agriculture, home economics, and youth development.

UCCE is part of the UC division of Agriculture and Natural Resources (UC ANR), a statewide network of researchers and educators. In 2024, UC ANR published our 2040 Strategic Vision, a blueprint to guide our work, structure, and resource allocation to stay relevant to the challenges and opportunities across a diverse and vibrant state.



UCANR priorities

UCCE advisors, research support staff, community educators, and local volunteers work in teams to develop and extend practical, trusted, and science-based information in Santa Barbara County. We also leverage the expertise of campus researchers across the UC system and collaborate with local, state, and federal agencies to strengthen our education and outreach efforts. While much of our funding comes from state and federal sources, we depend on cooperative support from the County of Santa Barbara to fund operational costs and expenses for doing business in the County. This partnership ensures UC resources are expended in, relevant to, and beneficial for Santa Barbara County.



UCCE is part of a statewide network of researchers and educators - UC ANR.

Agriculture and Food Systems Programs

Applied research and education in:

- Implementing safe, effective, and economical pest management
- Optimizing fertilizer application
- Improving water use efficiency
- Testing new varieties for economic and ecological resilience

Program	Clientele	Funding	Advisor
Integrated Pest Management	Growers, Pest Control Advisers	UC, grants	Chris Greer, Ph.D.
Soils, Water & Subtropicals	Growers, Pest Control Advisers	UC, grants	Ben Faber, Ph.D.
Production Horticulture	Growers, Pest Control Advisers, Public	UC, grants	Emma Volk, M.S.
Organic Agriculture-Education & Mentorship	Certified organic, transitioning, or aspiring organic producers	Grants	Maria De Lourdes Orozco Ramirez, M.S.
Small Farms	Growers	Grants	Staff: Claire Tuohey-Mote

Natural Ecosystems & Working Landscapes Programs

Applied research and education in:

- Improving land management decisions
- Improved community and food system disaster resilience

Program	Clientele	Funding	Advisor
Disaster Resiliency Planning and Policy	Public, Government, NGOs	UC	Lilian Thaoxaochay, M.A.
UC Environmental Stewards	Volunteers, Public	UC, grants	Managed by statewide program and local partners

Community Education & Youth Development Programs

Applied research and education in:

- Youth leadership, civic engagement, college & career readiness
- Home gardening, irrigation, and pest management
- Healthy eating, food and nutrition security, physical activity

Program	Clientele	Funding	Advisor
Community Health & Wellness	Social service & Youth development professionals	UC, Grants	Katherine Soule, Ph.D.
4-H Youth Development	Youth, Youth-development professionals	UC, County, Donors	Staff: Ella Mitchell, Ana Torres Advisor: Melissa Guillen, M.S.
UC Master Gardeners	Volunteers, Public	UC, County, Donors	Staff: Cindy Morales Advisor: E Volk
UC Master Food Preservers	Volunteers, Public	UC, County, Donors	Advisor: Katherine Soule, Ph.D. Staff: Kelly Hong



Advisor Volk collecting data on Gerbera daisy production.

Our two year study showed optimal fertilizer application rates for maintaining gerbera daisy yields while minimizing pest pressure.



Investigating optimal fertilizer rates in gerbera daisy production.

Supporting the local nursery and cut flower industry



By Emma Volk

Gerbera daisies, a California industry valued at $32 million, face multiple pest and disease pressures. Locally, growers have raised concerns about access to effective controls for pests, especially Western flower thrips (WFT). At the same time, California has increased oversight on fertilizer application in agricultural systems to improve water quality.

Scientific research has found a positive relationship between nitrogen fertilizer application and WFT populations in horticultural production settings. But questions remain when it comes to optimizing fertilizer application rates to both decrease pest pressure and maintain profitable yield.

Production Horticulture Advisor, Emma Volk and colleagues conducted research to determine optimal nitrogen fertilizer rates in gerbera daisy production. With input from local growers, they applied 4 different nitrogen rates to two different gerbera daisy varieties over two growing seasons. **Results show that 200 parts per million of nitrogen can minimize WFT and aphid pressure while maintaining industry standard yields.**



Advisor Thaoxaochay delivers an update to local growers on how to access disaster resources.

Disaster resiliency, planning, and policy

An emerging program at UCCE Santa Barbara
By Lilian Thaoxaochay

Climate change has impacted both the risk and variability of extreme weather events affecting communities all over California. These natural hazards combined with existing vulnerabilities can exacerbate inequalities. In San Luis Obispo, Santa Barbara, and Ventura Counties, wildfire, water/drought, and flooding have emerged as major causes for concern due to frequency and associated disruptions and losses to both community members at large and the agricultural sector. Vulnerable communities include seniors living on fixed incomes, low-income and/or non-English speaking households, the uninsured, and new and beginning farmers or farms grossing <$100,000 annually.

To address the highest needs issues in our local communities, Disaster Resiliency, Planning, and Policy Advisor Lilian Thaoxaochay is partnering with local communities to develop programming in:

- **Community education** to build resilience to natural hazards through preparedness education and organizing resources for local recovery and mitigation efforts.
- **Public policy engagement** through partnerships with local governments and nonprofits to address local hazards, reduce risk, and steward working landes.
- **Applied research projects** in preparedness, wildfire, drought, food systems and agriculture to adress emerging resilience needs.

Year 1 programming:

- Support small scale growers in accessing disaster relief.
- Policy listening sessions with growers.
- Develop and deliver preparedness resources for Super El Niño.
- Support efforts of local Fire Safe Councils.

UC Cooperative Extension in Santa Barbara County

1105 E Foster Rd
Santa Maria, CA 93445



Students in the UCCE supported school garden program at Hapgood Elementary in Lompoc lead tours and education.

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Shannon Klisch, Director
UCCE Santa Barbara
sklisch@ucanr.edu

https://ucanr.edu/county/santa-barbara-county