September 2024

2023-24 Annual Report

University of California Cooperative Extension in Ventura County

UC CE

RECS

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

UC Cooperative Extension

COUNTY of VENTURA

805-645-1451
https://ceventura.ucanr.edu/

Photo: N Levy

Photo: UC Environmental Stewards

Who we are

The University of California Cooperative Extension (UCCE) is part of the Division of Agriculture and Natural Resources (UC ANR). We are a statewide network of researchers and educators whose mission is to engage California communities in innovative research and education programs to ensure **sustainable, safe and nutritious food; economic success in a global economy; a sustainable, healthy and productive environment; and science literacy and positive youth development.**

The Cooperative Extension Service was created by the Smith-Lever Act in 1914 as a county-based outreach program to educate rural Americans about advances in agricultural technology and home economics. UCCE has been active in Ventura County for 110 years with support provided collaboratively by the County of Ventura, state and federal government, and grants and gifts.

What we do

Our advisors, educators, and volunteers provide education and extend applied research in support of:

Healthy communities

Promoting agricultural and home gardening practices and positive youth development to support human health

Healthy food systems

Supporting the economic vitality of Ventura County's $2B agricultural industry

Healthy environments

Researching best practices to conserve water, manage pests, and increase environmental stewardship

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UC Cooperative Extension Ventura County

Our work

As the University of California, our mission is discovering and advancing knowledge through education and applied research. In 2023 we had:

14,553

educational interactions with the public

2,837

participants at 63 academic-led workshops, field days, or classes

21,151

hours of public service & education provided by 327 UC volunteers

We train and support a cadre of expert volunteers to extend information on science-based practices within the community. In 2023, there were:

7,927

residents reached by the UC Master Gardeners

1,018

youth in the UC 4-H Youth Development Program

16

certified Environmental Stewards

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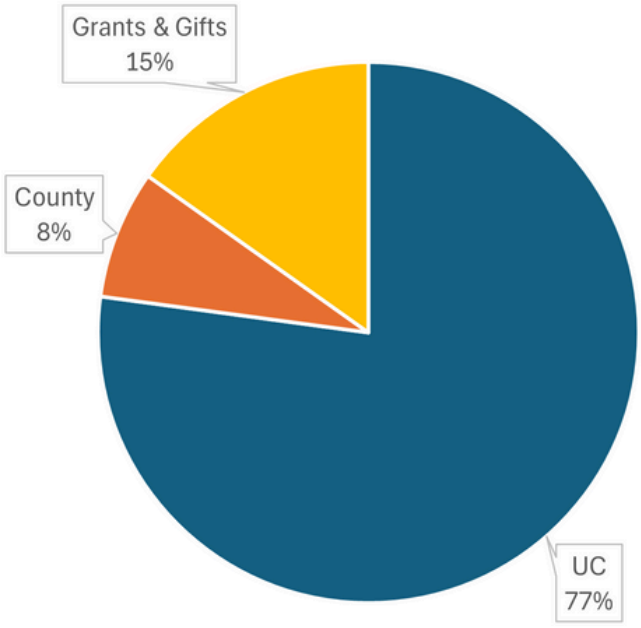
Partnering for Change

Through partnerships with local, state, and federal government, community-based organizations, schools, and private industry, UCCE programs improve lives.



Ventura County's investment in UCCE

Ventura provides vital funding to support programmatic and administrative costs

UC investing in Ventura County

For every $1 in county funding, UCCE brings in an additional $12

Photo: E Volk

Leveraging the Power of the UC System

Agriculture is a significant contributor to the economic vitality of California and Ventura County. At the same time, it is a highly competitive business with narrow profit margins that requires cutting-edge and targeted research in order to solve production problems to remain profitable.

Ventura County producers face many challenges, and without continuing research and education, agribusiness would become less competitive in local, national, and global markets.

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Making an Impact through Applied Research & Extension

UCCE Ventura strives to be a trusted partner in the community and in support of Ventura County's goals and priorities. Our Advisors support the economic vitality of Ventura County's $2 billion agricultural industry through applied research relevant to local needs and extension of science-based information. UCCE Advisors help growers reduce costs by increasing production efficiencies and yields through testing new methods for improving soil health, providing advice on management of invasive and endemic pests and plant diseases, and working with farmers and industry groups to anticipate market changes and explore the viability of new crops. Increasingly, our advisors are helping producers adapt to a changing climate, including drought, fire, and temperature extremes.

Improving pest and nutrient management in controlled environments

UCCE Production Horticulture Advisor, Emma Volk, supports the ornamental nursery, vegetable nursery, floriculture, and controlled-environment industries. Volk conducts applied research and education to support sustainable pest, nutrient, and landscape management. Projects in 2023 included:

- **Developing methods for growers to rear beneficial organisms on-site.** Beneficial insects are a vital component of sustainable pest management in greenhouses, but the quality of commercially available beneficials varies greatly. Volk is investigating on-site rearing to improve the impact of beneficial insect releases and minimize costs.
- **Optimizing nutrient application in vegetable transplant production.** Recommendations for nutrient application in vegetable transplant production vary widely. By studying evapotranspiration and nutrient uptake of vegetable transplants, Volk aims to determine optimal nutrient application rates to improve fertilizer application and reduce excessive nutrient application which can negatively impact water quality and increase costs for growers.

Photo: S Sope

Irrigation workshop at Boething Treeland Farms.

95%

of industry partners who attended Volk's workshops plan to implement knowledge they gained in their own operations

Impacts

Key Condition Change	Improved water quality		Increased ecological sustainability of agriculture and landscapes
Activity / Project	Optimized nutrient application in vegetable transplants	Development of methods for on-site rearing of beneficial organisms to control pests	Education to growers, homeowners, and UC master gardeners on sustainable evidence-based practices

Improving irrigation and nutrient management practices

UCCE Irrigation and Nutrient Management Advisor, Andre Biscaro focuses on creating information and tools that help vegetable and berry crop growers, farm managers, and crop consultants optimize water and fertilizer use for improved yields, environmental sustainability and regulatory compliance. Projects in 2023 included:

- **Assessing drip tape as an alternative irrigation method to micro-sprinklers** to reduce water use during strawberry establishment.
- **Development of a user-friendly irrigation calculator**, an online application that creates data-driven irrigation recommendations. Determining how much water to apply in each irrigation event is a challenging task to most irrigators, which often leads to both over- and under-irrigation. While still in its developmental stage, it is estimated that this irrigation app will support 50 to 100 irrigation decisions weekly in Ventura County.
- **Revising the Irrigation & Nutrient Management Plan Self-Certification Training** with VC Farm Bureau and CDFA so growers can obtain CDFA-approved certification and comply with regulations.

15,000 - 20,000
estimated acres of vegetables and berry crops managed with improved irrigation & nutrient management practices in Ventura. (2023)

560 participants at classes and field days related to irrigation and nutrient management

Although it is difficult to accurately quantify the impact of research and education in such a short period, it is expected that approximately 15,000 to 20,000 acres of vegetable and berry crops will be managed with improved irrigation and nutrient management techniques in Ventura County, leading to both ***water and nitrogen use optimization and the protection of natural resources.***

Photo: M Valdes-Berriz

Irrigation Field Day at Crisalida Berry Farms.

Impacts

Key Condition Change	Improved water-use efficiency		Increased agriculture efficiency and profitability
Activity / Project	Assessing alternatives to micro-sprinklers during strawberry establishment.	Development of a user-friendly app for data-driven irrigation recommendations.	Development of nitrogen removal coefficients for vegetable & berry growers.

Strawberry and vegetable pest management and sustainability

UCCE Strawberry and Vegetable Crops Advisor, Oleg Daugovish supports the vegetable and berry industries, two of Ventura County's leading crop areas. Projects in 2023 included:

- **Reducing synthetic fumigant use:** This collaborative research showed that mapping pathogens in strawberry fields and applying fumigants based on severity of diseases can reduce fumigant use 10-25% without compromising yields.
- **Improving organic strawberry productivity**: Daugovish investigated the efficacy of new carbon sources (wheat middlings) for ASD (anaerobic soil disinfestation), a biological alternative to fumigation. In large scale field demonstrations, ASD with middlings, controlled or suppressed charcoal rot, a key strawberry pathogen, and minimized germination of yellow nutsedge, one of the world's worst weeds, while increasing productivity. The practice has been adopted in all strawberry production regions of the state and is estimated to be used by more than 50% of organic growers.
- **Evaluating agriculture ditches for pests and beneficial insects**: Preliminary results show that ditches do not support large populations of Lygus bugs and diamondback moth during the winter and early spring. Western flower thrips was common, increasing in early spring. Parasitoid wasps remained very abundant from November through March as did general predators such as spiders and predatory insects. ***When completed, this project will guide ditch management decisions to help control agricultural pests while sustaining beneficial species.***

10-25%
potential reduction in fumigant use for growers adopting pathogen mapping.

This work contributes to reduction of fumigant use which is important for air quality, human health and long-term soil vitality.

Photos: O Daugovish

Wilt susceptible 'Sonora' celery collapses in September 2023 (left) while a resistant cultivar shows no disease symptoms (right)

- **Developing and evaluating celery cultivars for their resistance to Fusarium wilt** race 4. The soil fungus Fusarium oxysporum apii is a top issue for local celery growers, one of Ventura County's main vegetable crops. A 2023 trial of a publicly available cultivar showed excellent resistance to wilt while approaching commercial quality. Continued development of new cultivars with resistance to this harmful pathogen will address a priority need of the celery industry.

Impacts

Key Condition Change	Increased agriculture efficiency and profitability	Improved health for all
Activity / Project	Research and education to investigate disease resistance in strawberries and celery	Investigating alternatives to synthetic fumigants while maintaining productivity

Sustainable insect conservation and pest management

UCCE Entomology Advisor, Hamutahl Cohen develops research and extension programs focused on sustainable insect management in agricultural, natural, and urban ecosystems, with an emphasis on food systems. Projects in 2023 included:

- **Conservation of Beneficial and Endangered Insects**: California is home to an incredible amount of insect diversity, including 1,600 wild bee species and insect predators such as ground beetles, lacewings, and parasitoids. These insects are threatened by activities such as coastal development, invasive species, and agrochemical exposure. This project aims to enhance conservation of beneficial and endangered insects.
- **Sustainable Pest Management (SPM):** SPM is a holistic, whole-system approach to managing pests in agricultural and other managed ecosystems that builds on the concept of integrated pest management (IPM) with broader consideration for human health, social equity, environmental protections, and economic vitality. The goal of this program is to promote SPM by enhancing entomological knowledge, research, and technical assistance in crops such as cabbage, strawberry, lemon, and avocado.

95%
of participants at Cohen's workshops on conservation of beneficials intend to implement practices they learned.
(2023)

529
participants at classes and workshops

35
consultations with Ventura County growers

Cohen is collaborating on a project to study how habitat conservation and natural habitat influences pest outbreaks and pollination in Ventura County citrus and avocado farms. Preliminary results suggest that local habitat restoration and hedgerows promote abundant and diverse beneficial insects.
Understanding how agricultural practices and landscape management influence insect dynamics in crop fields has implications for how land managers and growers conserve and manage natural habitat.

Photo: H Cohen

Students from Cal Poly Pomona and UC Santa Barbara setting insect traps for a project assessing how habitat restoration influences pollinator and pest communities.

Impacts

Key Condition Change	Increased ecological sustainability of agriculture and landscapes		Improved health for all
Activity / Project	Research and education to enhance conservation of beneficial and endangered insects	Enhancing knowledge, research, and technical assistance related to sustainable pest management.	Secure funding for a statewide big data approach to pest control in areas experiencing changes in climate

Improving avocado and citrus productivity

UCCE Soils, Water, and Subtropical Crops Advisor, Ben Faber works with the citrus and avocado industries and smaller farms growing subtropical fruits in Ventura County. Projects in 2023 included:

- **Research and extension related to avocado rootstocks, varieties, planting, pollination, and weed control**. This work led to greater productivity for avocado growers, the release of a new variety "Luna", and potential reduction in pesticide use.
- **Education and workshops on subtropicals**, including dragonfruit, passionfruit, and cherimoya.

Blog: Topics in Subtropics

Bi-weekly posts cover irrigation, pest control, heat and frost mitigation, and fertilization with a reach of 1,200-20,000 readers/month.

Topics in Subtropics Blog
Topics in Subtropics Newsletter
UCCE Avocado Guide
UCCE Cherimoya Growers Handbook

Photo: Canva

Faber and colleagues published the **Cherimoya Growers Handbook**, the only publication of it's kind.

793

participants at subtropical workshops

UCCE Ventura Advisors Faber and Daugovish educate 1500 elementary students about Ventura County agriculture in May 2024, with a focus on Asian citrus psyllid and huanglongbing disease.

Photo: D Gray

Impacts

Key Condition Change	Improved water-use efficiency		Increased agriculture efficiency and profitability
Activity / Project	Extension with growers, professional groups, and regulatory agencies on science-based practices	Investigation of new avocado varieties for water efficiency and pesticide use reduction	Scouting new crops for Ventura County farmers

Integrated pest and disease management in agricultural crops

UCCE Integrated Pest Management Advisor, Chris Greer conducts applied research and education focused on providing decision makers with the knowledge and tools needed to make sound economic and environmentally sustainable pest management decisions. Projects in 2023 included:

- **Improving understanding of disease development and distribution**: Greer is utilizing small unmanned aircraft system (drone) imagery to measure and document plant health related to several diseases affecting key Ventura County crops. Collecting imagery throughout the growing season has allowed for differentiating areas of high and low soilborne disease pressure, permitting variable fumigation rate application and reduced overall fumigant use to effectively manage charcoal rot in strawberry. Measuring plant health throughout the season also allows documentation of when individual plants have collapsed and ceased contributing to yield, providing an estimate of economic loss related to the disease. Extension of this work to celery and lettuce are in the initial stages.
- **Evaluation of disease resistance in celery and lettuce:** Greer is participating in collaborative research to identify and promote the development of Fusarium wilt resistance in both celery and lettuce. Both diseases are quite challenging as there are currently no effective curative treatments for these diseases caused by soilborne pathogens. Disease resistance is the best form of sustainable pest management for these diseases. Field trial evaluations of cultivars and advanced breeding material will result in commercially acceptable Fusarium wilt resistant celery and lettuce cultivars that offer a better economic return in the presence of the pathogen.

End of season imagery from strawberry charcoal rot disease trial.

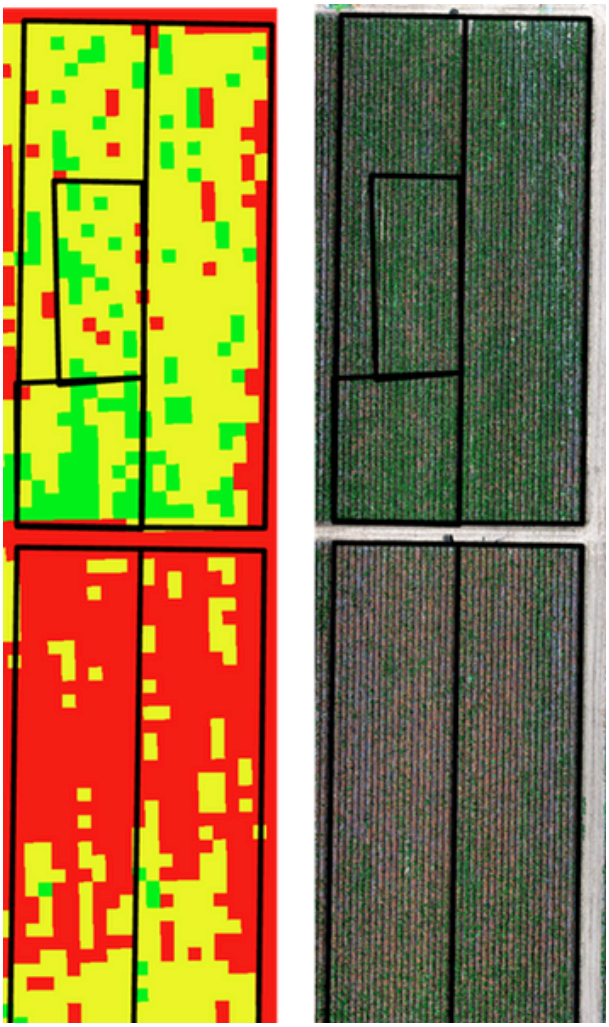

Photo: C Greer

Left image: Normalized Difference Vegetation Index (NDVI) High NDVI values (green) = healthy vegetation, low NDVI values (red) = less healthy or no vegetation. Right image: as the eye would see, brown areas are dead plants.

Impacts

Key Condition Change	Increased agricultural efficiency and profitability	Increased ecological sustainability of agriculture
Activity / Project	Research and development of technology to support disease management decision-making	Research and education to investigate disease resistance in celery and lettuce

Climate-smart farming demonstration

To accelerate adoption of climate-smart farming practices, the University of California awarded a Climate Action seed grant of nearly $2 million to a team of UC scientists and community partners working on a network of farm demonstration sites throughout California, building on the nascent California Farm Demonstration Network. Regional hubs demonstrate cover cropping, reduced tillage, use of compost and compost tea, and hedgerow planting that increase agricultural resilience to climate change.

Annemiek Schilder, Hansen Agricultural Research and Extension Center Director (HAREC) and Advisor Ben Faber lead the "Central Coast Hub" in collaboration with the Rodale Institute California Organic Center and the Ventura County Resource Conservation District. In January 2024, a replicated trial with 19 different cool-season cover crops, including legumes, cereal grains, and mustards, was planted at HAREC. Other trials include warm-season cover crops, soil amendments, and orchard cover crops. Roller-crimping of cover crops is being demonstrated at Rodale. Impacts on plant growth, weed suppression and soil health are being measured. The team is also working with local farmers to set up on-farm satellite demonstrations. A joint HAREC-Rodale field day was held on May 28, 2024.

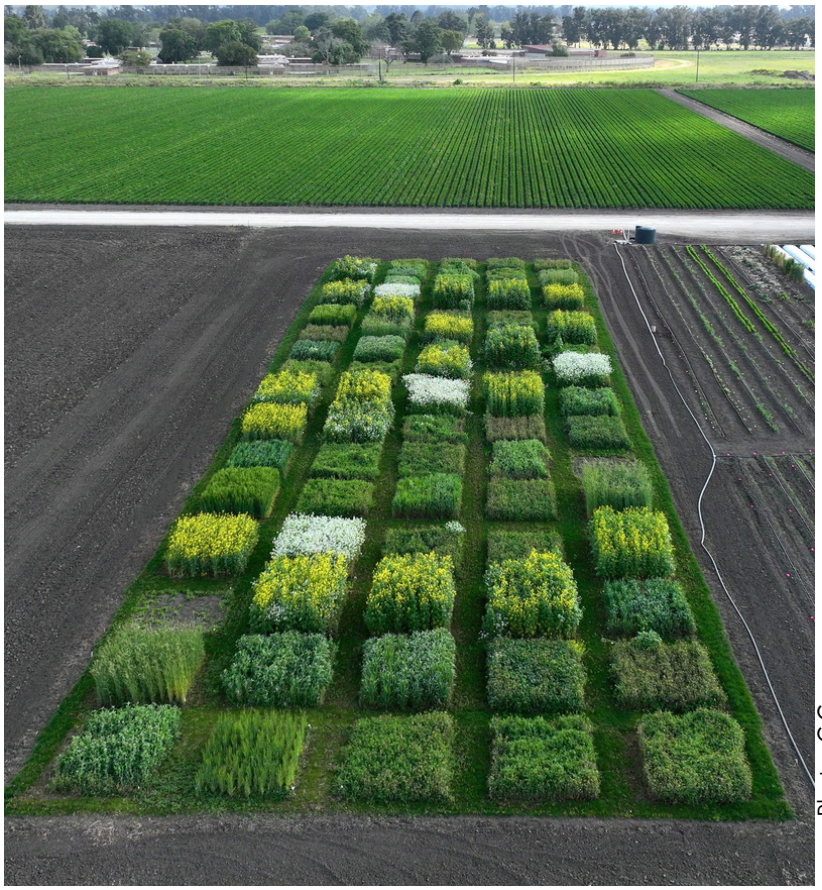

Photo: C Greer

Cool-season cover crop trial at HAREC.

Tom Johnson from Kamprath Seed demonstrating mustard root system.

Photo: A Novicki

Impacts

Key Condition Change	Increased ecological sustainability of agriculture, landscapes, and forestry
Activity / Project	Demonstration network and metrics for accelerating adoption of climate-smart farming practices

Reaching Ventura County

In addition to our advisors, we have a large group of community educators and volunteers that develop and deliver education and outreach programs. Our highly trained community educators work directly with the community or they may recruit, train and coordinate local volunteers in the areas of positive youth development and protection of natural resources in line with the county's goals for a healthy, safe, and resilient Ventura County.

Community climate education

The UCCE climate educator was hired in July 2023 to develop partnerships to promote climate friendly practices and to co-design and launch UC Climate Stewards and UC California Naturalist certification courses. These courses aim to foster environmental literacy, encourage citizen participatory science, and contribute to climate resilience initiatives. Certified volunteers work on projects that enhance the economic, social, and environmental resources of their communities.

In 2023, the climate educator developed resources to support the diverse network of sustainability professionals working on climate adaptation and resilience across the region, participated in community outreach events reaching over 4,000 community members, provided presentations to 3 community groups, and initiated the Climate Corner blog.

396 service hours by certified Environmental Stewards in Ventura County

Photo: UC Environmental Stewards

California Conservation Corps members receive California Naturalist training. This program supports workforce and career development and deepens connections to California's cultural and natural resources.

Impacts

Key Condition Change	Building climate resilient communities & ecosystems	Increasing civic engagement
Activity / Project	Provide climate education, a promising practice for reducing individual carbon emissions (Cordero et al. 2020)	Support course participants in increasing their capacity and intentions to do volunteer service (self-report, 2023)

Emerging tree pests and participatory science

Invasive pests pose significant economic, environmental, and public safety threats, causing billions of dollars in damage and treatment efforts every year. In Ventura County, Asian citrus psyllid/huanglongbing disease and Queensland fruit fly are found on backyard citrus triggering two respective quarantine zones this year. Invasive shot hole borers infest urban and wildland forests throughout the county, with over 60 tree species that are preferred hosts. Goldspotted oak borer is spreading rapidly in Los Angeles County and threatens the iconic oaks of Ventura County.

Early detection and rapid response are key to preventing spread of new infestations which requires surveying and monitoring, yet resources are often limited. To meet this need, UC ANR researchers initiated a program to train expert volunteers in identifying new pest outbreaks. In 2023,

- 10 emerging pest training classes were hosted in Ventura County, reaching 130 volunteers
- 3 new infestations in new geographic areas have been identified and reported by some of the highly trained volunteers in the last few years throughout the region

Photo: D Strong

Invasive shot hole borer training in January 2024.

130

expert volunteers trained to identify emerging tree pests for early detection and intervention

***This early intervention has resulted in faster agency response, coordinated education and outreach efforts to the public, and better management of infested and uninfested plant material*.**

Impacts

Key condition change	Increased ecological sustainability of agriculture & landscapes
Activity / Project	Train expert volunteers to provide early detection, response, education

"The more people who know about this situation and are educated about the topic, the better off we all are." - Gay Crusius, President of Green Valley Angeles National Forest Fire Safe Council, on why participatory science is important for early detection and rapid response. Her community was alerted in 2015 about the first gold spotted oak borer (GSOB) infestation in Los Angeles County by UC trained pest experts. GSOB is a looming threat to Ventura County oaks.

UC Master Gardeners of Ventura County

UC Master Gardeners are rooted in education and grown in service. Our county's Master Gardeners have offered valuable volunteer services and outreach to the public through ten diverse demonstration gardens located throughout Ventura County. Master Gardeners teach people how to sustainably grow food and cultivate gardens to protect our natural resources. Our volunteers are trained to customize gardening outreach for unique local landscapes and our diverse Ventura County residents. During this past year, the Ventura County Master Gardener program:

- Served 384 residents through the Ventura County Home Gardener Helpdesk, including advice about home gardening and plant sample diagnosis.
- Taught monthly hands-on drip irrigation classes to reduce water use.
- Installed native plants at the California Veteran's Home in Ventura to attract pollinators and monarch butterflies for resident education and enjoyment.
- Trained 40 new UC Master Gardener volunteers. Trainees completed 90 hours of evidence-based classroom instruction on horticultural topics and hands-on projects.

$247,213

value of 7,774 volunteer hours contributed in 2023

7,543

contacts with Ventura County residents at **97** public education events

10

public demonstration garden sites across Ventura County

Photo: UCCE

UC Master Gradeners won "Best in Parade" at the Ventura St. Patrick's Day parade.

Impacts

Key Condition Change	Protecting California's natural resources	Building climate-resilient communities and ecosystems
Activity / Project	Promote water wise plants and trees, and efficient irrigation in home gardens	Educate about integrated pest management, local quarantines, and protecting pollinators Educate about home landscaping practices to reduce wildfire risk and plan for extreme weather

Climate Smart Agriculture

In partnership with the California Department of Food and Agriculture, UC ANR's Climate Smart Agriculture Program serves 33 counties in California, including Ventura, and focuses on promoting science-based farming and ranching practices to support on-farm resilience to climate change.

The program aims to reduce greenhouse gas emissions and sequester carbon through improved soil health, water use efficiency, and alternative manure management practices.

In 2023, Our Ventura County Climate Smart Agriculture Community Education Specialist gave presentations at 6 workshops and fields days engaging over 96 producers on topics related to soil health indicators, soil sampling, cover crops, hedgerow planting, integrated pest management and weed management. Working in collaboration with farmers, ranchers, and land-owners, the community educator also supported the implementation of 5 CDFA-funded soil health projects in Ventura and Santa Barbara County related to compost, mulch, hedgerow, and windbreak establishment.

The technical assistance supported $470,426 in funding, 98 MTCO2e per acre of greenhouse gas savings, and 199 Acre-ft of water savings.

In late 2022, the UCCE educator established a partnership with the Ventura County Resource Conservation District to provide financial assistance to agricultural producers for local Healthy Soils Program (HSP) and State Water Efficiency and Enhancement (SWEEP) grants. Through this effort, almost $10 million will become available to local producers for on-farm soil health and irrigation efficiency grants in 2024.

Through assisting growers in the adoption of practices such as cover cropping, and installing solar panels, the Climate Smart Agriculture program has collectively supported growers in reducing 115,394 MT/CO2 per year, as measured by California Air and Resources Board (CARB) Greenhouse Gas Emission Reduction Tool (SWEEP GHG Calculator on CDFA's website), and the HSP Comet planner tool.

$10M

available to Ventura growers to improve soil health and irrigation efficiency in 2024

115K

metric tons of CO2 reduced/year in California due to practices adopted by growers

Impacts

Key Condition Change	Increased preparedness and resilience to extreme weather and climate change	Building climate-resilient communities and ecosystems
Activity / Project	Promote practices that reduce greenhouse gas emissions on farm operations	Provide application and project implementation assistance for growers to increase climate smart practices

UC 4-H Youth Development Program

California requires a highly skilled workforce to remain competitive, prosperous, and an innovative global leader. Improved college readiness and access can contribute to the development of a qualified workforce and a robust and thriving economy. ***UCCE's youth and community development programs equip the next generation for college and successful careers.***

During 2023, **Ventura County 4-H Clubs** participated in countywide events that challenged youth to demonstrate their skills in public speaking, clothing design, and showing livestock. These events include Presentation Day, Fashion Revue, and Large and Small Animal Livestock Field Day.

This year, Ventura 4-H youth continued to shine:

- One member became the 4-H State Ambassador and earned the CA 4-H Diamond Clover Award. ***This is the highest achievement for which a CA 4-H youth can be recognized.***
- Countywide Avian Project won ***CA State Championship*****,** qualifying for National Competition.
- One member earned the ***Golden Clover Award***, a state level award recognizing members of excellence.
- One member completed his Emerald Star project, "Accessible Avian Bowl Recordings" along with a tool sheet "How to Make Audio Accessible Recordings of 4-H Documents." This recording and tool sheet can be used by Avian Bowl competitors with disabilities now and in the future, ***increasing accessibility of 4-H programs.***

"Avian bowl is a tough and vigorous sport. This year at the 2024 State Qualifier in Fresno CA. we fought hard and won the right to be CA State Champions and now have the chance to be National Champions. This is an awesome, once in a lifetime opportunity. I personally have never been out of the state of CA."
- Ean, Avian Bowl Team Member

Youth who participate in 4-H programs report increased leadership and public speaking skills. (2023)

87%

of 4-H respondents statewide (n=140) say 4-H helped them learn science skills, including the ability to try new things to see how they will work (2023)

2024 Avian Bowl Champions

Photo: E Ramirez

Impacts

Key Condition Change	Increased effective public leaders	Improved college and career readiness and access
Activity / Project	Provide opportunities for positive youth-adult partnerships, authentic youth leadership, and youth voice and choice.	Provide opportunities for youth to gain hands-on experience in agriculture, science, technology, engineering, math, and nutrition.

Thelma Hansen Fund Grant Program

The Thelma Hansen Competitive Grant program awards research and education grants to benefit and sustain agriculture and natural resources in Ventura County. In response to the 2024 call for proposals, 21 proposals were received of which 8 education and 7 research proposals were selected for funding for a total of $197,436. The funded projects address urgent or persistent issues in the county, ranging from pests and diseases to water and nutrient use efficiency and climate resiliency. Education proposals address youth education, agricultural literacy and career readiness. We anticipate releasing the next call for proposals in November 2024 and look forward to sharing the results of the funded projects as they are completed.

$197,436

distributed to projects benefitting Ventura County agriculture and natural resources

Spotlight: Prescribed burning as a tool for noxious weed control

In 2023, the Ventura River Steelhead Preserve was the site of the first prescribed burn by the Ventura County Prescribed Burn Association. Following the burn, **UCCE's Maripaula Valdes-Berriz**, initiated a research project to assess consecutive prescribed burning as a tool to reduce yellow star thistle abundance for eventual habitat restoration. This effort is a collaboration between UCCE, the Ventura County Resource Conservation District, the Ojai Valley Land Conservancy and Ventura County Fire Department and is funded in part by the Thelma Hansen Foundation.

Photo: M Valdes-Berriz

The Ventura River Steelhead Preserve after the first prescribed burn in June 2023.

Thelma Hansen Symposium

The 2024 Thelma Hansen Symposium, "Trees to the Rescue: Solutions for Climate Change" was held as a virtual webinar series on May 14-16, 2024. On day 1, Dr. Karen Holl from UC Santa Cruz spoke on outcomes of forest restoration efforts worldwide, while Dr. Edith de Guzman from UCLA covered climate resilience through urban greening. On day 2, UC ANR advisors Janet Hartin, Dr. James Downer, and John Kabashima discussed optimizing tree survival in a changing climate. Day 3 focused on tree advocacy and planning at the local level with an introduction by Santa Monica Mountains National Recreation Area restoration ecologist Joey Algiers, followed by a panel discussion with panelists Joey Algiers, Mireille Vargas (VC Sustainability Division), Mikaela Randolph (Green Schools America), Jan Scow (Registered Consulting Arborist, Ojai Valley), Max Young (Ventura Regional Fire Safe Council) and Hannah 'Gil' Lester (TreePeople).

Hansen Agricultural Research and Extension Center (HAREC)

Photo: Google Earth

New location on Beardsley Rd in Camarillo.

VISION

To be a premier, climate-neutral, research and education center that conducts transformational research and outreach to support a vibrant agricultural and natural resource base, resilient local food system, and healthy communities on the Central Coast of California.

In September 2023, HAREC moved from the 27-acre Faulkner Farm in Santa Paula to the new 114-acre location on Beardsley Road in Camarillo, CA. Phase 1 included moving two modular offices, 11 storage containers, vehicles, tractors and other farm equipment, and myriad other items; establishing utility connections; and making septic system and well repairs. This allowed operations to get started while planning for a new engagement center (Phase 2, 2026) and full research facility (Phase 3, 2029).

Currently, there are six field and greenhouse research projects underway, with additional projects planned in the near future, such as establishing the CSU Channel Islands apiary for bee education and expanding the UC Master Gardener program. The first extension field day, focused on cover crops and soil health, was held on May 28, 2024.

Field day at HAREC

Photos: A Novicki

Moving in

UNIVERSITY OF CALIFORNIA
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Ventura County 2040 General Plan

UCCE and HAREC are proud to be partners in shaping the growth and change of Ventura County over the next 20 years. Collaborative efforts related to eight Agricultural Element Programs from the General Plan (GP) are listed below.

GP Program	Related Efforts
AG-M Research on Effects of Climate Change	Researcher hired July 2024. See also page 10, 11
AG-B Regionally-Grown Products sales Incentives	SALC* planning grant obtained. Hiring Food System Advisor in 2024/25
AG-E Specialty Farming Education	Recruiting an Agriculture Best Practices Educator in 2024
AG-H Nutrient Management Plans	See pages 4, 5, 6
AG-K Water-Saving Irrigation Techniques Program	See pages 4, 5, 8, 13
AG-L Encourage and Facilitate Carbon Farming	See pages 10, 14
AG-G Farm-to-Front Door	SALC* Planning grant obtained, hiring Food Systems Advisor in 2024/25
AG-N Subsidies for Resilient Crop Production	See page 10, 14

*Sustainable Agricultural Lands Conservation

Photo: D Strong

UCCE Ventura & Hansen REC Staff and Academics

In April 2024, UCCE reorganized under a new Area Director for Ventura, Santa Barbara, and San Luis Obispo Counties, Shannon Klisch. Annemiek Schilder remains the Director for the Hansen Agricultural Research and Extension Center and will continue to be a key collaborator with UCCE and local partners.

Not pictured above: Julie Clark, Gina Ferrari, Chris Greer, Jose Hernandez Alvarez, Santos Ramirez, Etaferahu Takele, Siomara Zendejas

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