UC Cooperative Extension
University of California
Agriculture & Natural Resources

Spotlight on Napa County

Located in the northeastern part of the San Francisco Bay Area, Napa County is known for its vineyard-covered valleys, redwood forests, oak woodlands, and diverse landscapes that shape both its environment and economy. Our local UC Cooperative Extension (UCCE) brings research and expertise to these landscapes through demonstrations, education, and collaborative projects, delivering practical, science-based solutions that strengthen agriculture, natural resources, and community well-being.

We work in partnership with vineyard and crop producers, natural resource managers, community organizations, and volunteers. Our programs serve winegrape growers, watershed and fire-preparedness stewards, 4-H youth and families, and home gardeners, ensuring Napa County continues to thrive both agriculturally and across all communities.



4-H youth complete a pre-flight safety checklist in preparation for drone flight.

Our Clientele
- Agricultural producers
- Farmworkers
- Rural and urban residents

Our Team
- 10 Academic Advisors
- 9 Program Staff
- 3 Community Educators

Volunteer Programs
- 4-H Youth Development
- Master Gardeners

Research and Extension
- 4-H Youth Development
- Community Health & Nutrition
- Food Systems
- Forestry
- Fire Science
- Human-Wildlife Interactions
- Livestock & Natural Resources
- Soil & Water
- Specialty Crops
- Viticulture

UC ANR Mission

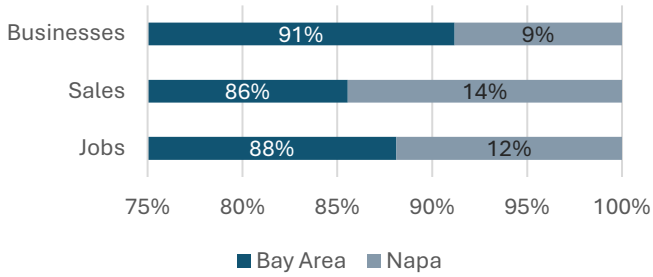
UC ANR cultivates thriving communities, sustainable agriculture, resilient ecosystems, and economic prosperity in California through development and sharing of equitable and collaborative science-based solutions that have national and global impact.

The Economic Power of Working Landscapes

Working landscapes, including farms, ranches, vineyards, and other productive lands are significant drivers of the regional economy, supporting thousands of jobs, billions in sales, and businesses across the agricultural supply chain. These impacts extend beyond farms and ranches to connected industries, from farm equipment mechanics and nurseries to input suppliers and processors. Together, these figures illustrate the broad economic value of working landscapes and the industries that sustain them.

25,532 jobs | **$9.79B sales** | **1,114 business**

Napa County's Share of the Bay Area's Working Landscape Economy



Source: Dompka, A., Hill, A. E., & Wilcher, A. (2025). California's Working Landscapes: Evolving Contributions to National, State, and Regional Economies. UC Agriculture and Natural Resources.

Volunteer Program Impact

Volunteers are at the heart of our work, strengthening communities across Napa County through service, education, and outreach. From home gardening and youth development to environmental stewardship, their time and expertise help educate residents, build meaningful community connections, and extend the reach and impact of the University of California Cooperative Extension.

305 volunteers | **24,300 hours donated** | **$938,204 volunteer service hours**

Sustaining Livestock, Land, and Natural Resources

This program supports local producers and working landscapes through research-based education on livestock production, agricultural policy, and natural resource management. In 2025, the program offered educational webinars on topics including estimated breeding values in sheep production and New World screwworm, helping producers stay informed about emerging issues and practical management strategies. The program also contributed to research and outreach focused on pasture management, soil health, and the economic challenges facing California sheep and goat ranchers.

Advancing Vineyard Health Through Research and Education

Accurate identification of visual symptoms is an important first step in managing grapevine leafroll and red blotch diseases. To strengthen industry professionals' ability to recognize and distinguish disease symptoms in the vineyard, the UCCE Napa Viticulture team hosted training sessions and developed a visual symptom identification training tool. The interactive tool allows users to practice distinguishing red blotch symptoms from those associated with other grapevine diseases and disorders, helping build confidence and proficiency in vineyard assessments.

UCCE also re-launched a digital decision-support tool that uses a predictive model to suggest a probable diagnosis within one of four categories based on observed visual symptoms. Designed to support new learners and provide a second opinion when symptoms are uncertain, the tool helps users evaluate their initial assessment and consider appropriate next steps. An earlier version demonstrated 86% accuracy under field conditions in commercial vineyards (MacDonald et al., 2025).

Together, these resources support more informed vineyard monitoring and disease management decisions.

Visual assessments should always be confirmed using molecular diagnostic assays to ensure accurate diagnosis.



Photo: Capturing images of grapevine canopy with handheld device using decision-support tool for viral symptom identification.

UC Master Gardener Program

During the 2025 program year, 154 Napa County UC Master Gardener volunteers contributed 11,354 hours of service supporting research-based horticultural education, community outreach, demonstration gardens, and public events. Volunteers dedicated more than 2,100 hours to public workshops and gardening advice, along with nearly 2,000 hours supporting community events, including the annual Tomato Festival and Fall Faire.

Through the Help Desk Hotline, Las Flores Learning Garden, the Soils & Climate Change Project, and educational workshops, volunteers connected Napa County residents with practical knowledge and resources on sustainable gardening, composting, pollinator habitats, and climate-resilient landscaping. By sharing University of California research and expertise, UC Master Gardeners continue to inspire environmentally responsible gardening practices and strengthen community engagement throughout Napa County.

4-H Youth Development Program

Napa County 4-H helps young people build skills, confidence, and curiosity through hands-on learning and community connections. The Drone Academy at Napa Valley College offered a memorable example: youth explored drone technology, planned flight missions, interpreted aerial imagery, and worked together to share what they learned. For one participant, an initial lack of interest in drones turned into excitement about flying, teamwork, and new possibilities in fields ranging from agriculture to marine biology.

Experiences like this introduce youth to subjects and career pathways they may not otherwise encounter, while helping them develop problem-solving, communication, and collaboration skills. Across Napa County, 4-H reaches young people through 10 community clubs, camps, and expanded learning partnerships, including cooking, nutrition, outdoor education, and STEM programs. Whether learning to prepare healthy meals, exploring science, or experimenting with new technology, Napa County 4-H gives youth opportunities to discover their interests and imagine what they can achieve.

4-H inspires young people to give back. 87% said 4-H strengthened their desire to engage in their communities.

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