

UCCE Human-Wildlife Interactions Advisor for San Mateo, Santa Clara, Santa Cruz, Sonoma, Marin, Alameda, and Contra Costa Counties

Developed and proposed by:

This proposal was developed by the Human-Wildlife Interactions Program Team and Area 10 and 12 Director Andrew Miller, with support from UC IPM and iGIS. External collaborators are: Santa Clara County Vector Control, County of Marin Ag Department, True Wild Conservation, Midpeninsula Regional Open Space District, San Mateo County Ag Department, Contra Costa Ag Department, County of Santa Clara Ag Department, California Department of Fish and Wildlife (CDFW), and the County of Santa Clara Office of Sustainability.

Position title: UCCE Human-Wildlife Interactions Advisor

Headquarter location and coverage area: The position will be headquartered at the UCCE San Mateo/San Francisco office and will serve San Mateo, Santa Clara, Santa Cruz, Sonoma, Marin, Alameda, and Contra Costa Counties. The office can accommodate the Advisor and San Mateo County is centrally located within the region.

The coverage area contains one of California's most complex urban-rural wildlife interface regions and has over six million residents. It includes rural, urban and suburban communities, small parcel and commercial livestock operations, agricultural production, wildlife species of conservation concern, and high public engagement around wildlife. The region currently has a Human-Wildlife Interactions Advisor that has been 50% soft-funded through a contract with San Mateo County. This position's current contract ends in June 2027 and the position will cease to exist when the contract is not renewed due to recent dire county budget shortfalls. Hard funding would preserve UC ANR's investment in this highly successful and important program, maintain continuity with county and agency partners, and retain capacity in the San Francisco Bay Area to address livestock depredation, carnivore conflict, vertebrate pest impacts, and regulatory changes. Already established clientele include small parcel and commercial livestock producers, land managers, agricultural producers, pest management professionals, public agencies, pet owners, and the public.

Position overview: The Advisor will focus on carnivores, including mountain lions, coyotes, and bobcats, and vertebrate pests such as California ground squirrels and gophers. The program will integrate ecological, social, regulatory, and management perspectives to develop best practices for livestock protection, public safety, wildlife coexistence, and vertebrate pest management.

A minimum of a master's degree in wildlife management, natural resources management, vertebrate pest management, ecology, or a closely related field is required. Desired qualifications include experience with applied wildlife research, livestock depredation or kill-site investigations, carnivore ecology, vertebrate pest management, extension education, stakeholder engagement, and current qualifications to conduct carnivore captures. Experience working with California agencies, NGOs, livestock producers, pest management professionals, and diverse public audiences is preferred. Spanish language skills are preferred.

The advisor will report to the UCCE San Mateo-SF Area Director and work closely with UCCE Livestock and Human-Wildlife Interactions Advisors, UC IPM, iGIS, county-based colleagues, and relevant Program Teams.

Justification: The Program Team and local Area Director ranked this position as its #1 priority because it maintains an established, high-demand and high-impact Human-Wildlife Interactions program.

Needs: The need for this position is substantiated by a 2020 needs assessment, increasing stakeholder requests for technical assistance, and continued expansion of the current program's research and extension activities. Clientele needs are driven by three regional challenges: 1) carnivore conflict involving livestock, pets, and public safety; 2) agricultural and infrastructure damage from burrowing rodents; and 3) increasing demand from urban and peri-urban communities for science-based guidance on managing wildlife conflict.

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Livestock producers, small parcel livestock owners, pet owners, and land managers are experiencing conflict with mountain lions, coyotes, and bobcats, resulting in livestock and pet losses, emotional impacts, public concern, and pressure for lethal control. Mountain lions and coyotes were identified as species of high concern in the 2020 needs assessment, and the current program has received increasing reports of bobcat-related poultry losses. The recent listing of regional mountain lion populations under the California Endangered Species Act further increases the need for applied research and extension on nonlethal livestock protection and conservation-sensitive management.

Agricultural producers, livestock operators, and public agencies also face crop, forage, and infrastructure damage from California ground squirrels and gophers. Restrictions on anticoagulant rodenticides have increased the need for integrated management strategies that reduce environmental trade-offs.

This position addresses priorities of county agricultural departments, vector control agencies, local governments, open space districts, conservation organizations, and livestock owners. Key knowledge gaps include nonlethal carnivore deterrent efficacy; depredation risk factors; urban coyote conflict response; burrowing rodent management under changing rodenticide regulations; and strategies that balance agricultural viability, public safety, animal welfare, and wildlife conservation.

Outcomes/Impact: This position contributes directly to UC ANR's public value framework and condition changes by improving land management, ecological sustainability, animal management and productivity, agricultural efficiency and profitability, and community health and wellness. It also supports UC ANR's Strategic Vision 2040 by delivering science-based solutions that strengthen sustainable agriculture, foster resilient ecosystems and working landscapes, and promote thriving communities through economic prosperity and improved wellbeing.

The current program has demonstrated impact through peer-reviewed publications, popular articles, bilingual outreach materials, applied research projects, extension presentations, and technical assistance for agencies, livestock owners, homeowners, Master Gardeners, 4-H audiences, and others. Public agencies and city governments have requested the program's educational materials and presentations. Livestock owners have implemented recommendations, and some have chosen not to pursue lethal control after receiving guidance.

With stable central funding, this position will expand ANR's capacity to deliver science-based solutions for livestock and pet depredation, human-wildlife conflict, and vertebrate pest management. In 20 years, success would include reduced livestock and pet losses, reduced conflict escalation, improved public understanding of wildlife, improved burrowing rodent management with fewer environmental impacts, and stronger alignment between agricultural viability, community well-being, and wildlife conservation.

Extension: The Advisor will develop and deliver extension programs for livestock producers, small parcel livestock owners, agricultural producers, land managers, pest management professionals, public agencies, Master Gardeners, 4-H groups, pet owners, and the public.

Extension activities will include livestock protection workshops, depredation response investigations and advice, coyote coexistence education, vertebrate management workshops and continuing education presentations, agency briefings, field days, webinars, bilingual factsheets, decision-support tools, and train-the-trainer resources. Topics will include nonlethal carnivore deterrents, livestock husbandry, public safety, attractant reduction, pet protection, and integrated vertebrate pest management, particularly for CA ground squirrels and

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gophers. The Advisor will also serve as a neutral, science-based resource for stakeholders who hold conflicting values regarding wildlife conservation, livestock protection, lethal control, public safety, and animal welfare.

Research: The Advisor will conduct applied research that supports management decisions and extension programming. Priorities will include evaluating nonlethal livestock protection tools; identifying risk factors for livestock and pet depredation; furthering understanding of mountain lion, coyote, and bobcat behavior and examining conflict patterns in urban and rural landscapes; developing response strategies for urban coyote conflict; and improving integrated management of California ground squirrels and gophers under changing pesticide regulations.

The program will incorporate wildlife ecology, vertebrate pest management, livestock production, human dimensions, spatial analysis, regulatory policy, and extension education. Outputs will include peer-reviewed publications, UC ANR and UC IPM resources, California Agriculture articles, technical reports, popular articles, policy briefs, and extension materials.

UC ANR network: This position aligns perfectly with Human-Wildlife Interactions Program Team priorities by reducing livestock and pet losses, minimizing negative interactions between people and wildlife, promoting science-based vertebrate pest management, and supporting environmental stewardship. It will fill a distinct gap by providing stable, regionally embedded expertise in applied human-wildlife conflict in the Bay Area.

Additional networks: Expected collaborators include UCCE Livestock and other Human-Wildlife Interactions Advisors, UC IPM, iGIS, and CE specialists.

UC ANR has limited dedicated capacity in applied human-wildlife conflict, particularly for mountain lion and coyote conflict involving livestock, pets, public agencies, and conservation-sensitive management. Existing pest management and livestock advisors provide complementary expertise, but this position fills a unique niche by integrating carnivore ecology, human dimensions, livestock protection, vertebrate IPM, and public-facing conflict mitigation. It also will provide enhanced capacity to further management solutions for CA ground squirrels along the rural-urban interface. Without this program, there is a major regional gap in regional expertise.

Network external to UC ANR: Externally, the Advisor will collaborate with CDFW, county agricultural departments, vector control agencies, Farm Bureau, open space districts, NGOs, local governments, livestock groups, conservation organizations, UC Santa Cruz's Puma Project, and community organizations. These collaborations will support applied research, outreach delivery, field access, stakeholder engagement, and adoption of science-based management practices.

Support: Marin Co. will provide office space and mileage reimbursement. Sonoma Co. will provide mileage reimbursement. San Mateo, Contra Costa, Santa Clara, and Alameda Co. will provide office and meeting space.

Other support: The existing program has attracted extramural and partner support from RREA, SAREP, UC Santa Cruz's Puma Project, CDFW, True Wild Conservation, All Hands Ecology, Panthera, and Midpeninsula Regional Open Space District; hard funding would help leverage these partnerships into larger, multi-year projects.