

Area Vertebrate Pest Management Advisor (Napa, Lake, and Solano Counties)

Position Title: Area Vertebrate Pest Management Advisor for Napa, Lake, and Solano Counties

Position: Briefly describe: The Vertebrate Pest Management Advisor will serve as an expert for impacts and conflicts from vertebrate pests in agriculture production systems. Requirements include a Master's Degree in wildlife management, natural resources management, or closely related field. Course work in pest management, pesticides, toxicology, and Integrated Pest Management (IPM) are desirable. Field experience and/or course work in bird, rodent, ungulate, or predator management are highly desirable.

The Area Vertebrate Pest Management Advisor will develop and deliver a research and extension program to reduce and relieve the vertebrate pest impacts incurred in annual and perennial crops. The advisor will be anticipated to work as a generalist with the ability to bring solutions for the broad variety of vertebrate pests impacting these crops and production systems. In this manner, they will complement the existing Pest Vertebrate Specialist and Wildlife and Human Conflicts Advisor in the ANR network. Accordingly, the advisor will work closely with UC ANR Wildlife and Pest Program Team, UC ANR IPM program, and specific annual and perennial crop work groups and program teams. The UC Cooperative Extension Napa County office will be the home office, providing support in conjunction with Lake and Solano Counties.

Justification: The assignment area is home to world renown wine grape production and a marked diversity of perennial and annual crops. Combined total acreage is 311,792 acres, with a production value of \$997 million in 2016. This includes 56,979 acres in wine grapes, 27,622 acres in fruit and nut crops (pears, prunes, almonds, walnuts, and olives), and 227,191 acres in field, seed, and vegetable crops (alfalfa, hay, wheat, sunflowers, processing tomatoes, and organic vegetables). Profit margins are thin for these crops and partial to total crop loss in any given year can be catastrophic. Because of persisting and emerging impacts from vertebrate pests on these crops and productions systems, the Advisor position will provide critically needed expertise that currently does not exist in the assignment area nor in the Advisor ranks statewide. These impacts translate to priorities for the Advisor to address including but not limited to: 1) Avian crop damage in bearing orchards and vineyards, as well as annual crops like sunflowers; 2) Developing solutions to disrupt pathways by which vertebrates travel to established vines and trees, while maintaining water and soil quality protections afforded by cover cropping; 3) Prevention of young vine and tree losses in the establishment of new orchards and vineyards; and 4) Development of pest management solutions that reduce the reliance on high risk materials and encourage the use of integrated practices for vertebrate pest management.

Along with the Pest Vertebrate Specialist and Wildlife & Human Conflicts Advisor, this position will support the formation of a core cadre of academics to support CE teams as they address critical wildlife conflicts facing Californians. Uniquely, this position will develop and deliver relevant program content for agricultural producers throughout the region and state, making it a strong complement to existing ANR expertise. Currently, growers and their associations, Pest Control Advisers, and ANR horticulture, pomology, specialty crops, and viticulture academics lack relevant expertise in vertebrate pest management in agricultural production systems. This kind of strategic focused academic hire has proven effective in growing ANR's capacity and impact, and the potential for this Advisor to do the same is imminent.

Extension: The assignment area is poised to support this Advisor with a strong network of viticulture, pomology, and annual crop advisors, as well as grower groups including: Napa Valley Vineyard Technical Group; Napa Valley Grape Growers; Suisun Valley Vintners and Growers Association; Lake County Wine Grape Commission; California Pear Board; California Almond Board; and many others. The extension program is expected to support agriculture and natural resource clientele needs and provide programming to target audiences through print and popular media, social networks, public presentations, field days, and web-based media. It is also anticipated that this Advisor will make contributions to the California Vertebrate Pest Council and annual Conference. Lastly, the Advisor's research and extension program will have broad relevance beyond the assignment area, accordingly it is anticipated that the Advisor will be a source for content and extension materials to those UCCE Advisors and their extension programs.

Research: The advisor will conduct collaborative and independent, applied research that is issues-based and directed toward pragmatic solutions for vertebrate pest impacts to agriculture. Solutions for avian impacts will be a high priority for this position initially. The Advisor is encouraged to use field research opportunities for hands-on teaching through CE Advisor collaboration. Outputs from research will include peer-reviewed articles, including California Agriculture, technical reports, articles for newsletters, special publications such as identification and pictorial guides, and web site postings, journals, and blogs.

ANR Network: The Vertebrate Pest Management Advisor will be a colleague and collaborator with UC IPM Program academics, with potential for Affiliate Status. The Advisor will work with program staff to develop, review, update, and revise educational and technical material to implement IPM in agricultural and natural resource areas. The Advisor will act as a strong link between field issues, CE Advisors, and campus resources (AES and CE faculty in WFCB at UC Davis) in matters related to vertebrate pest management in the North San Francisco Bay area. The Advisor will network with AES faculty (Dr. Van Vuren), CE Specialist (Dr. Baldwin), and southern California-focused Advisor (Dr. Quinn). The Advisor will also benefit from joining and contributing to the Wildlife & Fish Program Team and Workgroup and Pest Management Program Team among others. In this manner, this position fills a critical ANR gap in agricultural production vertebrate pest management through the on-the-ground orientation of an Advisor.

Network External to ANR: UCCE, in the assignment area, has strong working relationships with respective Agricultural Commissioner Offices and industry groups, and includes award-winning pest management programs and strong Spanish-language outreach programs into which this Advisor's program can be integrated and supported. In addition to local program partnerships, these relationships will facilitate broader regional collaboration with representatives from California Department of Food and Agriculture (CDFA) and California Department of Pesticide Regulation (CDPR). Similarly, cooperation and collaboration with California Department of Fish and Wildlife, USDA Animal and Plant Health Inspection Service (APHIS), and USDI Fish and Wildlife Service holds promise through this position's program focus.

Support: UCCE Napa will provide office and conference space, phones, internet connection, and vehicle and mileage support. Lake and Solano counties will also have satellite conference and meeting space as well as mileage support for the position. Based on grower support and interest for this position and the strongly established working relationships cultivated by existing Advisors, it is anticipated that vineyard, orchard, and farm access will be widely available for research and demonstrations.

Other support: The California Pest Council has committed to provide program funding in the approximate amount of \$10,000. Financial support will be competitively available from various sources including the CDFA Vertebrate Pest Control Research Advisory Committee (VPCRAC), Federal and Regional IPM grants, commodity boards, CDPR, CDFA, APHIS, and USFWS grants, and various donor support.

Location: The combination of Napa, Lake, and Solano counties provide the Advisor the diversity of crops and clientele to develop and deliver a successful program, delivering relief from locally incurred vertebrate pest impacts through research and extension programs that will be relevant and replicable regionally and statewide. The position's home office is Napa County, with program delivery facilities in Lake and Solano Counties.

Developed and proposed by: Position was proposed and developed jointly by County Directors David Lewis, Morgan Doran, and Rachel Elkins with input and encouragement from the Wildlife & Fish Program Team and Wildlife Workgroup. Current advisors in the assignment area have provided their support through edits and conceptual content for the position. Additionally, local grower and agency representative stakeholders provided their feedback on earlier drafts and have voiced their interest and support of this position and its critical need.