Position Title: Specialist in Sheep and Goat Herd Health & Production.

Position Description: A veterinarian (1.0 FTE CE Specialist) with expertise in sheep and goat health. The focus of this statewide position is sheep and goat health, welfare and production for California’s diverse sheep and goat industries such as commercial (e.g., meat and dairy sheep and goat), targeted grazing for vegetation control (e.g., fire suppression, browse reduction, vineyard and orchard weed management and invasive species control), youth projects (e.g., 4-H, FFA, club lamb/goat), and small and backyard holdings. This position will be supported by Veterinary Medicine Extension, School of Veterinary Medicine, UC Davis. DVM or equivalent degree is required, with graduate level training and/or board certification in an appropriate discipline to the health management of sheep and goats and/or pre-harvest safety of food products of sheep/goat origin is preferred.

Justification: The 2012 Census of Agriculture showed an increase of small ruminants inventory in CA as opposed to the national trend. California is the number two state in terms of sheep and goat production. Increased numbers of operations with nontraditional activities (e.g., targeted grazing and vegetation management); community-based and local agriculture (goat & sheep dairies, artisan cheese, niche marketing of lamb/goat meat) as well as challenges facing traditional sheep grazing based on utilization of crop residue and grazing on public lands have created immense need for knowledge and outreach in practices to maintain animal and human health and sustainable production. Maintaining sustainable agriculture systems that simultaneously provide a living for farmers/producers and protect the environment and people (healthy environment and communities) in CA is a priority of the UC ANR Strategic Vision. This position will address the strategic initiatives (SI) Endemic and Invasive Pests and Diseases (EIPD) and Sustainable Natural Ecosystems (SNE) as small ruminants play an important role in providing ecosystem services such as weed/vegetation control, ecological restoration, fire suppression in many peri-urban and forested zones and in integrated livestock -crop production systems in bio-diversified farms. Moreover, this position will enhance competitive Sustainable Food Systems (SFS) by providing support to the recent growing market of local and artisan dairy products, ethnic and high end markets for meat products, and cosmetic products (e.g., soap) which will require an increase demand for outreach efforts. Further, the specialist will fill a critical gap in serving a broad cross-section of the state’s rich diversity of cultures. Californian’s diverse ownership types (youth/family projects, diverse ethnicity of owners, large and small scale experienced/inexperienced producers) create strong need for an extension specialist who can understand the needs of producers, communicate with and extend knowledge to stakeholders and the general public in a variety of production settings. The specialist will address simultaneously, EIPD, SNE, and Water Quality, Quantity, and Security (WQQS) SIs by working with CE Advisors to help producers address current issues like animal traceability, scrapie eradication, antimicrobial resistance, food safety and emerging diseases while they face increasing challenges from loss of public lands, predation and other constraints on production. Particularly, some diseases like Brucella ovis have reemerged since the retirement of key CE leaders like John Glenn. The re-emergence of zoonotic diseases may affect the public health in CA and compromise the inter-state and international trade. The interface between production sheep and goats and the public through community based farming, fairs (youth projects), urban grazing and local licensed (and unlicensed) distribution of milk and meat presents strong needs for research and extension of knowledge in control/prevention of zoonotic diseases (e.g. Q-fever), pre-harvest food safety and emerging ruminant pathogens (domestic & wildlife interface, water quality). Moreover, food safety and water quality (contamination of irrigation water sources) concerns due to new FSMA regulations have reduced or eliminated grazing access to crop residues, orchards and vineyards, and even adjacent lands. This specialist position will fill a critical need in working with CE Livestock Advisors, CE Specialists, producers, practicing veterinarians, regulatory partners and UC faculty to lead efforts in sustaining healthy livestock production and solving sheep and goat health issues.

Extension: Given our state’s diverse sheep and goat industries, this position will provide statewide extension and outreach within the ANR network (advisors, specialists, AES faculty). Extension and outreach efforts will be placed across the state to CA Wool Growers Assn., Am. Goat Federation, Am. Dairy Goat Assn., CA Farm Bureau Federation, CA Veterinary Medical Assn., NCAT-ATTRA, veterinarians, and individual producers.
This specialist will develop and extend science-based information on how to maintain healthy flocks and herds for all types and sizes of sheep and goat operations, how to produce safe milk and meat products for human consumption, and develop sustainable animal health care practices through infectious disease and parasite control, animal traceability, production of residue free milk and meat, and act as a liaison between industry organizations, the University of California, and state and federal agencies. This specialist will collaborate with Specialists, Advisors and AES faculty on research and outreach projects, conduct workshops and speak at livestock field days (County based, UC Davis Goat Day, North Valley Goat Day, CWGA meeting, etc.), develop web-based training courses, and produce lay and peer-reviewed publications.

**Research:** The specialist will develop an applied research program in areas around the health of sheep and goats and all food/fiber originating from these animals. Areas of emphasis could include: infectious disease control, production medicine (e.g., nutrition, reproduction), animal welfare, wildlife interface (e.g., disease transmission, minimize predation), food safety (e.g., milk/meat quality assurance), and sustainable farming practices. The areas of emphasis will be based on a thorough evaluation of the needs of California in consultation with CE Advisors and industry stakeholders. Publication outlets can include California Agriculture, ANR peer-reviewed 8000 series, peer-reviewed veterinary and agricultural journals, and lay publications.

**ANR network:** There is an extensive network of livestock, natural resource, and watershed advisors, specialists, AES and I&R faculty working on areas applicable to various aspects of California’s sheep and goat industries and sustainable agriculture. This specialist will also collaborate with advisors and specialists in dairy (cattle) and range (beef) areas; in sheep and goat herd health and production will collaborate and provide leadership on critical issues facing industry: infectious diseases, herd health, environmental concerns, animal welfare, and food safety. HREC in Hopland has sheep and ecosystem resources for research and outreach.

**Network External to ANR:** This position will collaborate on research and extension projects with I&R faculty focused on livestock health, commodity organizations (CWGA, ADGA, AGF, CDHIA/DHIA West, etc.), and federal agencies such as USDA (APHIS and Wildlife Services) and FDA (MUMS, MUAD) that have regulatory oversight regarding food safety and appropriate drug use in small ruminants.

**Support:** Veterinary Medicine Extension, Department of Population Health and Reproduction, School of Veterinary Medicine, UC Davis, will provide administrative support for grants and contracts, office and laboratory space. Programmatic funds are provided annually to all specialists.

**Other support:** The specialist can apply for intramural grants to support his/her program in sheep and goat herd health and production. Various internal and external funding programs are available such as, the Center for Food Animal Health (SVM-UCD), Western SARE, USDA AFRI, OREI and NRCS programs, and sheep and goat industry associations. The specialist will have the opportunity to collaborate with scientists in state (e.g., Western Institute for Food Safety and Security, California Animal Health & Food Safety Laboratory) and nationwide agency partners on food safety, water quality, and animal health.

**Location:** This position will be located at UC Davis to enable close contact with Extension Specialists and AES faculty and graduate students at the School of Veterinary Medicine. This location will readily allow interaction with state and federal agencies in Sacramento that are involved with small ruminant health and sustainable production (CDFA, USDA, CDPH, USFS).

**Developed and proposed by:** This position was initially drafted by Joan Rowe & Alda Pires (VM:PHR and Veterinary Medicine Extension) and John Harper (Livestock & Natural Resources Advisor & SNE Strategic Initiative Leader); input was received from UCCE Specialists and Livestock and Natural Resources Advisors from throughout the state. This position was also reviewed and supported by the UCCE Agricultural Production Program Team and Small Farm Workgroup, CA Wool Growers Assn., Federation CA Artisan Cheese Guild, Am. Goat Federation, the Am. Boer Goat Association, and the Am. Dairy Goat Association.