

Position Title: Area Diversified Agricultural Systems Advisor, Lake and Mendocino Counties.

Position: This position will develop and extend research-based information on horticultural and other niche crops such as edible grains, oil seeds, nursery starts, cosmetic ingredients, etc. (excluding cannabis) to an economically, culturally, and socially diverse clientele. The advisor will also assist County Directors with Master Gardener (MG) training and problem solving. Minimum of a Master's degree in plant sciences, e.g. horticulture, pomology, vegetable crops, is required; pest management degree is acceptable if accompanied by adequate plant science-related coursework and experience. Demonstrated applied research, knowledge dissemination, and grant-writing experience are very desirable. The advisor will be housed in Lake County and report to the Lake County Director. S/he will work in Lake and Mendocino Counties and interact with academic staff in both counties, neighboring North Coast counties and statewide, relevant ANR Statewide Program units (e.g. AIC, IPM, SAREP), Hopland Research and Extension Center (HREC), and campus- based departments, e.g. UC Davis, Berkeley, Riverside. The advisor will also interact and collaborate with external public and community partners. This position may also eventually inherit the commercial pomology program (i.e. pears, walnuts, olives, apples) upon the retirement of the County Director/Pomology Advisor.

Justification: The three major issues to be addressed are (2012 Ag Census): 1) Maintain and enhance the economic, social and environmental sustainability of diversified agriculture in Lake and Mendocino Counties (total 2,058 farms, of which 95% of sales is non-livestock crop-related); 2) Meet the growing demands of, and contribute to the success of, the 92% of total farms (69% between \$1000 and \$250,000 and 23% less than \$1000 gross sales) classified as small farms by USDA that dominate the two counties. This economic group, while comprising the majority of farms by number and acreage (81% of farms are from 1-200 acres), often has the greatest need for, but lacks, innovative and economically-rational applied research and extension input due to the great diversity of crops grown (19 fruit, over 50 vegetable, herb/spice/ornamental/nursery start crops) and experience base (none to great); and 3) Preserve a viable agricultural land use base capable of harboring a diversified, locally-based agricultural industry but threatened long-term by non-agriculture uses as the population increases (ranchettes, commercial entities). There is demonstrated great consumer interest (e.g. 100 Farmers Market growers) in locally-produced food and other agricultural products, and deep cultural, social, and economic dependence on agriculture in both counties, thus the likelihood of significant outcomes and impact of this position is high. Besides growers and their associated service personnel (e.g. pest control advisers (PCAs), certified crop advisers (CCAs), ag dealers), this position will also address needs of multiple agencies and entities with similar goals and endeavors that need locally-relevant, research-based information and advice, e.g. agricultural training programs/farm schools, farmers markets/food hubs and other economic development entities, community college ag programs, etc. The Pomology Advisor interacts closely with pear and walnut commodity boards and these entities are greatly vested in local UC ANR programs. Specific organizations are listed below.

Extension: Activities may vary with program, season, and need, but can include: Written offerings: periodic newsletters, media articles, extension leaflets/handbooks/"flash cards", etc. Visual media: videos, slide presentations, multimedia. Internet/Social media: email "blasts", Internet blogs, immediate notifications (e.g. Twitter, Instagram), website pages, webinars. Group activities: Indoor presentations/workshops, field and "tailgate" meetings, hands-on demonstrations. Individual consultation: While often viewed as "old fashioned" "farm calls" are a valuable means to gain insight and become familiar with problems and issues, and will continue to be an important extension tool, especially for small and less experienced clientele. There should be close collaboration with other ANR academics versed in complementary fields of activity such as economics, marketing, value-added, and post-harvest quality, as well as external partners (see below).

Research: Applied research based on immediate and long-term need, clientele demand, and season/year should meet the specific demands of a unique geographical area and clientele group. Topics may include:

alternative crops and strains suitable to microclimates ranging from intermountain to coastal, organics, season extension (row covers, indoor growing), climate adaptation (shade cloth, planting/harvest timing), cultural input efficiency, crop transition strategies (crop rotations, fumigation alternatives, soil amendments), labor saving strategies/technologies, and post-harvest quality. Secondary programs may include economics (cost studies, beginning farmer and land use studies, marketing, ag tourism), and other complimentary disciplines. A thorough needs assessment should be undertaken in the first year(s) after hiring.

ANR Network: This position will satisfy the tremendous need to serve smaller specialty crop producers endeavoring to produce high-value products for local and/or regional markets, a large and growing clientele group thus far lacking dedicated UC academic staff. The advisor will (ideally) be part of a regional team of four specialty crops/small farms production (vacant) and marketing/food safety (in place) advisors, with others based in Humboldt/Del Norte and Sonoma/Marin Counties. Other UC colleagues will be statewide commodity/specialty crop/small farms advisors with similar interests and multiple campus-based academics, (Specialists, AES and non-AES scientists, REC academics). Given the wide diversity of crops, farm type and size, clientele experience base and economic resources, academic teams will vary considerably over time, but will likely include UCD Departments of Plant Sciences, Land/Air/Water Resources, Agricultural and Resource Economics (also UCB), Biological and Agricultural Engineering, SAREP/Agricultural Sustainability Institute, and others. An intensive survey to ascertain grower demographics, growing conditions, crop diversity, and, most importantly, perceived research and extension needs will clarify specific teams. Extending existing UC information and resources should be emphasized in early years.

Network External to ANR: The advisor will interact and partner as appropriate with growers of multiple crop types, related service personnel, public agencies (e.g. Agricultural Commissioner, USDA NRCS/FSA, RCDs, state agencies (Water Resources, CDFA, CalDPR, etc.), educational institutions, non-governmental entities, and private entities (foundations, businesses, consultants, lenders, grower representatives), etc.

Support: Lake County will provide mentoring, a dedicated office, conference room space, generous supplies and equipment, transportation (field vehicle and mileage reimbursement), and secretarial support. Mendocino County will provide mentoring, part time technician support, well-appointed meeting room and administrative support for grower programs. Other specific support will be supplied as needed and available.

Other support: Potential federal and state grant support (besides ANR) includes various USDA: NIFA (SCRI, AFRI, OREI, ARME, Farm Business Mgt. SARE), Advocacy/Outreach; CDFA/CalDPR: SCBG, Specialty Crop Multi-State, IPM; Local/Private: Mendocino Community Foundation.

Location: Lake County will house this position based on the history of need as well as the strong possibility that this position will inherit pomological programmatic duties once the Pomology Advisor retires.

Developed and proposed by: This position is being submitted by the Agricultural Production Management Systems Program Team. However, it was originally developed by Rachel Elkins, Lake County Director/Pomology Advisor and Mendocino County Director/Winegrowing and Plant Sciences Advisor. The proposal had input from the UC Pomology Program Team, the Small Farm Workgroup and a number of local stakeholders, including the Lake and Mendocino County Agricultural Commissioners, North Coast Opportunities/Lake Local Food Action Network, Lake and Mendocino County Farm Bureaus, Lake County Chapter California Women for Agriculture, Lake County Agricultural Fair District Board, Kelseyville Pear Festival Committee, Mendocino and Woodland Community College instructors, and USDA NRCS staff.

