

# III. Program Summary Narrative

## Introduction

My assignment as Area Environmental Horticulture Cooperative Extension (CE) Advisor, Assistant II, Term 2 is to lead an extension education and applied research program that provides technical support to professionals in turfgrass, urban landscape, and environmental horticulture industries. My program brings specific expertise in 1) turfgrass management, 2) landscape integrated pest management (IPM), and 3) natural area management within urban greenspaces. My clientele include professionals in various aspects of urban landscape management: golf and sports turf managers, parks and open space personnel, school and childcare center staff, arborists and urban foresters, maintenance gardeners, and wholesale and retail nursery growers.

I work closely with 2 University of California (UC) Agriculture and Natural Resources (ANR) statewide programs. I am an affiliate advisor of our UC IPM program. I also oversee a regional cluster of 3 UC Master Gardener (MG) programs, who extend education to community members about sustainable horticulture.

Urban landscapes provide numerous environmental and social benefits for Californians, which few other landscapes can offer. My major emphasis is managing these landscapes for desired recreational functions, while reducing environmental harm and enhancing ecosystem services. Furthermore, all of this must be carried out with economic awareness. My work aligns with Public Value Statement [Protecting California's natural resources](#) and Condition Change [Increasing ecological sustainability of \[urban\] landscapes](#).

## Theme #1: Increasing ecological sustainability of [urban] landscapes

### ***Background, Rationale, and Problem***

As urban populations are projected to increase, it is vital to enhance urban water use efficiency, solve pest problems while minimizing risks, and explore innovative ideas for alternative or native plant use. California contains an estimated 2.7 million acres of turfgrass ([Milesi et al., 2005](#)), which is more than almonds, grapes, and pistachios combined. Turfgrass landscapes are urban greenspace and predominately include lawns, schools, golf courses, parks, sports fields, and commercial properties.

In order to increase ecological sustainability of urban turfgrass landscapes, my approach was two-fold: 1) optimize management to maintain turfgrass with lower overall inputs of irrigation, pesticides, and labor, and 2) identify new grasses or groundcovers that can perform under reduced inputs of irrigation, pesticides, and labor.

### ***Methods, Outcomes, and Impacts***

#### *Advancing irrigation management*

I developed options to increase water use efficiency in urban environments. I conducted 8 field trials in 4 counties to evaluate 370 turfgrass cultivars, native grasses, or alternative groundcovers for water use efficiency. These trials identified perennial grass species that can survive with no supplemental irrigation, although grasses went dormant. Preliminary data revealed some native grasses can remain green with 25% less irrigation than required for industry standards, like bermudagrass. This research will lead to recommendations for lower-water-using vegetation, and thus reduce irrigation water applied to urban landscapes.

I, with academic collaborators from UC Riverside (A. Haghverdi) and UC Davis (A. Pourreza), identified new methods to quantify the impact of deficit irrigation regimes on turfgrass health. We developed new spectral indices to detect turfgrass drought stress with drones and remote sensing technologies. This research was published in 3 abstracts. Our research will be a foundation for control, optimization, and automation of turfgrass irrigation systems. Ultimately, this work will lead to precision applications of irrigation water and conservation of water resources.

#### *Expanding IPM adoption*

I provided 12 extension presentations on turfgrass and landscape IPM during the reporting period, reaching 685 professional clientele. I delivered a turfgrass IPM training to over 130 school landscape clientele at the Weed Management Expos for Schoolsites in Dixon and Long Beach, organized by UC IPM and California Department of Pesticide Regulation. Evaluation data from the workshop showed 94% of survey respondents (n=67) were satisfied or extremely satisfied with my turfgrass session. Furthermore, 43% of survey respondents said they planned to incorporate IPM practices and pursue alternatives to conventional pesticides. Anticipated impacts can be inferred from research showing that adoption/improvement of IPM can reduce pesticides applied and reduce costs associated with landscape management ([Gouge et al., 2006](#); [Smith and Raupp, 1986](#)).

Recent concerns about public health risks of glyphosate, a popular pesticide used to control weeds, have led to increased bans or restrictions in California cities, counties, and school districts. Because of this, my landscape clientele had a need that quickly evolved in the review period: to identify and implement alternatives to glyphosate. I independently conducted an applied research trial to evaluate glyphosate vs. organic pesticides and other alternative weed control tactics. I generated new knowledge to support my clientele, about tradeoffs associated with alternative weed control approaches. Measurable outcomes and impacts will be reported in my next term review.

#### *Reducing maintained turfgrass*

One approach to conserving water and labor on golf courses is to reduce acreage of maintained turf and convert to native/naturalized grasslands and forbs. I taught a [webinar](#), facilitated by the Golf Course Superintendents Association of America, about using low-maintenance grasslands to replace maintained turf on golf courses. Over 60 golf course managers watched this webinar live, and 97% of survey respondents (n=38) said they would use the information within 12 months. The biggest takeaway identified by survey respondents was how to select grass cultivars adapted for heat and drought stress. I had a regional field day about native grasses at a golf course, and attracted over 60 turf managers and associated professionals. My research was published in 2 abstracts and a trade magazine article.

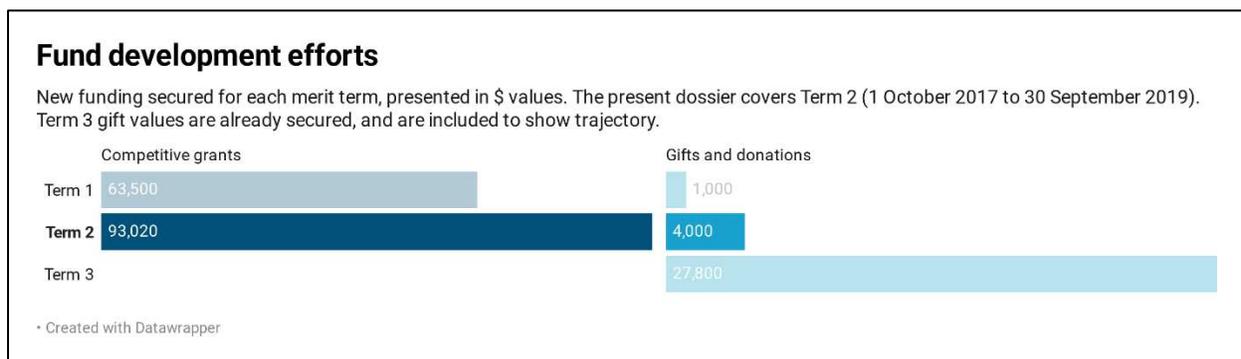
My research-based information was directly applied to support clientele decision-making. During the review period, I provided support to individual golf courses converting anywhere from 2 to 20 acres of maintained turf to naturalized areas. Impacts can be inferred from published golf course case studies showing that labor, inputs, and water savings were approximately \$2,000 for each converted acre ([USGA, 2017a](#)). Thus, my support and expertise may have contributed to saving an estimated \$4,000 to \$40,000 annually for each of the aforementioned golf course facilities. Moreover, naturalized areas use just 22% of the water required to maintain traditional turfgrass, like bermudagrass ([USGA, 2017b](#)).

#### *Enhancing the research-extension continuum*

To further disseminate information to turfgrass clientele, I conducted 45 site visits in 6 counties, and I wrote detailed reports for 3 site visits. In response to a follow-up survey after a school campus visit, the sports field manager wrote "Maggie Reiter was excellent to work with. Her knowledge and information have been extremely helpful with our sports fields."

In order to maximize efficiency in reaching intended audiences, I used technology to facilitate enhanced teaching and create online content. I taught webinars for the [Golf Course Superintendents Association of America \(aforementioned\)](#) and for [ANR internal training](#). I remotely instructed a Master Gardener training via Zoom. I regularly used social media like [Twitter](#), where I had 1,090 followers and tweets that reached up to 113,000 people in a 1 month period. I created a website [centralcaturf.com](#), which organized a database of relevant resources for clientele. My website also included decision-support tools, like local [turfgrass growth models](#) that automatically update daily with weather data and forecasts.

Fund development really got off the ground during this reporting period (see figure below). As a CE Advisor, Assistant II, Term 2, I brought in \$93,020 of new grant funding and \$4,000 of new gifts/donations. I spent time during this period working on relationships with donors, and secured at least \$27,800 in expected gifts for my next reporting period (Term 3).



*Note: figures hyperlinked to higher-resolution, interactive visualization.*

## Theme #2: Master Gardener program leadership

### ***Background, Rationale, and Problem***

I led 3 different UC Master Gardener programs in my region, where I oversaw 360 Master Gardener volunteers and 2 paid staff that are volunteer coordinators (see Additional Documents: Organizational Chart). I provided subject matter expertise on sustainable turfgrass and integrated pest management (IPM). To advance the horticultural knowledge of volunteers, I developed core training curriculum and continuing education. I directed local program efforts to maintain alignment with ANR and UC Master Gardener Program Strategic Plans. In the review period, I aimed to 1) advance horticultural knowledge of the volunteers, 2) develop staff capacity to support volunteers, and 3) increase reach to underserved audiences.

### ***Methods, Outcomes, and Impacts***

I oversaw the planning of monthly continuing education seminars for all 3 Master Gardener programs, as well as the 50-hour initial training class for 64 new Master Gardeners across 4 counties. I personally led the following trainings (see figure):

## Master Gardener trainings conducted

Core course	Continuing education
Low-input turfgrass and alternatives	Glyphosate: Addressing public concerns and providing alternatives
Weeds	Attracting beneficial insects to home gardens
Introduction to horticulture	Public Value Statements of our Master Gardener program
Plant diagnostics	Best practices for customer service and problem solving
What is University of California Cooperative Extension (UCCE)?	

· Created with Datawrapper

*Note: figures hyperlinked to higher-resolution, interactive visualization.*

Beyond the trainings listed above, I started a new workshop series to provide additional continuing education opportunities and integrate modern pedagogies to volunteer learning. I organized or co-presented workshops about social science, emerging IPM issues such as Asian citrus psyllid (ACP) and huanglongbing (HLB) disease, and vertebrate pests. Evaluation data from 3 workshops shows volunteers increased their understanding and confidence, and they were satisfied with the workshops (see figure):



*Note: figures hyperlinked to higher-resolution, interactive visualization.*

This is impactful because the volunteers extended this information to the wider community, and our volunteers reached over 24,000 contacts in the reporting period. Published research shows 92% of surveyed Master Gardeners implemented learned practices in their own home horticulture, and 95% of surveyed Master Gardener volunteers transferred information learned to others ([Peronto and Murphy, 2009](#)).

In addition to increasing knowledge and improving horticultural practices, my trainings resulted in Master Gardeners increasing their self-confidence and satisfaction. This is a key tenant of [ANR Goal 9: Improve volunteer management](#).

My responsibilities included supervising 2 Master Gardener coordinators for most of the reporting period. During this time, I conducted bimonthly staff meetings and weekly meetings with each coordinator. For about 6 months of the review period, from October 2017 to April 2018, the coordinator position overseeing the Fresno and Madera programs was vacant and administrative support staff in these counties is limited. So, I took on the additional work while maintaining my academic program. Additional responsibilities during this period included but were not limited to: day-to-day supervision of 260 Master Gardener volunteers, working with 2 different advisory boards, communicating with volunteers and responding to needs, interpreting and applying policies, attending to complaints, engaging with community partners, and budget management.

Throughout the entire reporting period, other Master Gardener leadership responsibilities included annual reporting to volunteers, annual reporting to local county governments, UC and county personnel system navigation, review of technical content delivered through volunteer programs, program advocacy, volunteer appreciation, and exit interviews with volunteers leaving the program. I improved program efficiency by transitioning internal communication to an email software called [MailChimp](#). About 83% of surveyed Master Gardeners (n=90) liked the modernization of communication systems. Additionally, I initiated outcomes and impact reporting mechanisms in alignment with Statewide Master Gardener Program objectives.

In the reporting period I expanded language-based outreach. The Fresno Master Gardeners historically offered weekly workshops at our demonstration garden. To reach more people in the community, we started teaching select workshops in Spanish at a public library, a new location that was more accessible to Spanish-speaking clientele. At a statewide scale, I was part of a team of academics that secured an ANR-funded grant to supporting our Spanish language community through online resources. I translated key handouts into Spanish and the team began developing “how-to” videos on sustainable horticultural topics.

## **University & Public Service**

During the review period, University service was an effective way I supported the development of ANR and my colleagues, and moved the mission of our institution forward. I contributed to the ANR Statewide Conference planning as a member of the science sub-committee, which organized and delivered technical sessions throughout the 4-day conference. I served as an administrative committee member of the UC Nursery and Floriculture Alliance, where I organized local events, provided input at monthly meetings, and contributed to competitive grant proposals. I served as a member of the UC Master Gardener Statewide Steering Committee, where I contributed to strategic planning and program evaluation at a statewide level. I was also a member of the 4-H Advisory Board for Inclusion and Affirmation, a group developed to create policies for more inclusive ANR programs. At the county level, I led or participated in recruitments for staff and academics, contributed to county office operations, and coordinated local tours for ANR leadership and elected officials.

Beyond ANR, I continued to serve the California Weed Science Society, as a session chair for the turf section of the annual conference, and as a judge for student presentations. Related to academic work, I developed a summer internship program for Fresno State students, providing academic oversight, daily supervision, and professional development opportunities in turfgrass science. I supported my local clientele by volunteering with the turfgrass management team at a major golf tournament, the US Open.

## **Professional Competence**

I maintained a level of professional competence and activity well beyond my CE Advisor, Assistant II, Term 2 step. At a regional level, I am sought for turfgrass-related expertise from CE advisors in other counties and UC Master Gardeners. I was invited to give turfgrass-related extension presentations and research updates 14 times outside of my counties, in locations from Yolo County to Orange County. I traveled widely outside of California to present on specific areas of expertise, including:

- Researchers at Oregon State University invited me to participate in a focus group for academics working with fine fescue grass species.
- I was invited to present on native turfgrass species at the University of Minnesota, during a multi-state turfgrass research meeting.

- I presented an invited seminar about golf course naturalized areas at the national Golf Industry Show Education Conference, which was attended by over 60 registrants from across the world.

Another highlight of this past term was my attendance at a [Women in Golf Summit](#) hosted by Bayer in North Carolina, where I was selected with 50 other women across North America to network and participate in professional development. I peer-reviewed 7 manuscripts for UC ANR, HortTechnology, HortScience, Grasslands Journal, and Crop Forage and Turfgrass Management. My academic community of turfgrass scientists invited me into leadership positions. I was selected to serve on 2 advisory committees with the National Turfgrass Evaluation Program, where I helped establish protocols for turfgrass research across the United States. I was interviewed by 2 trade magazines because of my proficiency in turfgrass and weeds.

I devoted substantial time and effort to improving my competence in horticultural science, especially turfgrass management and integrated pest management. I attended 28 trainings, webinars, meetings, and field days offered by professional associations, other institutions, and UC ANR.

## **Affirmative Action**

I worked to provide information to all potential clientele. I improved my competence in diversity, equity, and inclusion by attending trainings and seeking support from professionals in this field.

I used extension methods that are responsive to clientele needs and appropriate for the audience and situation. Because Spanish-speaking people made up a growing component of my professional clientele, I made a special effort to provide material in Spanish and overcome barriers in program participation. For example, extension presentations I organized or delivered in Spanish were:

1. Fertilizers: Types, Use, and Methods of Monitoring in a production nursery workshop
2. Pest Management in the Garden/Landscape training for maintenance gardeners
3. Interactions Between Irrigation Management and Disease Pressure training at a local nursery

As a supervisor to 1 student intern, 2 Master Gardener coordinators, and 3 Master Gardener programs, I took measures necessary to assure that staff and volunteers comply with all applicable federal and state laws and regulations, and all University policies regarding AA. Additionally, I promoted the accomplishment of AA goals established by UC ANR, and I ensured collection of appropriate demographic data at Master Gardener events.

## **Summary**

In the review period I demonstrated development of innovative programming and continued positive trajectory. I served as principal investigator and co-principle investigator on research projects that addressed clientele needs and contributed to the wider scope of turfgrass research. I enhanced both my professional clientele and Master Gardener volunteer knowledge, and anticipated impacts are justified with published literature. I served in activities that support ANR, my local units, and the wider public. I showed program efforts to reach and serve all potential clientele. I demonstrated leadership and recognition for turfgrass expertise at statewide and national levels. My work meets advancement criteria for merit action to CE Advisor / Assistant / III / Term 3.

## IV. Supporting Documentation

### A. Project Summary

Project Title	Role	Collaborators	Support Amount/Duration	Support Source
<b>Increasing ecological sustainability of [urban] landscapes</b>				
Remote sensing turfgrass response to water stress	Co-Principal Investigator	A. Haghverdi, UC Riverside A. Pourreza, UC Davis	\$21,000 January 2017— December 2020	ANR: California Institute for Water Resources  ANR: Competitive Grants Program
Evaluation of turfgrass cultivars under reduced inputs (5 separate projects: perennial ryegrass, tall fescue, low-input grasses, warm-season deficit irrigation, bermudagrass)	Principal Investigator	R. Lomeli, Ridge Creek Golf Course T. Jacobsen, Fresno State University Center for Irrigation Technology	\$75,520 October 2016— May 2024	National Turfgrass Evaluation Program
Maintained turfgrass conversion to native or alternative grasses	Principal Investigator	R. Lomeli, Ridge Creek Golf Course P. Barr, San Luis Obispo Country Club	\$50,000 January 2017— December 2021	United States Golf Association
Factors that influence maintained turfgrass conversion to other vegetation	Co-Principal Investigator	K. Soule, UCCE San Luis Obispo  Central California golf course managers  M. Barnes, University of Minnesota	July 2018—July 2020	

Project Title	Role	Collaborators	Support Amount/Duration	Support Source
<b>Master Gardener program leadership</b>				
Supporting our Spanish language community through online resources	Collaborator	M. Gable, UC ANR UCCE Imperial, Sonoma, Santa Clara, Sonoma	\$10,000 March 2019 – June 2020	ANR: Develop Online Educational Resources Targeted at Underserved Audiences

## B. Professional Competence and Professional Activity

### *Professional Development and Training*

#### *Development offered by ANR*

Begin Date - End Date	Location	Name, Description and Occurrence of Activity
October 2017— September 2019	UC ANR, UC Davis, Kearney REC, UCCE Santa Cruz, UCCE Fresno, online	Attended the following trainings and conferences: ANR Programmatic Orientation for Early Career Academics, ANR Copyrights Training, ANR Office of Contracts and Grants Training, ANR Administrative Orientation for New Employees, ANR Pesticide Policy Training, SiteBuilder Training, Hmong Cultural Awareness Training, Conducting a Needs Assessment Training, Integrating Climate Change in California Cooperative Extension Programs, UC Nursery and Floriculture Alliance Pest Management Symposium, Understanding Generational Differences (training from UC Davis), UC Davis IPM Summit, UC Davis Weed Day, Improve your understanding of ANR's Condition Changes and Use of Relevant Indicators (webinar)
October 2017— September 2019	California	Attended the following workgroup meetings: Floriculture and Nursery, Landscape Urban Horticulture, Weed, Agroecology and Organic Farming Systems

***Development offered by organizations other than ANR***

Begin Date - End Date	Location	Name, Description and Occurrence of Activity
January 2018— August 2019	online	Watched webinar trainings about turfgrass science: 8 webinars from Golf Course Superintendents Association of America, 1 webinar from Utah State University, 1 webinar from North Carolina State University
May 2018	UC Berkeley	Attended workshop about grass identification
August 2018— September 2019	Winters, Oregon State University, UC Riverside, online	Attended the following field days: California Native Grasslands Association Field Day, Oregon State University Turfgrass Field Day, UC Riverside Turf and Landscape Field Day, University of Tennessee <i>Poa annua</i> Field Day (online)

***Disciplinary Society or Professional Association***

Disciplinary Society/Prof. Assoc Name	Membership/Meetings Attended/Activities
Crop Science Society of America	Attended annual conference
California Weed Science Society of America	Attended and co-chaired the turf session of the annual conference
Golf Course Superintendents Association of America	Attended local chapter meetings and annual conference
International Turfgrass Society	Active member

***Evidence of Professional Competency***

Begin Date - End Date	Location	Name, Description and Occurrence of Award, Recognition, Professional Presentation, Office or Activity
October 2017— September 2019	California	Attend at least 20 hours of continuing education every 2 years to maintain Qualified Applicator License from California Department of Pesticide Regulation

Begin Date - End Date	Location	Name, Description and Occurrence of Award, Recognition, Professional Presentation, Office or Activity
November 2017— September 2019	Online	Peer-reviewed 7 manuscripts for UC ANR, HortTechnology, HortScience, Crop Forage and Turfgrass Management, Grasslands Journal
October 2017— September 2019	Bakersfield, Santa Barbara, San Luis Obispo, Winters, Long Beach, Dixon, Riverside, Merced, San Jose	Invited to give turfgrass-related extension presentations and research updates 14 times outside of my counties, reaching over 600 people
December 2017— January 2018	Online	Selected to serve on 2 advisory committees of the National Turfgrass Evaluation Program, to develop protocols for turfgrass research across the United States
August 2018	Oregon State University	Invited to provide input during a focus group about fine fescue grass species
January 2019	Online	Invited to teach a webinar about golf course naturalized areas, hosted by Golf Course Superintendents Association of America
February 2019	San Diego	Invited to teach a seminar about golf course naturalized areas at the national Golf Industry Show Education Conference
June 2019	University of Minnesota	Invited to present information on native turfgrasses, during a multi-state turfgrass research meeting
July 2019	Boston, Massachusetts	Co-authored poster presented at a professional society meeting:  Cheung, K., A. Pourreza, G. Zuniga-Ramirez, <b>M. Reiter</b> , and A. Haghverdi. 2019. Identification of drought stress in turfgrass using hyperspectral and multispectral remote sensing. ASABE Annual International Meeting.

Begin Date - End Date	Location	Name, Description and Occurrence of Award, Recognition, Professional Presentation, Office or Activity
September 2019	Raleigh, North Carolina	Selected to participate in a Women in Golf Summit, sponsored by Bayer

## C. University Service

Begin Date - End Date	Name, Description, and Occurrence of Activity	Org Level	Your Contribution and Leadership Role
October 2017—December 2017	Coordinated program for ANR Statewide Conference	State	Science sub-committee member
October 2017—September 2019	Co-coordinate meetings and competitive grant proposals for UC Nursery and Floriculture Alliance	State	Administrative committee member
April 2018	Reviewed Project Board Civil Rights Compliance Instructions for UC ANR	State	Reviewer
August 2019—September 2019	Contributed to UC Master Gardener Statewide Steering Committee	State	Steering committee member
December 2018—September 2019	Contributed to 4-H Advisory Board for Inclusion and Affirmation	State	Advisory committee member
January 2018—June 2018	Provided information to Western IPM Center, which I collected on pesticide use of local stakeholders	State	Contributor
October 2017—September 2019	Co-organized and participated in local tours for ANR leadership, elected officials, a UC Regent, and Advisor interview candidates	County	Co-coordinator or local host

Begin Date - End Date	Name, Description, and Occurrence of Activity	Org Level	Your Contribution and Leadership Role
October 2017—April 2018	Led 2 different search committees for Master Gardener Volunteer Coordinators	County	Committee chair

## D. Public Service

Begin Date - End Date	Name, Description, and Occurrence of Activity	Org Level	Your Contribution and Leadership Role
October 2017—January 2019	Co-chaired session and judged student posters at the California Weed Science Society Annual Conference	State	Session co-chair, student competition judge
May 2018—September 2018; May 2019—November 2019	Internship oversight for Fresno State undergraduate student	County	Provided daily supervision and academic development to undergraduate student completing a summer agricultural internship
May 2018—September 2019	Mentored graduate students at Utah State University and Mississippi State University	National	Advised graduate students on research methods and potential careers in university extension systems
June 2019	Volunteered at US Open, a weeklong event	International	Supported my turfgrass management peers at a major golf tournament

## E. Extension Activities

### *Meetings Organized*

Begin Date - End Date	Meeting Name and Type	Topic/no. of repetitions	Role	Location(s)	Total No. of Attendees
<b>Increasing ecological sustainability of [urban] landscapes</b>					
March 2018	Climate resilient landscaping (1-day workshop)	Irrigation for urban landscapes / 1	Presenter, co-facilitated agenda planning	Fresno	68
July 2018	Evaluation of native grass species for golf courses (field day)	Native grasses / 1	Presenter, co-facilitated agenda planning	San Luis Obispo	62
March 2018	Grafting training for small nursery growers (1-day workshop)	Plant propagation for specialty crops and ornamentals / 1	Co-coordinated speakers, facilitated agenda planning, and purchase of materials	Kearney REC	67
September 2018	Fertilizers training for nursery growers (1-day workshop)	Plant nutrition and fertilizer management for nursery growers / 2	Co-coordinated speakers	Fresno	20
<b>Master Gardener program leadership</b>					
September 2018—July 2019	Continuing education workshop series for Master Gardeners	Social science, emerging IPM issues, vertebrate pests / 6	Co-developed agenda and presentation materials, co-presenter	Fresno, Tulare	240

## Educational Presentations

Begin Date - End Date	Meeting Name/Event	Presentation Topic/no. of repetitions	Location(s)	No. of Attendees
<b>Increasing ecological sustainability of [urban] landscapes</b>				
February 2018—April 2019	Pest management meetings organized by others	Turfgrass IPM, landscape best management practices / 2	Kearney REC, Woodlake	70
<b>Master Gardener program leadership</b>				
November 2017—July 2019	Master Gardener monthly Continuing Education meeting	IPM updates, attracting beneficial insects, glyphosate alternatives, customer service, Public Values statements, social benefits of botanic gardens / 8	Fresno, Tulare, Madera, Mariposa, Alameda, San Mateo	380
January 2018—June 2019	Master Gardener core course training	Weeds, lawns, plant diagnostics, UCCE orientation, horticulture / 7	Fresno, Tulare, Merced, Napa	115

## Other

Begin Date - End Date	Description	No. of Instances
May 2019	<a href="#">Interviewed for Landscape Management</a> trade magazine	1
August 2019	<a href="#">Interviewed for the Minnesota Golf Course Superintendent Association</a> newsletter	1

## F. Publications (Bibliography)

### *Peer Reviewed*

[In press] Reiter, M. 2019. Plantains (Revision). UCIPM Pest Note. ANR Publication 7478.

### *Non-Peer Reviewed*

#### *Popular press articles*

Reiter, M. 2019. [Crop Coefficient Values \(K<sub>c</sub>\) for Turfgrass in California](#). Technical handout.

Reiter, M. 2019. [Adaptive Management for natural areas on golf courses](#). Blog post.

Reiter, M., K. Umeda, and W. Burayu. 2019. [Establishment of low-maintenance, naturalized grasses and forbs for turf replacement in California and Arizona](#). Golf Course Management 87:74-79.

Gillison, S. and M. Reiter. 2018. [UC Master Gardeners pilot gardening program for incarcerated youth](#). UC Delivers.

#### *Technical reports and other non-reviewed articles*

Reiter, M. 2018. [Bermudagrass rough conversion to no-mow, low-input grass area](#). United States Golf Association Turfgrass and Environmental Research Program: Research Summaries p. 96-101.

Reiter, M. 2017. [Bermudagrass rough conversion to no-mow, low-input grass area](#). United States Golf Association Turfgrass and Environmental Research Program: Research Summaries p. 152-155.

#### *Published abstracts*

Pourreza, A., G. Zuniga-Ramirez, M. Reiter, and A. Haghverdi. 2019. [Identification of drought injury in turfgrass using hyperspectral and multispectral remote sensing](#). SSSA International Soils Meeting.

Haghverdi, A., M. Reiter, S. Ghodsi, and A. Singh. 2019. [Evaluating the performance of smart evapotranspiration-based controllers in southern and central California](#). SSSA International Soils Meeting.

Reiter, M., and K. Soule. 2019. [Golf courses as sites for ecological restoration in California communities](#). The 26th Annual Conference of the California Society for Ecological Restoration.

Reiter, M. 2018. [Establishment of California native grasses as an unmowed golf course rough](#). ASA, CSSA, and CSA International Annual Meeting.

Reiter, M., A. Pourreza, G. Zuniga-Ramirez, and A. Haghverdi. 2018. [Multispectral and thermal remote sensing of turfgrass response to deficit irrigation in Central California](#). ASA, CSSA, and CSA International Annual Meeting.

Qiu, Y., A. Orshinsky, M. Reiter, and E. Watkins. 2017. [Simple sequence repeat and single nucleotide polymorphism marker-based detection and quantification of fine fescues \(\*Festuca\* spp.\) in a mixed stand](#). ASA, CSSA and SSSA International Annual Meeting.

**Your submission (2018-0563) to UC Agriculture and Natural Resources accepted pending revision**

Your manuscript "UC IPM Pest Note: Plantains" has gone through the ANR peer review process, and I am pleased to inform you that reviewers have recommended it be accepted after revision.

Attached to this email are the reviewer forms with comments that need addressing. Both reviewers have also made comments on your manuscript itself, please log into the Manuscript FastTrack system and click on your submission to view them.

Please return to me within three months of this letter

- Your revised, final manuscript
- Your response to reviewers' comments

To submit your revision and response, go to your "My Submissions" page. Click on your submission ID number. Go to "Manuscript Attachments" at the bottom and click on "Add another file." Now upload BOTH your revised manuscript and your explanation of how you responded to reviewer comments. (If you disagree with any of them, please explain why). Lastly, electronically fill out and sign the MF-21 Submittal Form, which is attached to your submission.

With these two documents and electronic signature, I will evaluate your revision and consider the manuscript for acceptance as an ANR publication.

Once accepted, I will electronically sign the MF-21 Submittal Form as well as indicate to Communication Services that your manuscript has passed peer review and is approved for publication production. Please note that production on your publication will not begin without this signed MF-21.

If extenuating circumstances will prevent you from completing this within three months, please notify me. After three months, the manuscript will require a new peer review or it will be considered withdrawn.

Best regards,

Andrew Sutherland,  
UC Agriculture and Natural Resources Associate Editor

=====  
REVIEWER COMMENTS:  
=====

Reviewer #1:

1. Please summarize what you believe are the major problems--if any--in this manuscript. You may also attach a separate sheet instead of using this form.

major problem- herbicides- are these for homeowner or for professional applicator- should be a category for each or at least a note.

2. Does the title accurately represents the manuscript's contents?

Yes

3. Is the manuscript technically sound?

No

4. Expand on Question #2. Is the manuscript accurate and does it reflect good science?

again - recheck the herbicides

5. Is there a need for the information in this manuscript?

Of general interest, average need

6. Is the manuscript up to date?

herbicides?

7. Is the writing style and organization clear and unambiguous? Note that professional editors will be copyediting manuscripts that pass ANR peer review.

not to belabor it but audience is ambiguous in reference to herbicides

8. Is the manuscript's content appropriate for its audience?

Do not know

9. Are you aware of other publications that adequately cover this material?

Not aware of any

11. Is there a need for this publication in a language besides English?

If so, what language?

spanish

12. Recommendation for publication:

Accepted, contingent upon approved revision

Reviewer #2:

1. Please summarize what you believe are the major problems--if any--in this manuscript. You may also attach a separate sheet instead of using this form.

NO major problems. Section on herbicides should be revised to be less ambiguous. Other minor edits -

see attached.

2. Does the title accurately represents the manuscript's contents?

Yes

3. Is the manuscript technically sound?

Yes

4. Expand on Question #2. Is the manuscript accurate and does it reflect good science?

Descriptions are accurate. I did not check the labels to see if herbicides listed are registered.

5. Is there a need for the information in this manuscript?

Of general interest, average need

6. Is the manuscript up to date?

Yes

7. Is the writing style and organization clear and unambiguous? Note that professional editors will be copyediting manuscripts that pass ANR peer review.

Mostly. The herbicide section should be revised. Also, it should be more specific about which herbicides are only available to professional applicators.

8. Is the manuscript's content appropriate for its audience?

Yes

9. Are you aware of other publications that adequately cover this material?

Not aware of any

11. Is there a need for this publication in a language besides English?

If so, what language?

No

12. Recommendation for publication:

Accepted, contingent upon approved revision