

Sowing Seeds of Evaluation: Measuring UC Master Gardener Program Public Benefit

WebANR - January 30, 2019

Missy Gable, UC Master Gardener Program

Katherine Webb-Martinez, UC ANR Program Planning & Evaluation

Tamekia Wilkins, UC ANR Youth, Families & Communities

Kit Alviz, UC ANR Program Planning & Evaluation



University of California

Agriculture and Natural Resources

■ UCCE Master Gardener Program

Welcome & Desired Outcomes

Participants will have:

- Understanding of the UC Master Gardener Program's statewide outcome evaluation design, year one findings, and lessons learned.
- Understanding of feasibility for an ANR program to collect follow-up survey responses (3 months post event; 30%+ response rate)
- Examples of how behavior change outcomes can be communicated in relation to ANR condition changes
- Lessons learned from data collection and analysis that can be considered for other statewide and academic programs



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program

Timing Was Right for UC MG

- Funders are more demanding of rigorous evaluation information
- Charge from senior leadership
- Improved program consistency statewide
- Developed more comprehensive monitoring system
- Developed consistent messaging and marketing
- Feed in and inform development of new national evaluation effort



Developing the MG Evaluation Plan

1. Statewide advisory committee & broader MG community
2. Key evaluation question
3. Logic model
4. Outcomes and indicators
5. Data collection plan, training & pilot
6. Dissemination plan and impact statements



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program

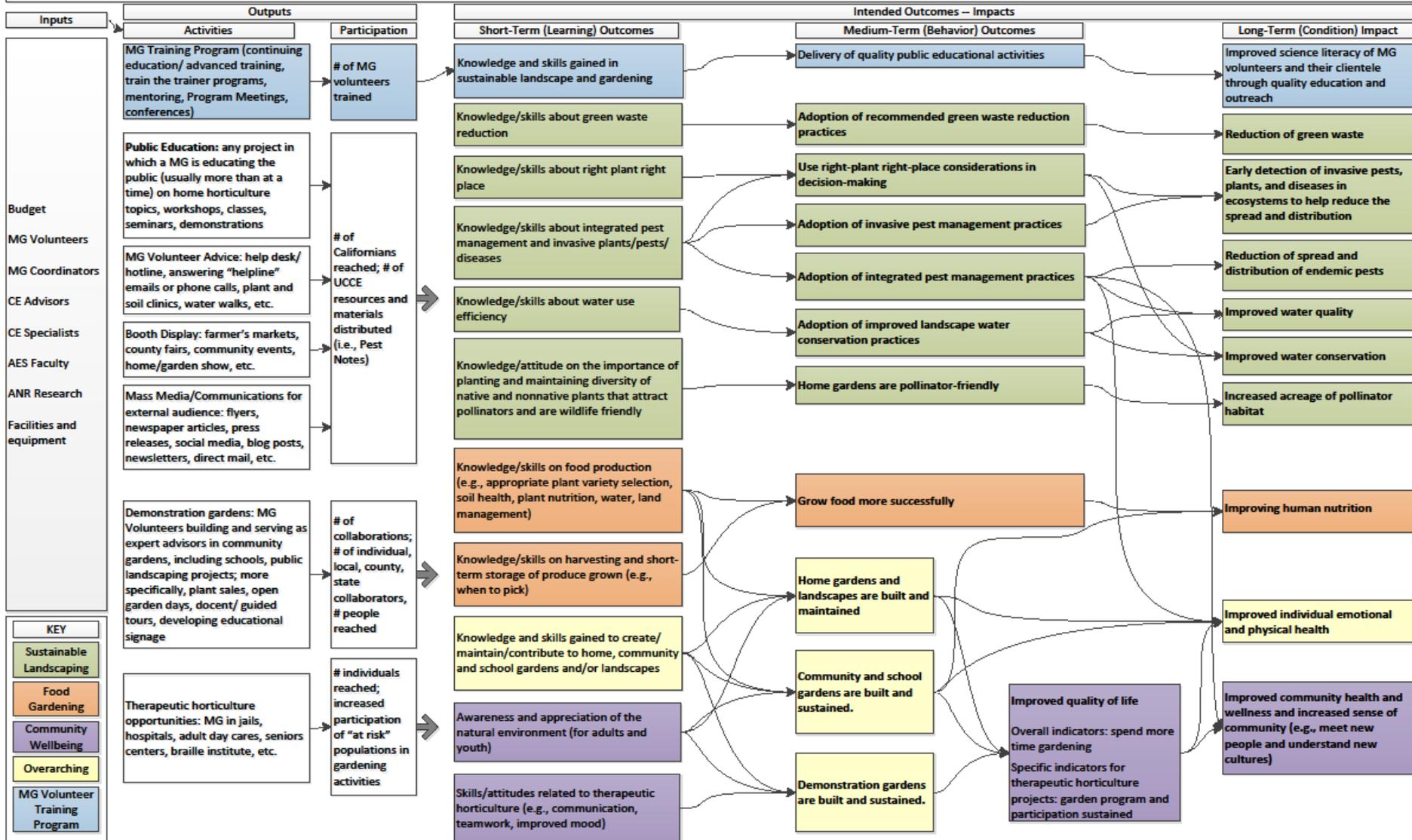
Evaluation Question

- How does the public benefit from the MG volunteers' work?
- What is Yours?
type into the chat



Developed Logic Model to Focus Which Outcomes to Measure

Situation Statement: California has major environmental concerns, including water availability and decline in pollinator populations. Additionally, California must improve community wellbeing by addressing issues of food access and our lack of urban greenspaces. By sharing research-based information on home horticulture, UC Master Gardener volunteers empower the public to be more sustainable in their home landscape, more productive in their food garden, and more engaged in their community well-being.

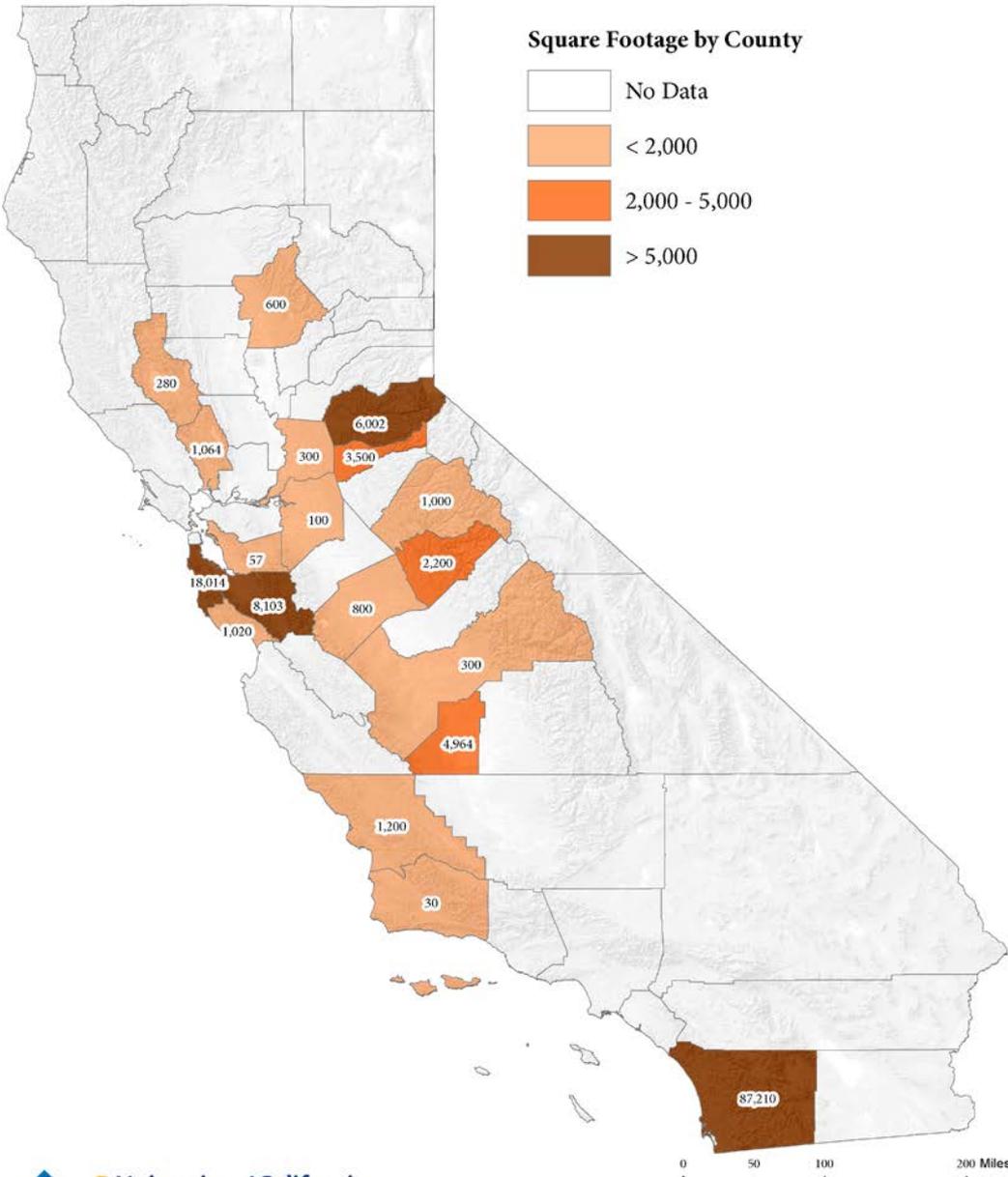


Overarching Outcomes

- ❖ Community and school gardens are built and sustained
- ❖ Home gardens and landscapes are built and maintained



School or community garden sizes and locations where practices learned from University of California Master Gardener events were applied



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program

Map Created by UCANR Informatics and GIS Statewide Program

School or Community Gardens

where new or improved practices were applied



Sustainable Landscaping Outcomes



- ❖ Create and enhance pollinator-friendly gardens
- ❖ Use recommended green waste reduction practices
- ❖ Adopt pest management practices
- ❖ Adopt improved landscape water use efficiency practices
- ❖ Use right-plant right-place considerations in decision-making



University of California

Agriculture and Natural Resources

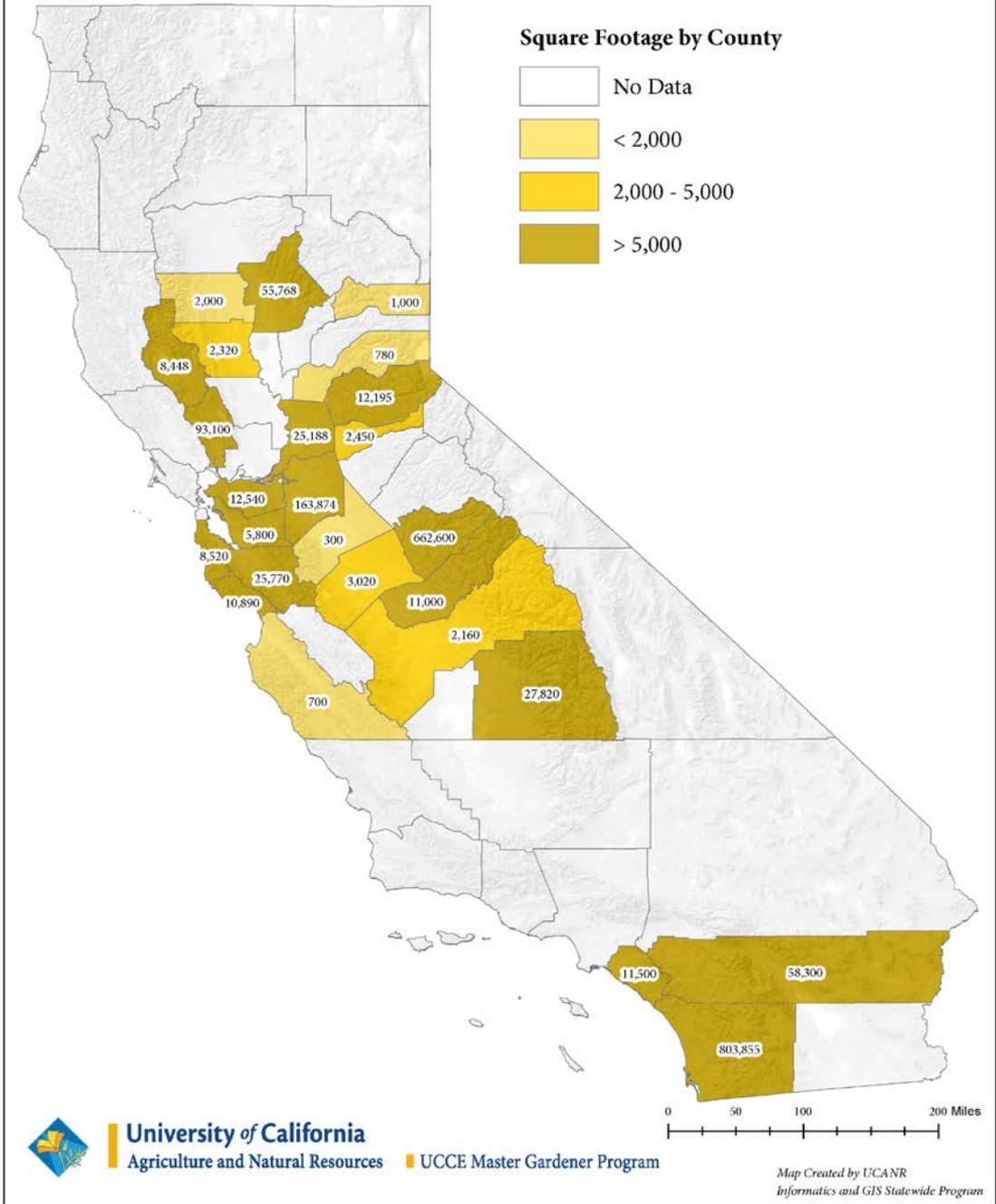
■ UCCE Master Gardener Program

Pollinator Habitat

where new or improved practices were applied



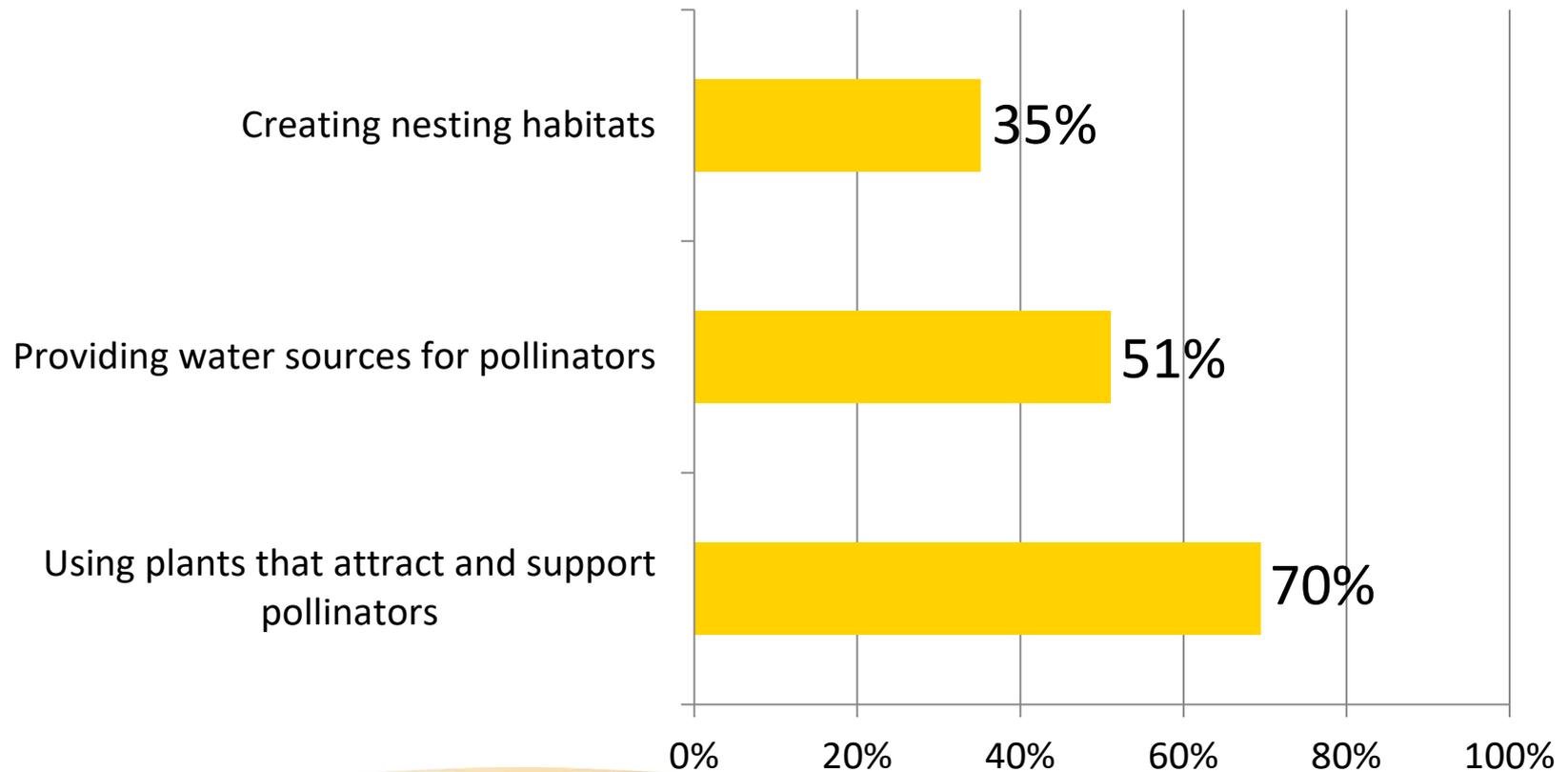
Pollinator habitat sizes and locations where practices learned from University of California Master Gardener events were adopted or improved



Pollinator-Friendly Gardens

(n = 424)

Participants reporting behavior change in...



University of California

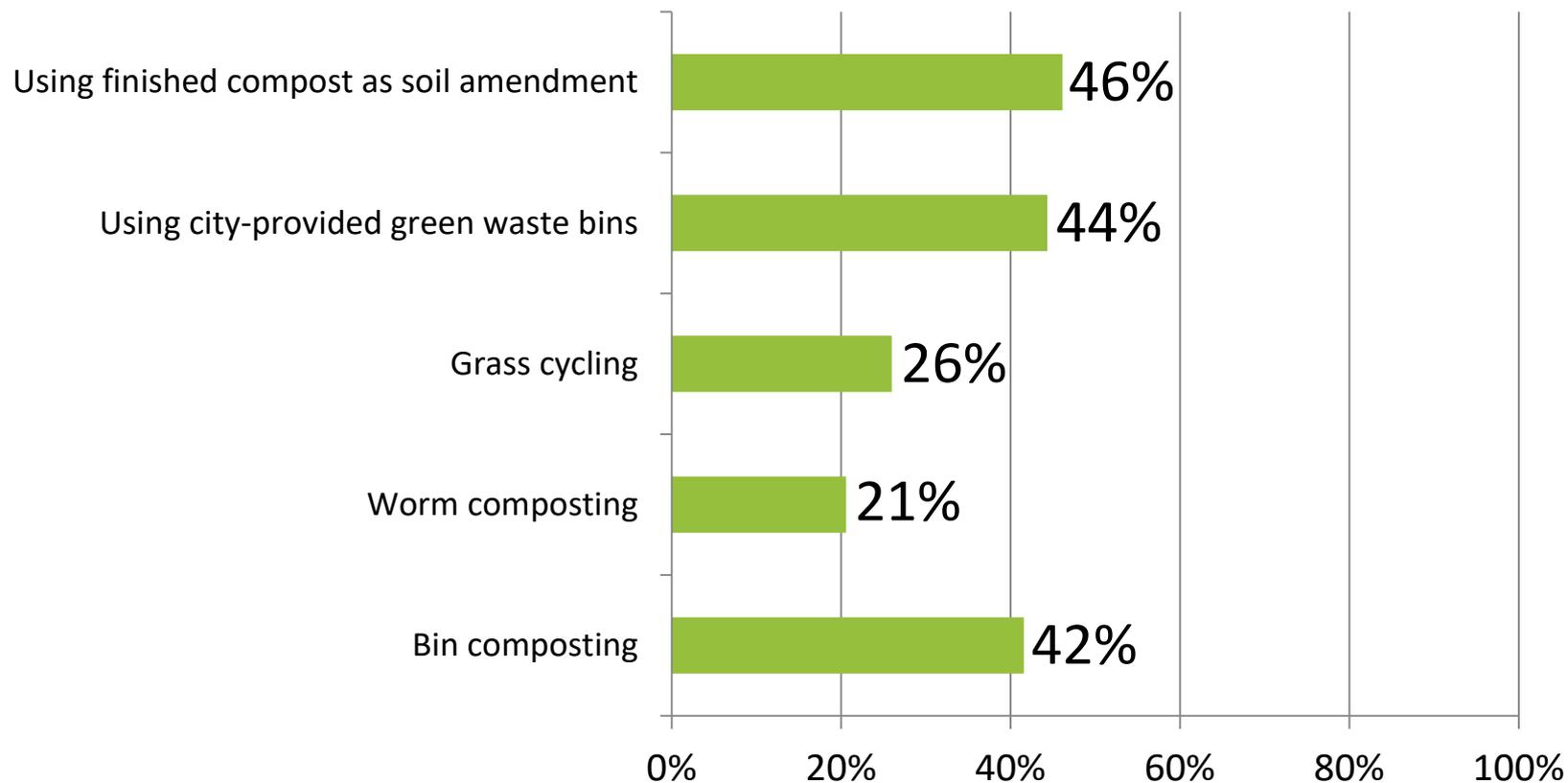
Agriculture and Natural Resources

UCCE Master Gardener Program

Green Waste

(n = 391)

Participants reporting behavior change in...



University of California

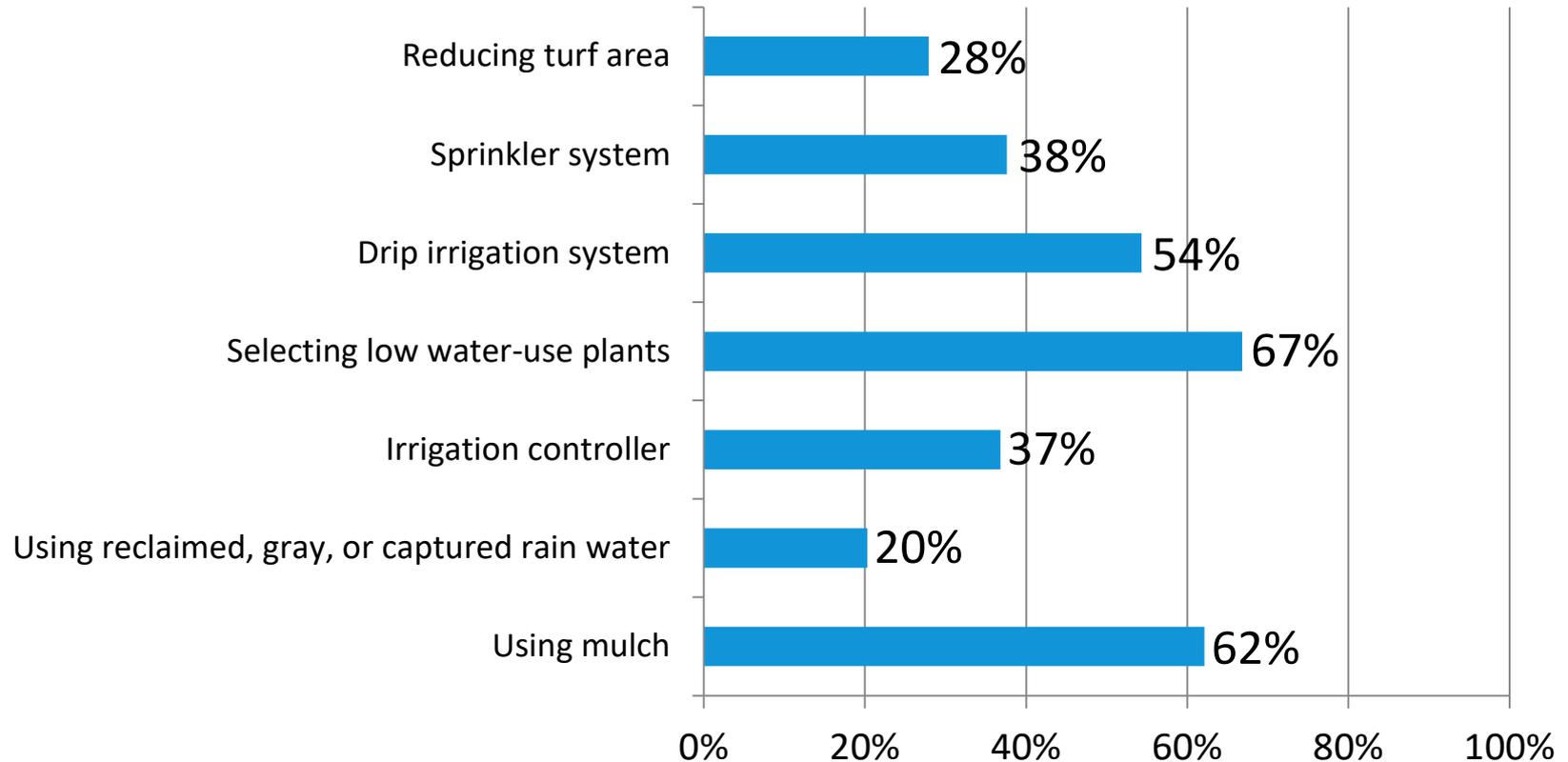
Agriculture and Natural Resources

UCCE Master Gardener Program

Water Conservation

(n = 587)

Participants reporting behavior change in...



University of California

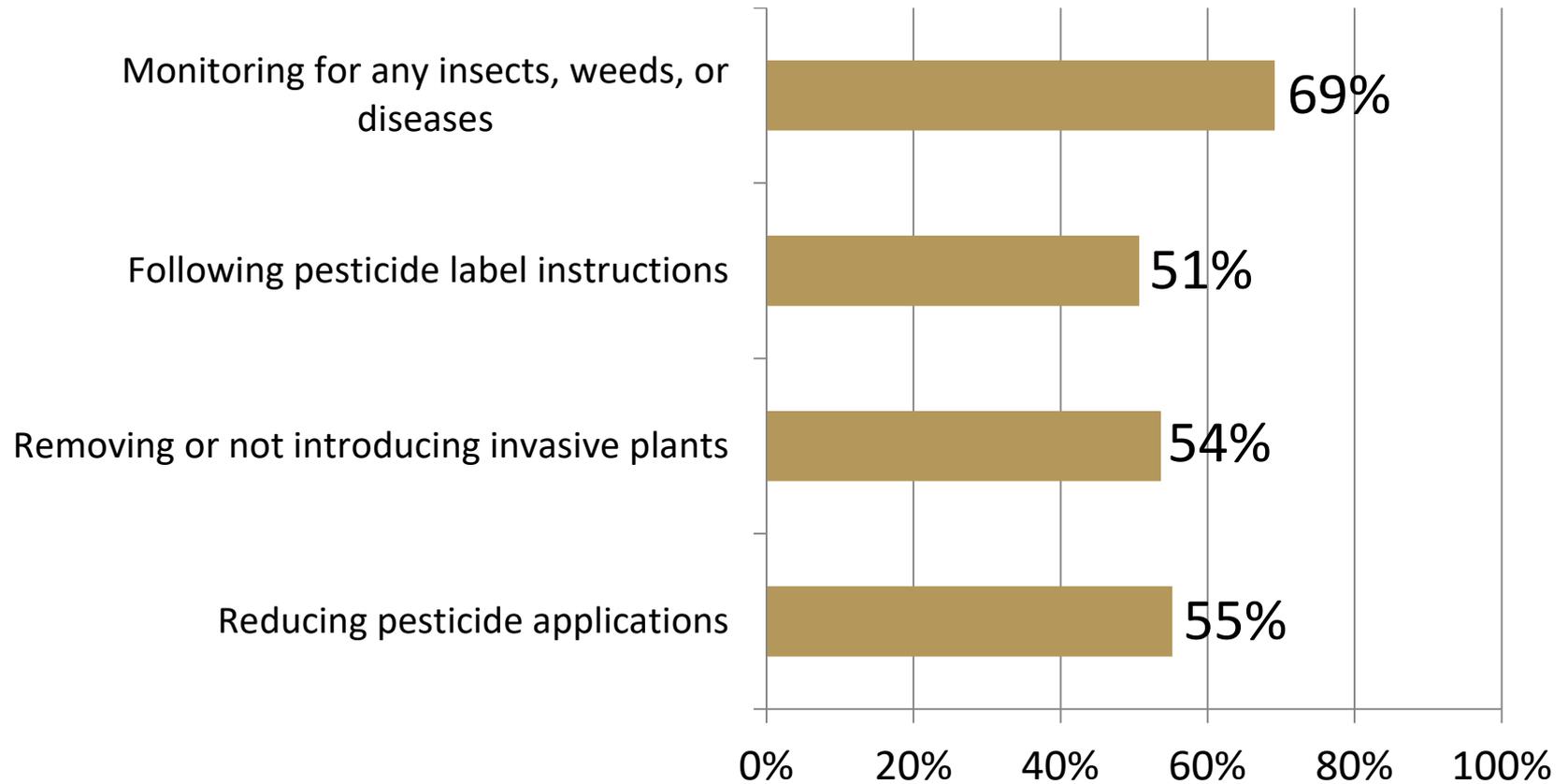
Agriculture and Natural Resources

UCCE Master Gardener Program

Pest Management

(n = 632)

Participants reporting behavior change in...



University of California

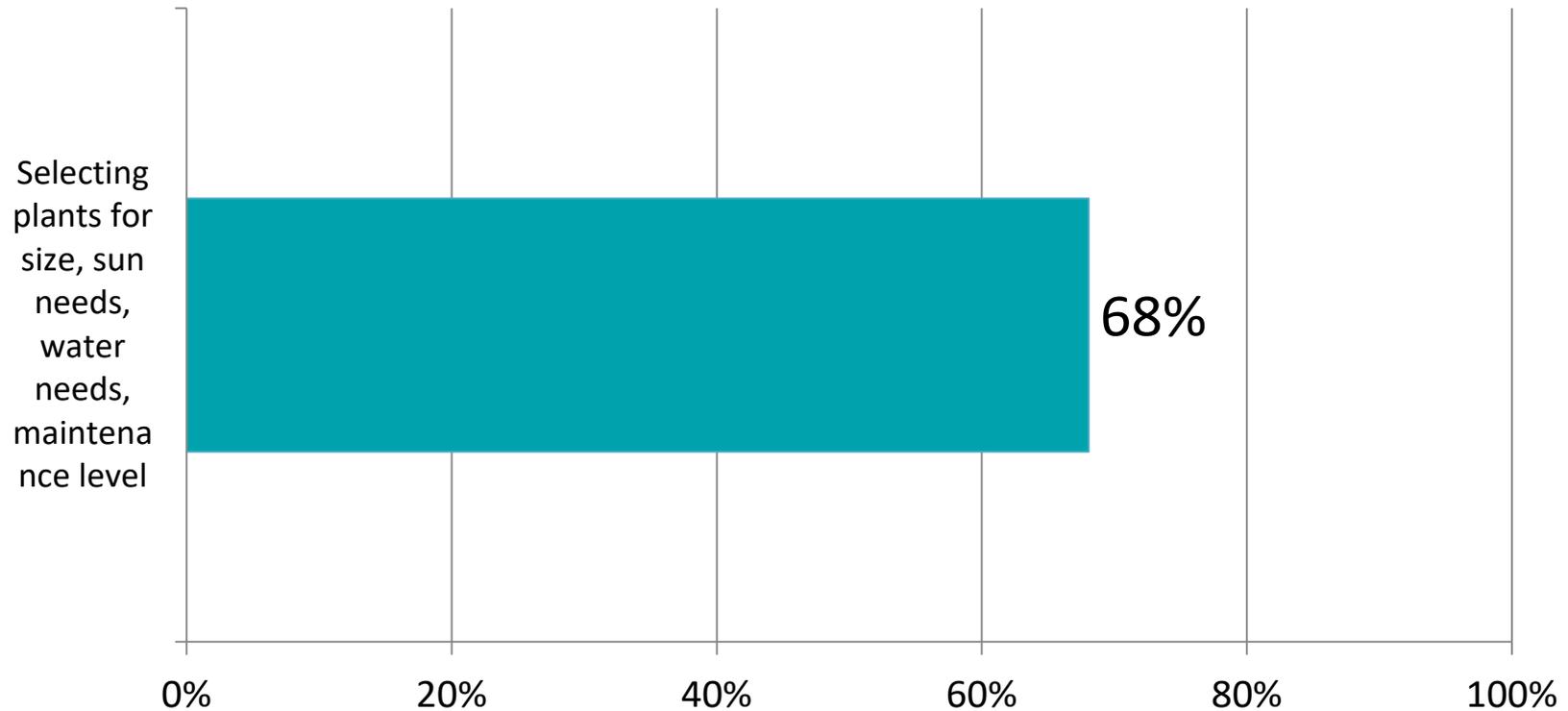
Agriculture and Natural Resources

UCCE Master Gardener Program

Right Plant Right Place

(n = 719)

Participants reporting behavior change in...



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program

Food Gardening Outcome

❖ Grow food more successfully

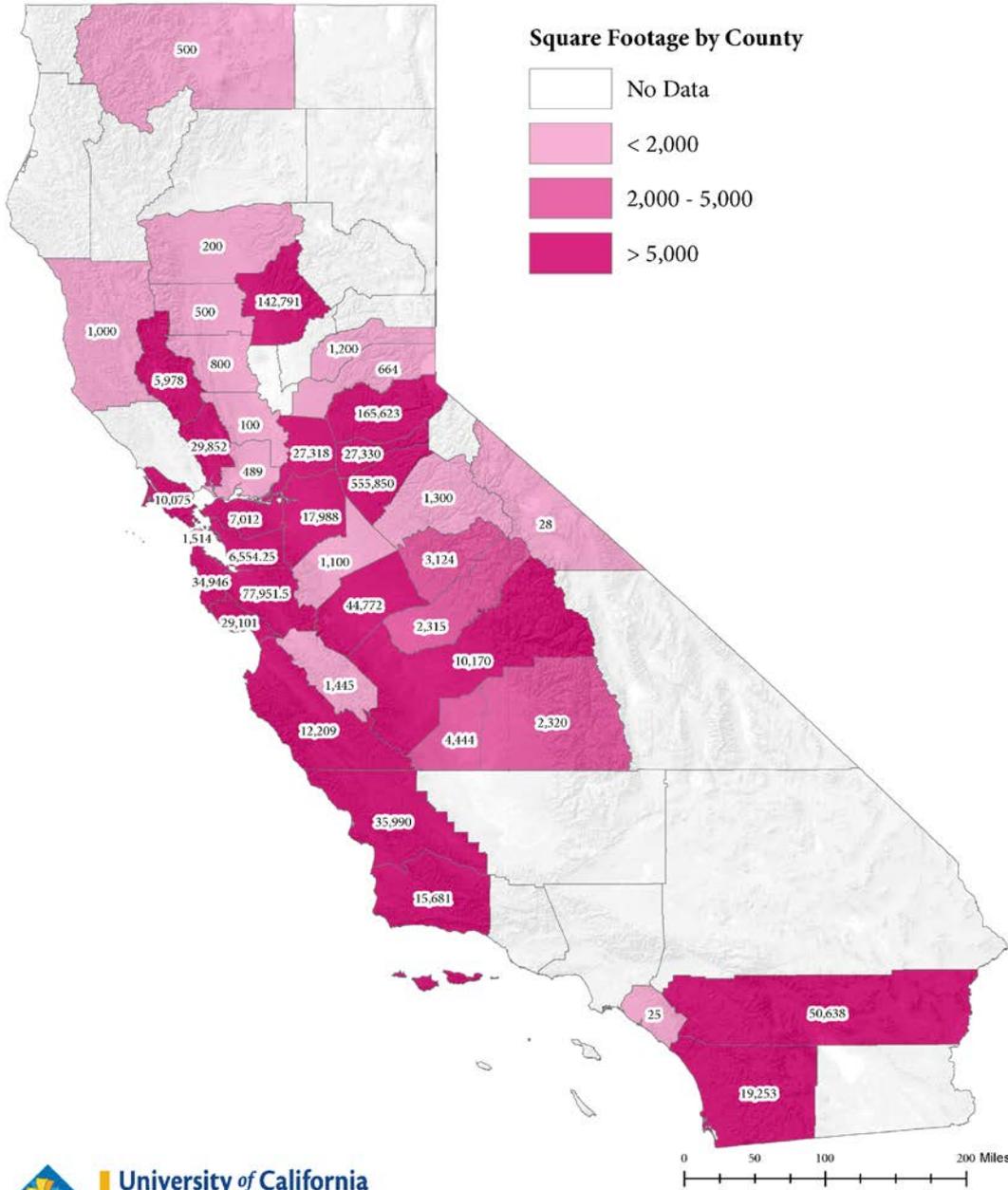


University of California

Agriculture and Natural Resources

■ UCCE Master Gardener Program

Food garden sizes and locations where practices learned from University of California Master Gardener events were applied



Food Gardens

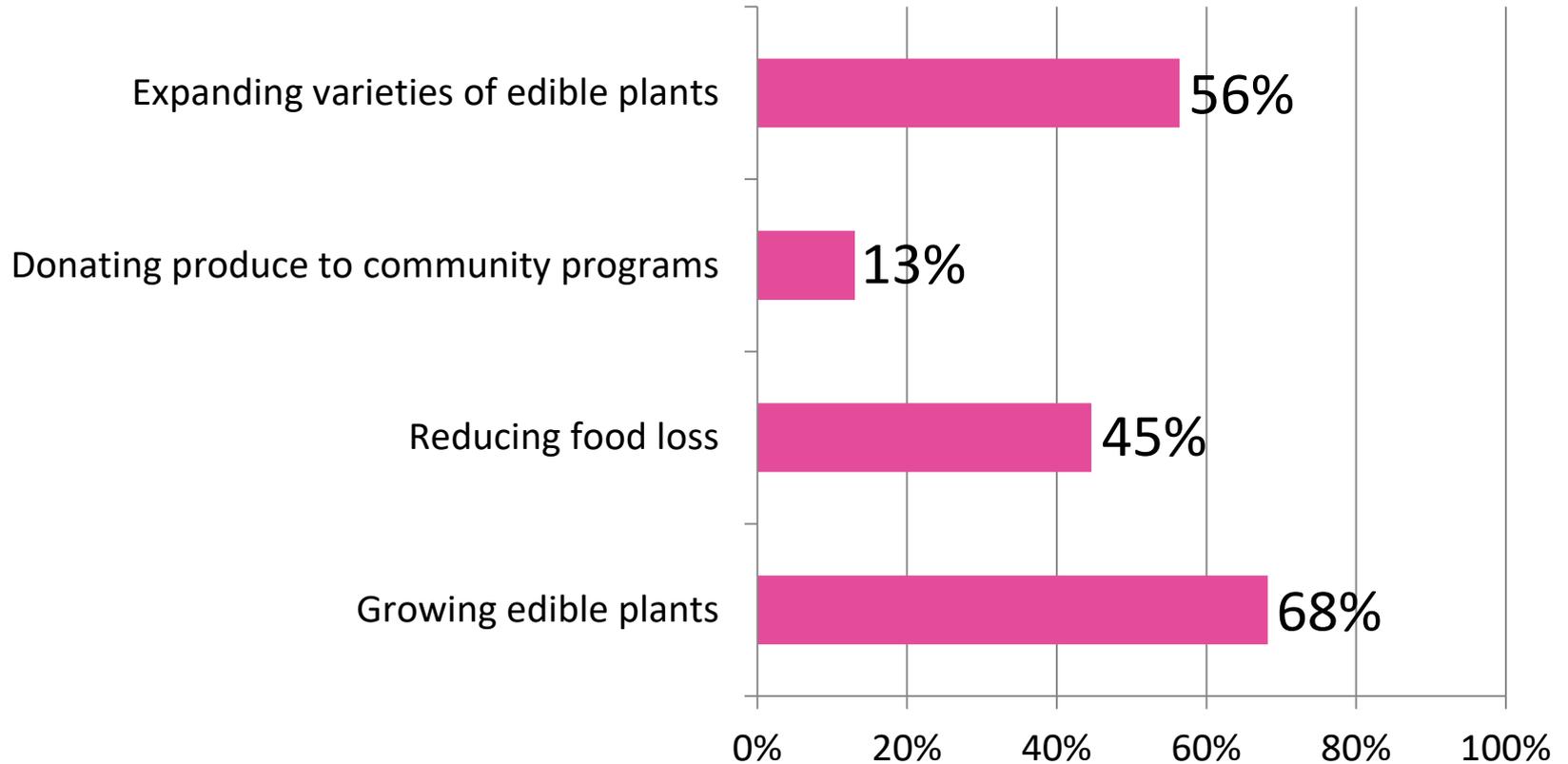
where new or improved practices were applied



Food Gardening

(n = 841)

Participants reporting behavior change in...



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program

Community Well-Being Outcome

❖ Improve quality of life



University of California

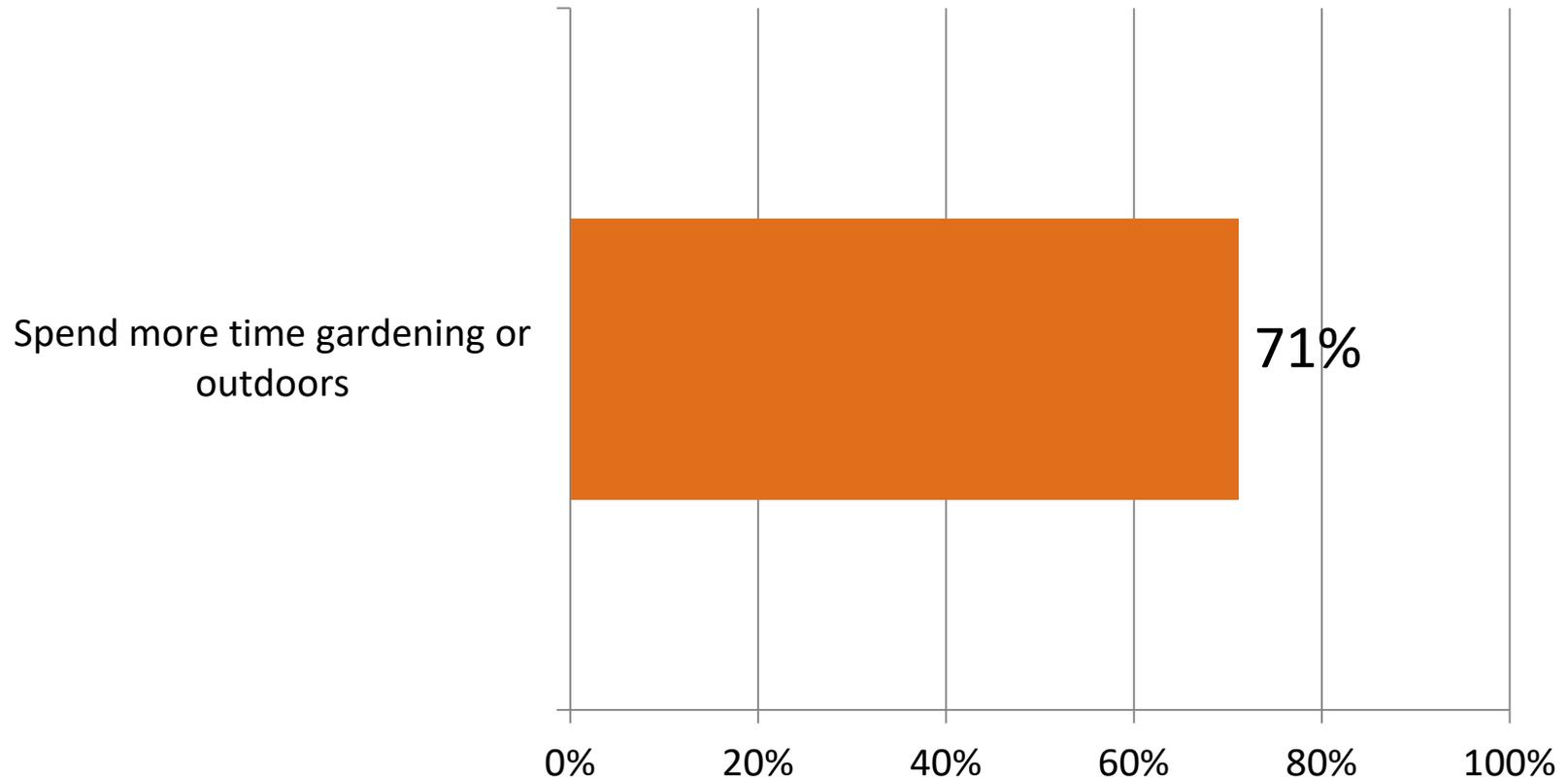
Agriculture and Natural Resources

■ UCCE Master Gardener Program

Spending More Time Gardening

(n=1142)

Participants reporting behavior change in...



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program



Evaluation Process – Statewide Follow Up Survey



University of California

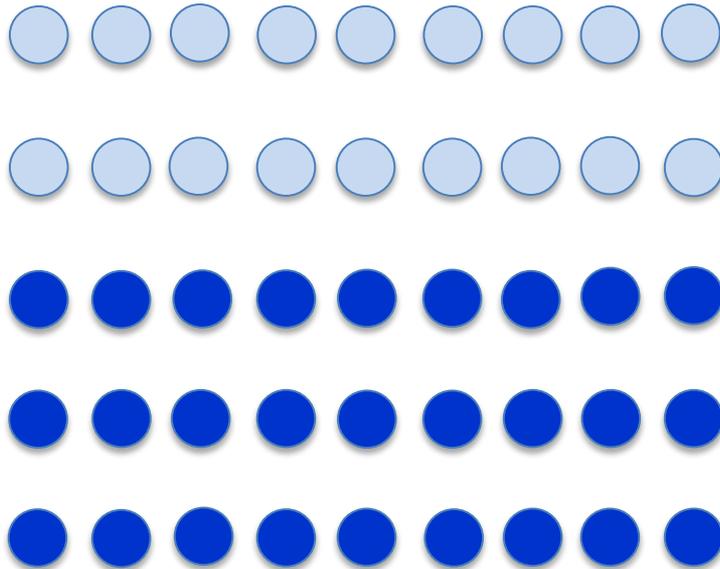
Agriculture and Natural Resources

■ UCCE Master Gardener Program

Roles and Responsibilities

Who	What	When
MG Volunteers	Collect names and emails of public education event participants	At each event
MG Volunteers	Complete and submit excel template	After event
Evaluation Coordinator	Distribute Qualtrics surveys to participants 3 months after event	Ongoing
Evaluation Coordinator	Compile, analyze, and distribute county and statewide data	Monthly/ Quarterly
Statewide Office	Revise annual impact statements and produce annual report	Annually

Year 1 Participation



60%

Counties have begun evaluation process (n=31)

1,505 survey participants

36%

Response rate



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program

Using the Data to Tell Your Local Story

- Share with partners, donors, County Board of Supervisors
- Share with volunteers
- Create and distribute public value statements
- Repurpose public value statements into social media pieces, blogs, newsletter articles, newspaper articles, etc.



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program

Fresno + Madera Master Gardener Programs



Our public demonstration gardens (*Garden of the Sun* and *Three Sisters Garden*) offered **35 on-site workshops to 700 local residents** in attendance

As a result of these workshops:

- 65% of survey respondents started/improved monitoring for insects, weeds, or diseases
- 60% reported selecting lower water-using plants
- 90% reported spending more time gardening or outdoors

Using the Data to Tell Our Public Value

Growing Gardens Improves Community Health and Wellness

Issue

As a society, we are more and more disconnected from nature given our increasingly urban-oriented lifestyles. In 2010, 95% of Californians lived in urban areas, accordingly to the Decennial Census. Research has demonstrated that our health and wellness suffers, including high levels of stress and anxiety, when we do not have the opportunity to interact plants and nature.

What the UC Master Gardener Program has Done?

Through public education, the UC Master Garden program shows people where they can find and enjoy gardens in their communities, and how they can bring plants into their own home environment perhaps with houseplants, container herb garden on a patio, or vertical gardening. In over 50 counties, 6,087 UC Master Gardener volunteers have offered over 446,000 volunteer hours to help the public learn the knowledge and skills to sustainably grow home, community, and school gardens.

Outcomes/Impact

Members of the public working with UC Master Gardener volunteers have helped build and sustain a total 2,867,571 sq. feet (65.8 acres) of garden green space statewide, as reported in an online survey conducted in 2018. **A 2016 nationwide study found that living near greenery may help you live longer.** It is believed that four factors in these greener areas account for the extended lifespan: less air pollution, more physical activity, more social engagement, and most significantly better mental health as measured by a lower prevalence of depression. In addition, 71% of participants (812) reported spending more time gardening or outdoors. **Other behavior research showed that flowers have an immediate impact on happiness, a long-term positive effect on mood, and contribute to more intimate connections between individuals.** Through ornamental and edible horticulture learning experiences, the UC Master Gardener program connects the public to gardens, reconnecting them to nature, and increases green space -- **contributing to improved community health and well-being.**

Lessons Learned

- It can be done!
- Group effort with volunteers, coordinators, academics, etc.
- Input during planning phases, pilot with 5 counties all helped improve the process
- FTE at SWP level
- Show value to participants as soon as possible



Evaluating with Help from Your ANR Community

- Consultation and [training/resources](#) from Program Planning & Evaluation
- Connect with evaluators in the ANR network, such as CE Evaluation Specialist
- UC MG sounding board
- Integrate with other statewide programs' evaluation efforts



Questions



University of California

Agriculture and Natural Resources

■ UCCE Master Gardener Program

Additional Information about MG Outcomes Evaluation

- Link to interactive maps --
<http://ucanr.maps.arcgis.com/apps/webappviewer/index.html?id=31c01857eee349eea29bea9a3d5d3bcd>
- Annual report with findings coming soon!



University of California

Agriculture and Natural Resources

UCCE Master Gardener Program