



University of California

Agriculture and Natural Resources

Master Gardener Program

2nd Quarter 2024

Spring is Coming!!

HELPLINE: Look at the VMS to sign up for the Helpline, Monday afternoons and Thursday mornings. If you need training, contact Marilynne Manfredi or Debbie Morrow if you have ???'s.

April 3rd: Spring Field Trip

April 6th and 20th: Farmer's Market

April 8th: General Meeting

April 19th-20th: MC Plant Sale

May 4th: Farmer's Market

May 13th: General Meeting

May 11th: Drip Irrigation Workshop

May 4th and 18th: Farmer's Market

Merced Fair: June 5th-9th

June 8th: Pest Management in the Veggie Garden—a non-Chemical Approach Workshop

June General Meeting TBA



2024 Merced County Fair, June 5 - 9!

Second Request!

Competition Garden Leadership Teams

"New Orleans" An upscale courtyard for entertaining

At our March monthly Master Gardeners General Membership meeting on March 11th, the majority of the members present voted to move forward with the large Professional Garden at the Merced County Fair.

The reasons for voting in favor of choosing a large Professional Garden plot include:

1. *This is the only fundraiser for Merced Master Gardeners, with the potential to win \$1,200.*
2. *Many members earn their annual required hours by working on the garden plot.*
3. *It is a way to promote the Merced Master Gardeners.*

In order to share the responsibility of the garden, we had thought this year we could divide the workload of the Garden into four Teams:

- A Communication and Organization Team
- A Design Team
- A Procurement Team, and a
- A Garden Installation Team.

To date, only six Master Gardeners have volunteered, replying to the first email. If you replied the first time you are on our list!

Many of the Master Gardeners will likely show up to help with installation, but we need a commitment up front for all TEAMS. (Cont on p. 7)



Merced Master Gardeners

ucanr.edu

For info on the MG Program, click the QR Code..

Garden To-Do's: April, May, and June 2024

By Pat Shay

Prime gardening season is upon us. We've had some good rains. The temps are going up, but not too fast. If you planted spring bulbs, or have beds of them from years past, they are blooming, or getting ready to and you are itching to get out there and Do Things! Read, Set.....GARDEN!! Before you go 'over board', remember that we can still have a frost, so do not plant out fragile starts just yet. It may seem like a good idea to get a jump start on annuals and veggies, but planting too soon might mean that you'll get to plant again.

Take Note: Merced College Plant Sale is April 19 and 20! Go to their FB page to sign up!

April

If you haven't already, do the ground work, now. Make sure beds are free of weeds and debris from recent rains. If there are low spots, level them off now. With recent light rains, it is easy to see where water has collected so fill in holes that might lead to drowning new plantings.

Check irrigation systems. Look for missing emitters or those that don't work – replace. Check timers to be ready for dry weather and higher temps when they arrive.

Monitor soil moisture so you know when start irrigating. Continue to monitor to fine tune how much irrigation is sufficient.

Take note of places in the landscape where plants need to be replaced and make a list of things you might want to add, giving particular thought to grouping plants with similar water and sun/shade needs. Also look notice things that don't seem to be thriving and consider moving to a different location that might be more suitable.

While the ground is still moist and easy to work, weed thoroughly and keep at it as necessary.

Aphids may soon appear, be prepared to flush off with the hose until lady beetles arrive to keep them under control.

Clean the ground under camellias, azaleas and rhododendrons to discourage disease and add acid fertilizer as directed on label.

Sow hardy annuals in beds or in pots to add color. Plant summer bulbs and rhizomes.

Lightly fertilize perennials as the temps increase. Remember that California natives, as a rule, do NOT need fertilizer.

May

Fertilize roses as buds appear.

Plant flowering annuals and all summer veggies. Consider employing edible gardening practices and add some veggies/berry plants to annual beds. Edible flowers, carnations, violas, lilacs, roses, lavender, marigolds and nasturtiums and herb blossoms in your beds will attract beneficial to aid in general pollination and help control harmful pests.

As you add tender young annuals to the garden guard against too much sun too soon. Some may need afternoon shade for the rest of the season.

Make sure all young trees and shrubs are staked against too much wind. Remember not to stake too tightly so that the plant has some flexibility as it grows stronger.

Prune spring-flowering trees and shrubs after bloom.

Monitor weed growth as you begin irrigation.

Begin mulching all beds to prepare for increased temps on the horizon.

Be water wise – irrigate in the morning before the sun evaporates the moisture. Monitor closely as temps in May can vary from cool (less water) to fairly hot (more water).

Garden To-Do's: Continued

June

Mulch, mulch, mulch.....helps soil retain moisture for the plant's use and reduces weed growth.

Keep mulch at least 6 inches from the base of trees and shrubs to prevent fungus/disease.

Continue to fertilize roses and dead-head as needed – the more you dead-head the more re-bloom!

Monitor suckers on fruit trees and remove.

Enjoy bird visitors to your garden. If you have hummingbird feeders be sure to empty and refill at least every other day. Provide a birdbath and clean/refill often to prevent disease. Place a cork or two in a bird bath for bees to land on while getting a drink. As the temps rise, it is vital that they get enough water to keep their hives cool.

If you have a wisteria, prune it now to ensure good bloom next year.

Note from Delores:

If you like to use coir as mulch, you can buy dry blocks. Open them, put them in a half barrel with water, and it's ready to spread in a few minutes.



Skelton Flower: The skeleton flower is whiteish when dry, but when it rains or gets wet, the leaves turn transparent and all the parts of the interior of the leaves are on full view. When they dry, they become white again!



Succulent with a myriad of spring flowers.

Thinning Peaches and Other Fruit Tom Dinwoodie



Peaches require early thinning to produce the largest high quality fruit. Early means just as bloom ends and very small fruit appear...now!

Remove all fruit within six inches of thin branch end. Thin to one fruit every hand's width - four inches - or more. Twist the young peach and gently pull. Consider how large and heavy the fruit will be at picking. Less is better.

Do NOT let excessive fruit shape your tree with downward pointing and/or broken limbs.

So Much Info to Learn and Remember!



Quarantine in Action.



E
N
T
O
M
O
L
O
G
Y



Pruning is love!



Tomato Tom's Garden Tours

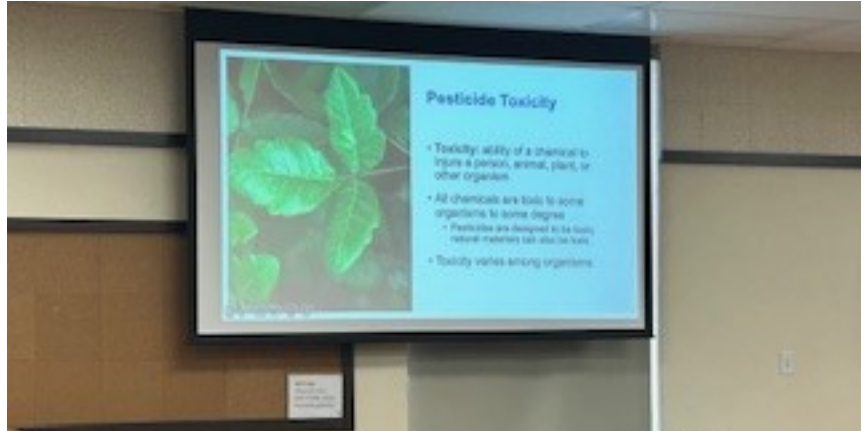


RWA

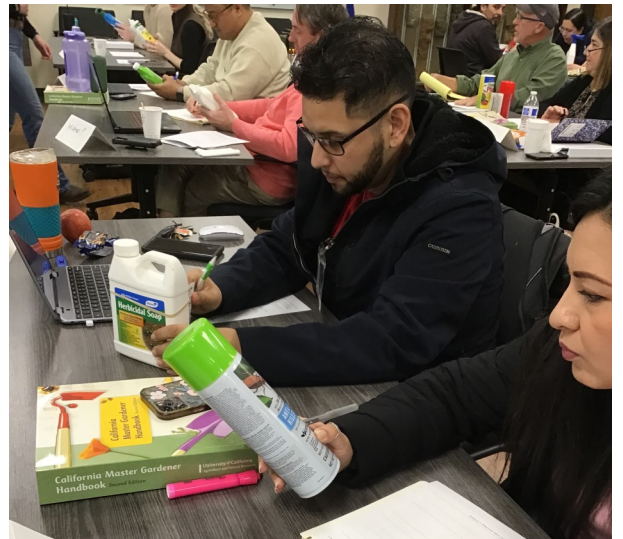
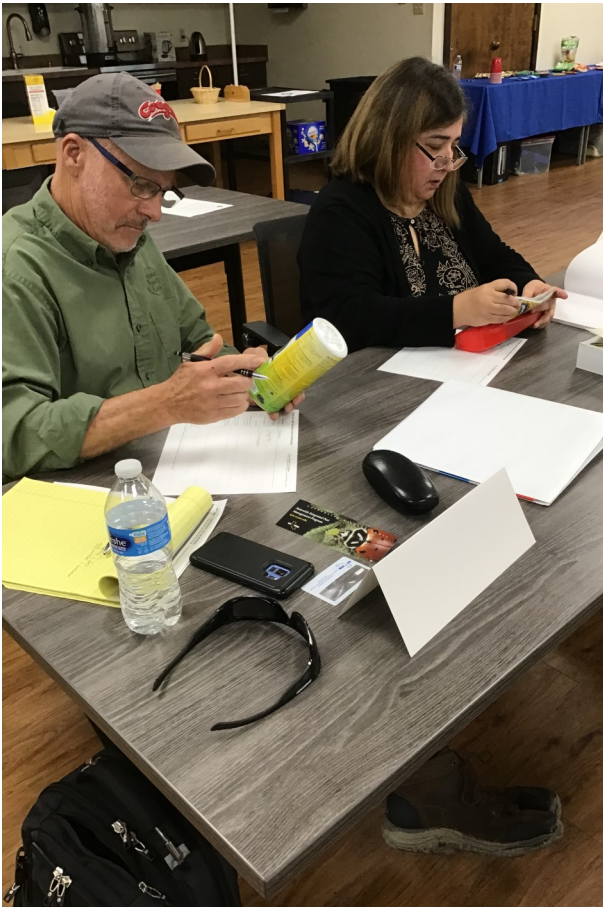
Trainee Presentation



Class of 2024 Learns about Integrated Pest Management with Lauren Fordyce



The IPM presenter gave trainees containers of pesticides to become familiar with information on the labels and answer some specific questions.



Whose Worms Are These?

We gardeners love our worms, especially our red wigglers. However, what most of us don't know is that the worms we love may be aliens flooding our beloved country from other countries. Sound familiar? These are not aliens crossing the border. These aliens came in legally probably and now have colonized, threatening our native ecosystems. What is this all about, you ask? Well, researchers have documented the presence of "scores of nonnative earthworm species across the continent, calling them a 'serious threat' to biodiversity because of their role as 'ecosystem engineers.'"

In an article in the journal *Nature Ecology and Evolution*, researchers looked at data from 1891 to 2021, took reports of nonnative earthworms intercepted by the U.S. Department of Agriculture, used a machine learning analysis of species richness to reveal the concept that nonnative earthworms are probably the dominant species across 73% of the continent, with 28% of North America probably devoid of its original earthworm species.

"Overall, the researchers pinpointed 70 unique species of alien earthworm, the majority of which originate from Europe and Asia. The use of earthworms for fishing bait and the sale of vermi-composting materials are partly to blame, the researchers write, and the creatures tend to enter the continent from coasts and areas with airports.

So what, you might ask. Well, while we see earthworms as positive, nonnative species may have the opposite effect, causing changes in plant composition of forests, different movements and feeding patterns may cause soil compaction, the opposite of what we desire in gardening and optimal plant growth. In fact, non native species may reduce biodiversity and aid invasive plants, hurting trees such as the sugar maple.

The Washington Post. Erin Blakemore. "Study: Nonnative earthworms are all over North America." Feb. 20, 2024.

Garden Tours On the Horizon

Glorious Garden Tour: Saturday, April 13, 2024 9am-1pm
Madera Tickets are \$25 each Contact Caddie Bergen in the Extension Office.

Merced College Plant Sale: April 19-20 1/2 hour sign-ups online.
Go to [Mccd.edu](https://mccd.edu) and search plant sale.

<https://www.eventbrite.com/e/merced-garden-tour-2024-along-the-garden-path-tickets-861201164867>



Merced Garden Tour
Wednesday, April 17th
\$25 Adult
\$10 Child



Le Grand Garden Club
presents
"Generations of Gardens"
4 Historic Gardens
&
Vendor Faire
April 24, 2024
10:00 a.m. - 3:00 p.m.
\$30 per person
Gourmet Box Lunch
Included
For ticket information:
Please call 209 - 761 - 6717

Plant Give and Take By Cathy Dunn

On Saturday, March 23rd, more than five (past and present) of our Merced Master Gardeners along with several Fresno Master Gardeners assisted the Merced Grange in their ninth annual Plant Give and Take held in the parking lot of St. Patrick's Church on Yosemite. After several days of rain, the clouds and rain departed, and we enjoyed beautiful, sunny weather for the event.

The event officially started at 9 a.m. and by 8:30 a.m., there was a long line of eager gardeners who were ready to go. As usual, the plants and seeds were well organized and identified with helpful notes. Each table had at least one volunteer to answer questions and make sure the plants were distributed fairly. The crowd was very well behaved and happy to receive free plants and advice. Shortly after 10 a.m., the line was gone and the volunteers made short work of the cleanup.

If you haven't assisted with this event before, please give it some thought. It is really a lot of fun and as a bonus, we got first pick of the plants before the event started and were able to take whatever plants were still available after it was over. It's also a great way to share any extra seeds and plants you have at home, and to share information about our program with interested gardeners. We even had MG'ers come through the line after donating boxes of plants.



The Fair Is Coming June 5-8 Please Do Your Part

(Cont. from p. 1) Last year we did not have as many Master Gardeners as we had hoped to help! If you are able to commit to joining one of the Teams in order to make the Garden happen this year, please reply by email to one of members below.

Sign up NOW to be a leader or volunteer for one or more teams!

Reply YES or NO.

What TEAM do you want to work with?

Reply by text or email.

Mary Shasky – 209.769.8500 or mary@shaskyfarm.com

Janette Hernandez – 209.628.0132 or snet10@sbcglobal.net

Debbie Morrow – 209.761.2536 or debbiemorro@cs.com

Newsletter: Delores Cabezut-Ortiz/Cathy Dunn cabezut48@gmail.com

Column & Photos Contributors: Pat S., Tom, Mary S., Marilynne, Cathy D., and Nicolai.

Want to write a column? Let me know the subject at mmgnewsletr@yahoo.com

Good to know gardening basics:

Merced/Atwater USDA Growing Zone 9a (low temperature range 20-25°F)

Average First Frost 11/11-20 Average Last Frost 3/11-20

Compost Bin and Tumbler

By Nicolai Laquaglia" <nicolaisworms@gmail.com

Note from Delores: In 2010, Nicolai was part of a compost research project in Sacramento. He has written an extensive explanation of the project which is available in the presentation section of the VMS. If you have questions, contact him through the VMS email. The process of composting has been the subject of use and study for hundreds, perhaps thousands of years. It is said that George Washington had a building built to house his compost activity. The UC Davis method, in a nutshell, is that the optimum size of a backyard compost “container” should be one meter cubed, or we usually say 3 feet, by 3 feet, by 3 feet. This is so that the core area, or the hot part, is large enough to cook the materials properly to decompose it all and leave fully composted, safe, weed seed and pathogen (mostly) free compost. In a commercial facility, the maximum depth of the material should be no higher than 1.5 meters. This is so that the weight of the materials don't press down by gravity and reduce the air space necessary for the compost process.

Hot compost is made from a mixture of 50/50 by volume of brown and green, shredded as much as possible to increase the surface area of the materials to facilitate the close contact of the two materials with air and water to feed the microbes that do the composting. If the pile does not get hot rather quickly, an hour to overnight, then there is not enough green (nitrogen), too much water, or too little water. Understanding this helps one to understand the efficacy of some of the devices and the failure of others.

The test group started each composter with the same blend of materials using a fork to fill the unit (a shovel does not work), wet the materials as we filled with water from a hose end sprayer. They twisted and blended the materials and water as they went and added more until the device was full. Some bins were quite easy to fill with this method. The tumblers were very hard to fill and blend.

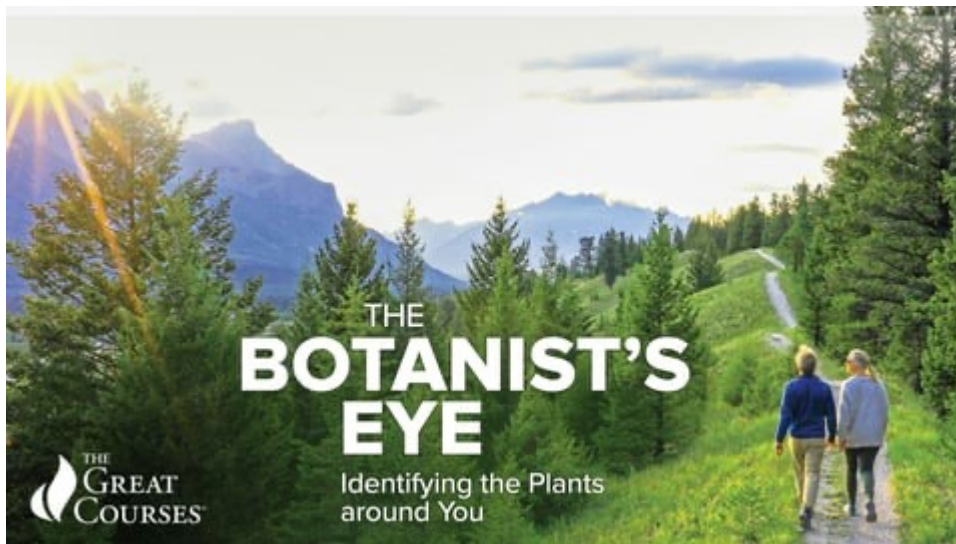
The group took turns going to the project daily and taking temperatures, probing three different places in each composter and noting all temps. They used the OMRI schedule to turn and re-wet the composters. The temperature in a hot compost pile is actively composting starting at 130° and up to 165°. Three days at that temperature range “cooks” the material and then one turns the material and re-wets enough to continue the process. Turning and blending each time feeds the microbe population and supplies air and water to the pile. Once the pile is turned 5 times, it is finished and effectively has reduced the weed seeds and pathogens present to minimal levels. The compost will cool down if not turned and the microbes give off H₂O, so one adds just enough to supply the needs of the microbes.

The bins varied in size, but were similar in temperature and times, so were turned at the same time. The tumblers did not re-blend the material in them, so the group had to put the fork into them, and have someone help spray water while turning the materials. None of the tumblers were equal to 3'x3'x3', so they did not achieve the temperatures needed and had small core areas to “cook” the compost. The tumblers did not produce good usable compost. The Roto Composter had very few small air vents, so it became anaerobic and unsafe to use. The Two-Chamber Tumbler, difficult to put the fork into the openings, was high off the ground. When emptying I, the group pushed a wheelbarrow up to it, turned it with the doors off and it dumped the material on the ground not in the wheelbarrow. The design of two chambers were so that one could start compost after having started the other side. Both sides were too small and were nearly impossible to twist during the compost cycle.

To test the efficacy of each composter, they weighed 10 lbs. of random material from each composter and pushed the compost through a screen. Each resultant screened compost was weighed. The best bin, the Presto Home & Garden Compost Bin, \$35, produced about 90%-95% of screened fine quality compost.

Do you have your Hours In? June 30th is Looming!

Do not forget as Master Gardeners we need 12 hours of Continuing Education for the year. Many of us use fair participation to complete our volunteer hour obligation but CE is another matter. If you need CE, you might want to visit the following *Great Course*. The sessions with Dr. Catherine Kleier, a botany professor from California Polytechnic University, SLO, delivers 30+ sessions on the taxonomy of plants in 30 minute (more or less) intervals. I accessed the course, along with others, free from the county library's online program *Kanopy*. All you need is a library card and a digital online device. This online course is very easy to listen to and is down to earth. *Kanopy* also provides access to movies. You could also watch *The Biggest Little Farm*. or a Great Course on Insects. Some of the *Botanist's Eye* sessions are also on YouTube. There are also many articles in the VMS.

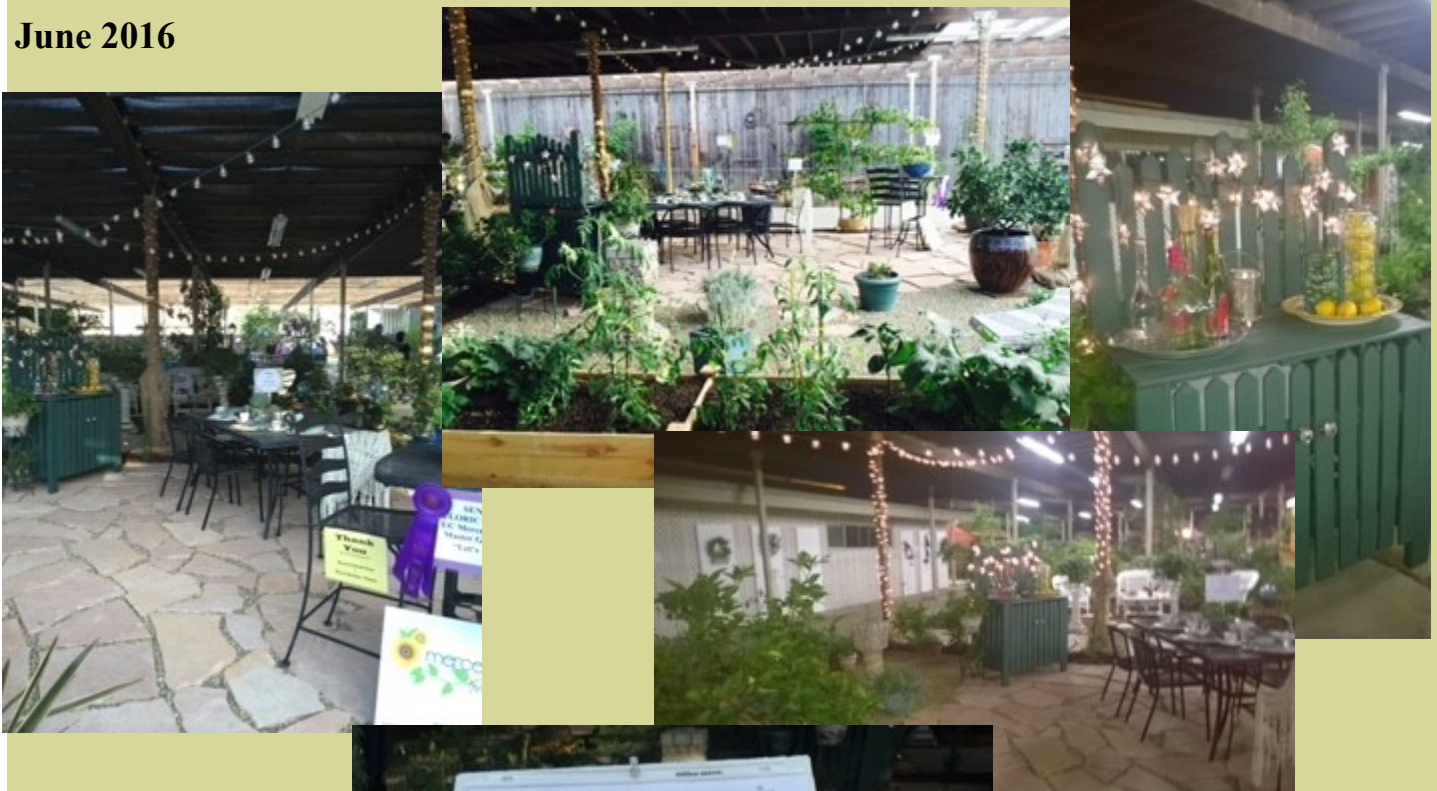


In *The Botanist's Eye: Identifying the Plants around You*, you can explore the most common plant families in North America, as well as some of the fascinating species within them. Along the way, learn the history of botanical science, tips and tricks botanists use to identify seemingly similar plants, and the myriad ways plants define what it means to be human.

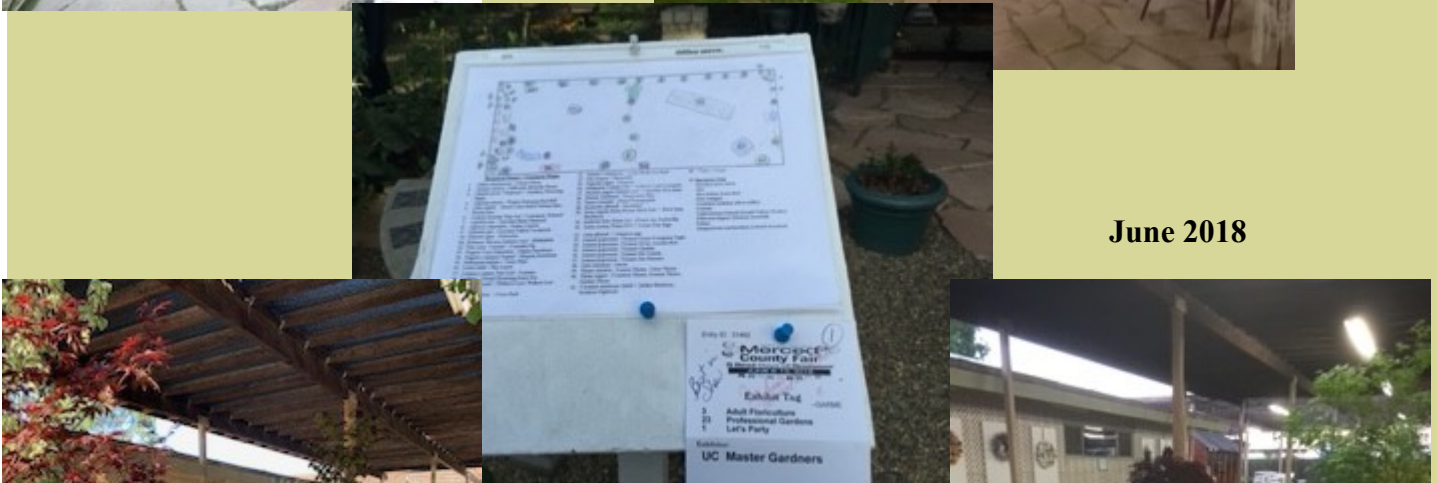
<https://www.kanopy.com/video/12413231>

Samples of past Fair Gardens to whet your appetite: Be part of what we hope are winning teams.

June 2016



June 2018



June 2019

