



**Napa County Master Gardeners
Food Growing Forum
06-13-2021**

**Growing Food in a
Drought**

Maximize your water

- To increase water available outside, minimize use of water inside.
- Consider:
 - Shorter/less frequent showers
 - Less frequent flushing of toilets
 - Only run dishwasher and washer when full
 - Don't let water run down the drain
 - Use grey water from washer to water non-edibles

Make Choices

- Decide what you want to grow/maintain
 - Lawn
 - Trees
 - perennial vegetables
 - annual vegetables

Prioritize

- What do you need to water in your garden?
- Prioritize most valuable plants to least valuable.
- Is it time to get rid of your thirsty lawn?
 - Sheet mulching
 - Cash for Grass – City of Napa

Fruit Trees

- Consider removing old fruit trees that are not producing well.
- Summer prune/thin vigorous trees to reduce water needs.
- Dig down about 6" to see if soil is still moist.
- If needed, water efficiently.

Summer Pruning (Plum)

Before



After



How much water does a tree need?

Canopy diameter (ft.)	1	2	3	4	5	6	8	10	12	15	20	25	30
gal/tree/day													
midsummer (June, July, Aug)	0.4	1	2.1	3.5	5.4	7.6	13.4	20.7	30	47	83	129.7	186.8
spring and fall (April, May, Sept)	0.3	0.7	1.5	2.5	3.8	5.3	9.4	14.5	21	32.9	58.1	90.8	130.7

What is canopy?

Gal / tree / day

12" down

Example

- Assume your tree has a 6' canopy
- You need 7.6 gal/day for this tree
- You want to water deeply enough so that the root zone gets the water it needs:
 - If you water once a week, you need 7×7.6 or 53.2 gal/week
 - If you water every 2 weeks, you need 14×7.6 or 106.4 gal / 2 weeks
- To see which is the most effective, dig down 12" – the soil should be moist.



Tree Ring Irrigation Contraption (TRIC)

<https://ccuh.ucdavis.edu/tric>



The TRIC is not an item for sale, but rather a [kit that homeowners can put together themselves](#). The total cost is about \$100 to make a TRIC for one tree. Add timer.

Avoid watering by hand

- Example of a hose timer



Perennial Crops

- Artichokes, asparagus, rhubarb, cane berries.
- Drip irrigation only
- Mulch well

Annual Vegetables

- Grow only the annual vegetables that you can use and choose varieties that mature quickly.
- This is not the year to expand your gardening square footage.
- Note that you can “dry farm” tomatoes after fruit is set

Prepare

- Prepare beds
 - Amend soil with compost
 - Weed!
 - Water thoroughly before planting and monitor depth of water after planting
 - Use water meter?
 - Most annuals only need water to about 3", tomatoes will need more
 - Mulch heavily to maintain moisture after planting

Types of mulch

- Chips, bark, shavings (best for fruit trees and paths)
- Yard Waste: pine needles, lawn clippings & leaves from your garden
- Ag by-products: straw, rice hulls, barn litter, etc.
- Compost products and (composted) manures
- Man-made coverings: heavy-duty paper, shredded newspaper, etc.



Questions?

Type your questions into the chat function.

UC Master Gardeners of Napa County
<http://napamg.ucanr.edu>