



How To Have A Kitchen Garden In A Drought

Janice Johnson, UCCE Master Gardener of Amador County

I grew up in Western Oregon and never thought I would wish for rain, but this winter has been even too dry for me. Even though we got rain late this winter, it still looks like we'll have a dry year. But with a little thought and planning we can have a water-wise kitchen garden even in a drought.

The amount and quality of vegetables you get from your kitchen garden are directly related to how well you water, so it doesn't make sense to skimp on irrigation, but it helps to plant and water wisely. Here is a free UC publication on vegetable garden basics: <http://anrcatalog.ucdavis.edu/InOrder/Shop/ItemDetails.asp?ItemNo=8059>.



When planning what to grow this year, think about the size of your garden. The easiest way to reduce water usage is to plant a smaller garden. Here's a link to a UC planting guide: <http://ucanr.org/sites/gardenweb/files/29040.pdf>. The column in the middle of the chart shows the recommended number of plants for a family of four.

Tomatoes are my weakness and according to the chart I only need three to five plants, not the dozen or more I usually grow. This year I'll plant fewer tomato plants, but I will pick varieties that produce well in my area. There are other vegetables that I really don't care that much about, like eggplants. I usually grow a few, just because they are so pretty, but if I want to have a smaller garden this year, I won't miss them.

The biggest mistake that I see as a Master Gardener is improper watering. Gardeners don't water deep enough. Roots grow wherever the water is. Shallow watering wets

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How To Have A Kitchen Garden In A Drought *(Continued from page 1)*



only the top of the soil, which results in the roots staying near the soil surface, where they quickly dry out in hot, dry weather. The plants wilt in the heat, the gardener waters again, but not deep enough, and the cycle continues.

Here's what you need to know to water your kitchen garden well. Early in the season, when roots of young plants are near the surface, you need to water frequently. But your goal should be that as the plants mature, you water them less frequently and deeper until you are watering them once or twice a week slowly and deeply. This allows the water to penetrate deeper into the soil, which encourages deeper roots which are more resistant to drought. Watering slowly avoids run-off and running the water for a longer time allows the water to soak deep into the soil.



Drip System

How do you know if you are watering deep enough? By checking. Water the way you think you should, wait an hour to let it soak in and then with a hand spade dig in the soil to see how deep the water went. Most people are surprised that the water has only gone an inch or two. Deep watering should wet the soil a foot deep or more. For crops like cabbage, lettuce, and radishes, water six to twelve inches deep. Water other vegetables like beans, carrots, cucumbers, peppers, and summer squash 18 inches deep. Water tomatoes, cantaloupes and watermelons even deeper. That's why they say if you keep your tomatoes happy the rest of the garden will be happy!

Applying water slowly and for longer watering times with a drip system or soaker hose and mulching can cut water use by half. A sprinkler timer is a must for most gardeners, as there is no point in having an efficient drip system if you forget to turn it off. They can be as simple as battery powered timers that fit on a hose bib or sophisticated timers with soil probes that only irrigate when needed. Timers with automatic turn-on allow you to water early in the morning, when it is cooler and more efficient. Repair leaky faucets; just one drip per second can cost you 9 gallons a day or 260 gallons a month! Don't waste water that could go on your garden.

Too much nitrogen results in excess growth which requires more water, so avoid excess growth by using less fertilizer and don't apply it as often. I add compost to my raised beds in the spring and fall and I do not need to use additional fertilizer. The compost not only adds nutrients, but improves the water holding capacity of the soil. Another reason not to over fertilize is that excess growth often attracts pests.

Other tips that help to conserve water are planting in blocks rather than rows as more of the soil is shaded. You can also plant shade tolerant plants in the shadow of taller plants. Eliminate weeds and vegetables that are past their prime so that they will not be competing for water with productive vegetables. Here's another great UC link on vegetable gardening: <http://cagardenweb.ucanr.edu/Vegetables/>.



Block Row Planting

My challenge to you is to start planning a small water-wise kitchen garden now, so that this summer you can grow the vegetables that you enjoy and use the most. I bet that with extra attention to details you'll have the biggest and best harvests ever even though you have a smaller garden.

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Truths And Myths About Mulching

Janice Johnson, UCCE Master Gardener of Amador County



If you are a California gardener, conserving water is nothing new and you may already know the benefits of organic mulch. Mulch conserves water by cooling the soil surface and reducing evaporation by restricting air movement across the soil. Mulch also prevents weed seeds from growing and prevents erosion and soil compaction. The best part is that we have a free supply of mulch already in our yards: wood chips, leaves, pine needles, and grass clippings make excellent mulch.

If mulch is so magnificent, what are some of the myths?

One is that you can't mulch with acidic leaves and needles like oak and pine because they will make your soil too acidic. The truth is that only the very top surface of the soil becomes more acidic and it won't have any effect on your plants because their roots are deeper.

The second myth is that mulch is bad because it depletes nitrogen, which is sort of true, but we can use this to our advantage. A three to four inch layer of mulch on top of your soil will suppress weeds. This works not only by blocking sunlight to the newly sprouted weed seeds but also by depleting nitrogen that the weed seedlings need to grow. Microbes at the mulch/soil interface deplete nitrogen in the process of turning the mulch into compost. The nitrogen level is too low for most seedlings to thrive.

The myth is partly true if you are planting seeds because they are suppressed by low nitrogen, just like weed seeds are. But nitrogen depletion is a myth because it's easy to avoid this low nitrogen zone. Start with a thin layer of compost over your vegetable and flower seeds and seedlings. Once their roots are established into the normal growing zone, add mulch. The roots will thrive in the soil beneath the low nitrogen layer.

For established plants the low nitrogen zone is not a problem as it is only at the very surface of the soil; the nitrogen level is normal an inch below the surface. Raking back the mulch when planting prevents mulch from falling into the planting hole where it could break down and deplete the nitrogen, just like it did at the surface. When the new plant is snug in its new home, replace the mulch.

Your three or four inch layer of mulch will continue breaking down over time, becoming compost, so replenish it throughout the year. The compost that it becomes provides nutrients, improves soil oxygen levels, and the microbes and worms will thrive; just like the ecosystem you'd find in a forest.



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The Best Barnyard Chickens For Your Hen House

Janice Johnson, UCCE Master Gardener of Amador County



Choosing the right breed of chickens is one of the most important decisions you'll make for your chicken coop. It's a lot like choosing a marriage partner. Since your chickens can live ten years or more, you want to try to get it right the first time! Chickens come in all sizes and shapes, a rainbow of colors, and a range of personalities that could keep a Freudian psychologist happy. There are hundreds of breeds to choose from so let me help you get started. Two major characteristics to start with are the chickens' size and their personality.

Chickens come in two basic sizes: Standard (large) and Bantam (small). Some breeds are only standard, some only Bantam and many breeds have both large and small versions. The differences involve the size of their eggs, their resistance to predators, and their affect on your garden. So which size is best for you?

Standard size hens lay the same size eggs you buy at the grocery store; bantams lay small eggs. When I'm baking, I use three of my bantam eggs in place of two standard eggs. Another difference is that standard breeds are less

likely to be carried off by hawks, but both sizes can be killed by most other predators. For us gardeners, a big difference between the sizes is their ability to "rototill" your garden. If your chickens have the run of your yard, standard chickens can do a surprising amount of destruction when digging up your garden looking for seeds or bugs and when making the perfect place to take a luxurious dust bath. Because bantams are smaller, they do much less damage. A final difference between the sizes is standard chickens eat more and poop more, which is great for the compost pile, but not if you step in it! If you only have a small area for your chickens, you want bantams. If you want to keep both standard and bantams together, you can, but be sure to pick mild mannered standard chickens so they don't bully the bantams.

Personality is second on my list of what to consider. Some breeds have been bred for laying eggs in a commercial setting and don't make good pets. You probably don't want these, because we all end up becoming very fond of our chickens, even if we didn't intend to. So you might as well start with friendly mild mannered chickens. Not only will they be easier to handle, but you'll have less squabbling in the hen house. The personalities of the different breeds are discussed in a variety of books. Check your local bookstore or online for colorful pictures of chicken breeds. Most hatcheries' catalogs will say if the breed is mild mannered, but they might not mention if they are nervous or flighty. Websites like *My Pet Chicken* not only describe the personality of the breeds they sell, but have a "which breed is right for me" tool, where you answer a couple questions and they recommend a breed that they think is right for you. (<http://www.mypetchicken.com/chicken-breeds/which-breed-is-right-for-me.aspx>)

Chickens are often sold as egg layers, meat, multipurpose, ornamental, or heritage. Don't put too much emphasis on selecting chickens for their egg laying ability. Unless you're going to sell the eggs, a few hens of almost any breed will give you more eggs than your family can eat. It's better to pick the breed based on size and personality. My favorite breeds are in the multipurpose and ornamental groups, such as Silkies, Cochins, and Brahmas.

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The Best Backyard Chickens For Your Hen House *(Continued from page 4)*

There are many other qualities to consider, which I will discuss next month. But before I close, I'd like to tell you about my chickens, which of course, I think are the best! I have Bantam Calico Cochins which look like a big ball of feathers. They even have feathers on their feet, which make them look like they are wearing clown shoes. Just seeing them always makes me smile. Cochins are a popular backyard breed and come in nearly any color you can imagine. Mine are pictured here and their color is called Calico or *Mille Fleur*, which means many flowers.



Until next month, here are some great websites to help you learn about the different breeds and to see what they look like.

- ◆ Feather Site has lots of pictures of pure bred and mixed breed chickens. Be sure to visit them at:

<http://www.feathersite.com/Poultry/BRKPoultryPage.html>

- ◆ Backyard Chickens may be the biggest and most complete online chicken site. Visit them at:

<http://www.backyardchickens.com>

Be sure to check out the "Breeds" tab. After looking at these two sites, you'll be thinking that there's no way you can just pick a single breed or even just a couple breeds. I'll help you with that next month.

No endorsement of products/companies is intended, nor is criticism implied of similar products/companies that are not included.

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Gardening Quote For The Day

"In the garden I tend to drop my thoughts here and there. To the flowers I whisper the secrets I keep and the hopes I breathe. I know they are there to eavesdrop for the angels."

-Dodinsky



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Public Education Classes & Events for Amador and El Dorado Counties – Free!!

Most classes are from 9 a.m. – Noon.

Please call ahead to confirm locations.

Click on the class title to go to our public website and schedule an email reminder for the class.

Amador County

Unless otherwise noted, the location for all Amador County classes is the GSA Building, 12200-B Airport Road, Jackson. Questions? Call 209-223-6838.

May

3: POSTPONED - Attracting Beneficial Bugs, Bees & Pollinators

Please visit the [Amador County class website](#) to check for updates regarding this class.

17: Gardening with Vertebrate and Invertebrate Pests; Wildlife Rescue

The class will present an overview of the use of Integrated Pest Management (IPM) in controlling pests. IPM is a process that can be used to manage pest problems while minimizing risk to people and the environment.

[UCCE Master Gardeners of Amador County Facebook page](#)



[El Dorado County Master Gardener Facebook page](#)

[Download the full 2014 class schedules for both Amador and El Dorado counties.](#)

El Dorado County

Questions? Call 503-621-5512.

May

17: Orchids In The Home

Learn how to grow orchids in your home and get them to bloom. Watch a repotting demonstration. Bring your own orchids for the instructor to examine.

Location: Bethell-Delfino Agriculture Building, 311 Fair Lane, Placerville

21: 9-10am Its Showtime! How to Enter Your Fruit-Vegetables- Plant or Flower in the County Fair

This year, enter the El Dorado County Fair in the “Flowers & Plants” and the “Fruits & Veggies” divisions. It’s fun, it’s easy and YOU can win!

Location: Fairgrounds Floriculture Building

31: Mini Series: Mini-Greenhouses, Bucket Cloning and Compost Tea

Three classes in one! Learn how to root cuttings in inexpensive miniature greenhouses any time of the year, how to clone the more difficult plants like the pros --with hydroponics and aeroponics, and examine the current scientific research regarding compost tea’s benefits and dangers.

Location: Government Center Hearing Room, Building C, 2850 Fairlane Ct., Placerville*

Be a Scientist for a Day

Science is everywhere. Take a walk, visit a park or garden, and help us paint a picture of California’s food and water resources. The University of California is conducting three science projects on May and needs your help collecting data. Visit our day of science and service website at http://100.ucanr.edu/Day_of_Science_and_Service to participate in your own home counting pollinators, listing water conservation methods, and mapping where your local food originates.



UCCE Master Food Preservers



The UCCE Master Food Preservers of El Dorado County want to extend a warm thank you to the El Dorado County Fairgrounds and CEO, Jody Gray, for providing us with the use of a building for all of our FREE public classes about safe home food preservation. Our free public classes will be twice a week, Tuesdays and Saturdays, July through October. Note our new class location at the El Dorado County Fairgrounds! [Get a map here.](#)

Have a Question for the Master Food Preservers?

Call the Master Food Preserver Hotline: (530) 621-5506 or submit an [online information request form](#). If you have a food safety or preservation question, please call and leave a message; we will be happy to return your call. Or send a question through the email or fill out the online information request form.

[El Dorado County 2014 UCCE MFP Class Schedule](#)

email: edmp@ucdavis.edu
Phone: (530) 621-5506

[Amador/Calaveras County 2014 UCCE MFP Class Schedule](#)

email: acmfp@ucdavis.edu
phone: (209) 223-6857

Next class: May 10, 10-Noon, [Tangy & Sweet Accompaniments](#)
Calaveras County Senior Center, 956 Mountain Ranch Road, San Andreas

Pest Notes

Free Pest Notes are available on a variety of topics. For more information, call or email your local UCCE Master Gardener office.



To explore the Pest Notes on the UC Integrated Pest Management (IPM) website, go to <http://www.ipm.ucdavis.edu>.

Amador & El Dorado Counties Master Gardener Newsletter

Editor: Janice Johnson
Layout Editor: Kim Cohen

Not on our e-newsletter distribution list yet? Know someone who would like to receive our newsletters and notifications on classes and events? Sign up online at <http://ucanr.edu/mgenews>.

Get Answers to Your Gardening Questions Online

http://cecentralsierra.ucanr.edu/Master_Gardeners

- Information about Master Gardeners and how to become one
- List of public classes
- Calendar of Master Gardener events
- Useful links to gardening websites
- Home gardening publications

Got a specific question? Just email us!

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