Launa Herrmann, U.C. Master Gardener, Solano County

All it takes is a little rain, a period of above average temperatures, then more rain and a bit of wind to foster the growth of mushrooms and wood decaying fungus in Solano County. These spore-bearing fruiting bodies sprout in lawns, on the shady slopes of foothills and along tree trunks. The English term “mushroom” emanates from the French word mousseron referring to moss, or mousse. “Toadstool” is a familiar description of a mushroom derived from folklore and fairy tales. Whatever the nomenclature, mushrooms are a fungus with one of the most common and most beautiful being the turkey tail (Trametes versicolor).

Growth Pattern and Color
Turkey tail fungus typically grows on tree bark in clusters or in a rosette pattern, also known as conks or bracts. They often form overlapping rows or shelves. To compare various formations of Turkey Tails and view an example of a large intact rosette pattern visit http://nathistoc.bio.uci.edu/Fungi/Trametes%20versicolor.htm.

Bracket fungi belong to the polypore family. The fruiting bodies of this fungus group form tubes or pores on their underbellies instead of gills. These cream to white colored tubes harbor the developing spores. The upper surface of the mushroom is velvety in appearance and fan-shaped. When fresh, it is flexible and thin to the touch. Its concentric banding in a color palette similar to an actual turkey tail is the reason behind its name. Colors range from soft to bold in shades from brown and gray to white, orange, reddish brown and purple.

Nature’s Composter
Turkey tail fungi plays a key role in decomposing wood and are found on more than 70 genera of hardwoods in the United States. These bark mushrooms also can attack conifers. Preferring the shady, north side of trees, this fungus fruits best during the rainy season, spreading via wind-blow spores that infect older trees and those wounded by boring insects, vandalism or storm damage. With an open eye for trees stressed by drought, this pernicious invader aims for the cambium, breaking down the lignin in the

(Continued on Page 2)
wood and leaving behind white cellulose, hence its classification as a white rot. In addition to decomposing weakened trees and feeding on deadwood, turkey tail fungi act as a clean-up crew making room on the forest floor for new saplings, and in the process, leaving nutrients behind. Truth be told, *Trametes versicolor* is an efficient natural composter.

To learn more about bark mushrooms and to view photos of nine wood decay fungi on California landscape trees, download a PDF file from the University of California Statewide Integrated Pest Management Program at [http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74109.html](http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74109.html).

**Intriguing Culprit**

Currently, scientific studies are underway to learn more about the enzymes *Trametes versicolor* uses to break down the cellular walls of its hosts in regard to the biodegradation of organic pollutants. Researchers are also investigating this mushroom’s immune-enhancing, antitumor and antiviral abilities.

Meanwhile, I play sleuth in my own backyard, all the while wondering why turkey tail is such a persistent interloper in my side yard. I thought I had this fungus on the run. Three years ago, while cleaning up leaf debris, I had discovered a plethora of gorgeous velvety bark mushrooms on the trunks of two old trees, one a peach, the other a nectarine. At the time, I wasn’t sure what I was dealing with. But now I do. Especially after losing the nectarine, the evidence is clear and the culprit unmistakable. Once again I’m face to face with the intriguingly beautiful Turkey Tail Fungus (*Trametes versicolor*) — and once again I’m spraying fungicide on the peach tree and scraping off bracts.

Why did this intriguingly beautiful pernicious invader attack my two stone fruit trees? Here are three reasons: First, both trees experienced wounding from peach tree borers (*Synathedon exitiosa*) — and they were old. Then, after being stressed by drought, the trees were drenched by rain. And finally, their location on the shady north side of my house provided the ideal spot where this fungus thrives best.

So what’s a gardener going to do? The only thing any true gardener can do. Stand your ground. Fight to the death. Hope for the best. Shake off the dust, then plant a new tree. ☀

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**UC Master Gardeners of Solano County**

**Garden Tour**

**Embark on a self-guided journey through eight private gardens in Fairfield**

**April 29, 2018 ☀ 10am to 4pm**

Buy tickets online: solanomg.ucanr.edu
Or in person on Mondays, 10-noon and 1pm to 4pm
At 501 Texas Street, Fairfield

Cost: $30 prior to 4/29/18
$35 day of the Garden Tour

Questions: mgsolano@ucdavis.edu
GREEN IS GOOD IN ASIAN FOOD
Pearl Eddy, U.C. Master Gardener and U.C. Master Food Preserver, Solano County

In California we are used to many types of ethnic foods, and find that we simply must use some special green herbs in our cooking, such as fresh basil, bay and cilantro. Two other herbs to consider are lemon grass and Kaffir lime leaves, both of which can be found in local markets, but which are also very easy to grow. Both can be grown in pots so that they can be moved easily to survive in severe cold spells.

Kaffir lime trees (*Citrus aurantiifolia*) can be purchased in nurseries in pots, and I still have a small 20-year-old tree in a medium sized pot where I keep it stunted in size by neglecting it and rarely fertilizing it. It is very easy to move when necessary. It sometimes sends out sprouts from below the graft and they should be removed. The leaves are thick, dark green and shiny on the top. The leaf can be used whole in curries or soups or sliced thinly for recipes. Some cooks declare that there is no replacement for fresh Kaffir lime leaves. Others say to peel a thick strip from a lime, bruise or crush it a bit to release flavor and aroma and use a 2-inch by 1-inch strip of the peel for every Kaffir lime leaf the recipe calls for.

Lemon grass (*Cymbopogon citratus*) is a perennial in warm climates, but an annual in cold areas. It likes full sun, ample water and monthly fertilizing with half-strength fish emulsion or vegetable fertilizer during the growing season. It can be grown in a large pot or 5-gallon bucket which can be brought indoors in the winter. It can be overwintered by digging up a few stalks, trimming them down to just a few inches tall, and planting them in smaller pots. Place these in a bright, south-facing window and keep soil barely moist. ☼

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**UC MASTER GARDENERS WILL ANSWER QUESTIONS AND PROVIDE INFORMATION THROUGHOUT THE SEASON**

**FARMERS MARKETS**

Vallejo Farmers Market  
Saturday's 9:00am to 1:00pm  
Vallejo, CA

Vacaville Farmers Market  
Saturday's 8:00am to 12:00pm  
Beginning May 5, 2018  
Vacaville, CA

Benicia Farmers Market  
Thursdays 4:00pm to 8:00pm  
Beginning April 26, 2018  
Benicia, CA

**FAIRFIELD HOME DEPOT**

Every other Saturday  
April through October  
Starting on April 7  
10:00am to 2:00pm  
2121 Cadenasso Drive  
Fairfield, CA

**DUNNELL NATURE PARK AND EDUCATION CENTER**

3357 Hillridge Drive, Fairfield  
10:00am to 12:00pm  
POLLINATORS: UNDERSTANDING, ATTRACTING AND PROTECTING THEM—April 14th  
PLANT PROPEGATION AND DIVISION— May 12th  
CREATING A HEALTHY SOIL—June 9th

**DIXON MAY FAIR**

May 11th-14th  
655 S. First Street  
Floriculture Bldg.  
May 10th—4:15pm to 9:00pm  
May 11th—12:00pm to 9:00pm  
May 12th—12:15pm to 9:00pm  
May 13th—12:00pm to 8:30pm

**TOMATO MANIA**

ACE Pacific Hardware  
April 5th—16th  
627 Merchant St., Vacaville  
10:00am to 2:00pm
SEEDS OR STARTS?
Gene Ekenstam, U.C. Master Gardener, Solano County

With the arrival of the summer vegetable-planting season, we hear the age-old gardening question: “Is it better to plant from seed, or should I get transplants from the nursery or garden center?” My personal preference is to use seeds whenever possible because a packet of seeds costs about the same as a six-pack of the same transplants, I can work on my own schedule rather than the nursery’s, and because I have the flexibility to look for varieties that may better suit the climate conditions of our property.

Let’s take Solanum lycopersicum (tomatoes) as an example. The gardeners in Benicia where I live can be challenged to find the tomato variety that works best for our location. Benicia and Vallejo have generally the mildest weather in the county, with frequent strong winds off San Pablo Bay and parcels that have widely different sun exposures. So I have looked for seeds for tomatoes that do well in cooler climates or that might thrive in short-day (i.e. shaded) situations. Besides, if I want to try to grow and to compare four different slicing tomatoes, I don’t want to buy a six-pack of each and deal with 24. (And, I’m parsimonious enough to hate wasting 20 plants just to get 4. Besides, nobody wants my surplus transplants—they usually have a surplus of their own.) Some of the most unusual varieties, of course, are available only in seed form—it wouldn’t be profitable for nurseries and garden centers to regularly order transplants of tomato that only a few people want. Besides, growing an unfamiliar plant from seed makes for interesting discoveries.

Another feature of growing from seed is that it is useful for folks who follow the “Square Foot” method of gardening. The originator of this approach recommends planting new seeds, or the starts you have in waiting, in the space that has just been harvested in order to have a continuous supply of vegetables and the “squares” keep working for you.

How about using seeds left over from other years? Many seeds can be viable for 3 or more years, so I take that into account when using seeds from previous years and double or triple the number of old seeds in one spot. I then thin plants after they germinate and emerge from the soil. (At Liberty High School, the student gardeners determined that seeds for the 2013 season had a 50% germination rate).

So, do I grow exclusively from seed? Certainly not. First of all, it is not unusual for me to get behind the curve on planting seeds and I decide to start with transplants from the nursery just to meet a production schedule. Secondly, sometimes a plant fails and I need a quick replacement. When the chickens decimated some of our greens, I replaced them (the plants, not the chickens) with starts from the nursery. We generally buy herbs as starts rather than try to grow from seeds, mostly because we can get them as sizeable plants in single pots.

So far, these factors of choice, cost, and convenience are really only matters of personal preference. However, there are circumstances where planting from seed in the spot where you expect the plant to grow is better. In general, root crops will do better if they start and stay in their growing space, rather than being transplanted.

Some gardeners may be particularly invested in the debate about Genetically Modified Organisms (GMO’s). There are seed producers whose farms are certified as non-GMO seed producers, but I haven’t seen any transplants offered by retailers labeled as non-GMO. So, if that is a concern, growing from seed could be important.

Finally, a word about reading the seed packet. Master Gardeners usually advise that the seed packet contains much information about growing the particular plant—how deep, how far apart, etc. But both the general information on the seed packet as well as the seed catalogue description can be specific to the location of the seed company. I chuckle whenever I read the direction “Plant as soon as the ground can be worked in the spring.” That’s a clue that the seed company is in New England or some other frozen-ground place. A more important factor for most of California is the date of the earliest or last frost.

So, yes, it’s the gardener’s work style and interest in having choices that answer the question. Planting from seeds takes more planning, but to me that’s part of the fun.

Happy Summer Harvest! ☼
INVITING BUTTERFLIES TO YOUR GARDEN
Darrell g.h. Schramm, U.C. Master Gardener, Solano County

I’m really quite glad I have butterflies in my garden rather than a unicorn. Imagine how hard it would be to convince people that a mythical beast was browsing among my flowers—and probably eating them too, more than cucumber beetles or a host of aphids would. The fact is that butterfly counts are down in New Jersey, Pennsylvania, Kansas, and other areas of the country. This is especially true of the Monarch butterfly. Fortunately, Solano County is aflutter with these colorful Lepidoptera. And my garden is home to or rest stop for at least seven different kinds. My favorite two are somewhat similar: the Anise Swallowtail and the Western Tiger Swallowtail, both yellow and black, but the Anise is more reticulated than striped. I also see the Painted Lady, the Red Admiral, the Checkered Skipper, and of course the more common Monarch and the White Cabbage butterfly.

I’ve probably seen the Buckeye butterfly but mistook it for a moth, given its brown tones. It’s fairly common in the county, and it feeds on snapdragons, foxgloves, and plantain, all of which I grow. Though I’ve not seen it in my garden, probably because it prefers wooded areas, the Field Skipper is supposedly also common in the county. Nor have I seen Lorquins Admiral, sometimes called the “Banded Butterfly” because of its white band—like a pearl necklace—swooping across its wings. It’s a beauty I’m eager to spot, but then as a caterpillar it favors trees that I don’t grow: cottonwood, other poplars, and willows, which suggests that it likes waterside areas.

Not just any plant attracts butterflies. Daylilies, for example, do not attract them in our area. On the other hand, different butterflies have their favorite trees, flowers, and other plants. The flower whose nectar lures the greatest number and variety of all our regions butterflies is lantana (Lantana camara, L. hirta, and L. montevidensis). A close second is Jupiter’s Beard (Centranthus ruber). The favorite tree of many butterflies in our locale is the California Buckeye (Aesculus californica).

Butterflies grow in stages: egg, larva or caterpillar, chrysalis or pupa, and adult. It is important to recognize these life stages so as not to destroy one of them or its food source. While some feed on a great variety of plant species (known as hosts), others are more specialized. Aside from the long distance migrants like Painted Lady and Monarch, most butterflies are resident creatures, rarely traveling farther than a mile or two, and thus their habitat requirements can be a matter of life or death. After all, the adult butterfly usually lives only from two to four weeks.

For instance, I know that my garden is home to Anise Swallowtails. Because I know that the caterpillar stage requires fennel (Foeniculum vulgare), I have retained a huge fennel plant in my backyard. Though I cut it back twice a year, I do not touch it in the winter months, especially in January, when it becomes the necessary food for the pupa.

To keep butterflies as residents or regular en route visitors, we must make sure that their resources and conditions are consistent, season to season and year to year. Seasonally or annually removing certain plants that might attract butterflies only to replace those plants with something different disrupts their lives. Keep in mind, however, that the plant food is not synonymous with the butterfly. Other vegetation is also important for basking sites, territorial sites, protective sites, and hibernation sites. In hot, dry regions, butterflies may concentrate in areas where seepage occurs or where a stream or other water runs. Thus, microclimate, vegetation structure, moisture, and consistency are all important to retain butterflies in the garden.

However, butterfly authorities assert that butterfly populations

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disappear not only because the habitat changes or deteriorates, but also because of “persistent climate change” and because the competition or predation may have increased. So you may have done all things well to attract and keep these flighty creatures on your property, including no pesticide or herbicide use, but sometimes factors beyond your control may intrude.

Nonetheless, a healthy garden with certain kinds of plants can lure the butterfly. Some of those plants we may consider weeds; however, butterflies have evolved to use such plants as food, plants like milkweed, plantain, mallows, and gnaphalium. The leaves of this last plant have a balsamic scent. Its brownish flowers are not outstanding to us, but we are not butterflies. Gnaphalium looks good in rock gardens and borders. It’s worth a consideration.

I’ve already mentioned lantana and Jupiter’s Beard as flowers to draw butterflies. Others are Aster x frikartii (deadhead it to keep it blooming), the butterfly bush Buddleia davidii (cut it back severely in winter), coreopsis, cosmos, Echinacea, hollyhock (Althaea rosea), the common heliotrope (Heliotropium—it needs partial shade in our area), parsley (especially when it’s gone to seed), penstemon, pincushion flower (Scabiosa), Plumbago capensis, sage (Salvia—most types), sedum, Mexican sunflower (Tithonia rotundifolia), Verbena bonariensis, and the single types of zinnia.

Some plants are particularly alluring to particular species: fennel to Anise Swallowtails, ceanothus to Tortoise Shell butterflies and the various Blues, milkweed to Monarchs, pipevines (Aristolochia californica) to Pipevine Swallowtails, nettles and Baby’s Tears to the Red Admiral. Trees, too, serve as hosts, especially for the larval stage. I’ve already addressed the popular Buckeye. But Mourning Cloaks prefer willows, poplars, and elms; the Western Tiger Swallowtail as a caterpillar too looks for willow and poplar trees but also for cherry, sycamore, and ash.

To further ensure a place for these fluttering insects, the North American Butterfly Association (NABA) recommends mulching all possible host plants, which will provide shelter for the caterpillars of some species; growing a variety of plants that appeal to butterflies; using rocks and gravel for basking areas; and avoiding use of pesticides and herbicides.

For more information, visit www.naba.org, www.butterflywebsite.com, www.kidsbutterfly.org. Butterfly Gardeners Quarterly is a publication that might interest you (P.O. Box 3093, Seattle, WA 98103), as is American Butterflies (4 Delaware Rd, Morristown, NJ 07960 or email naba@naba.org).

And should you wish to visit places particularly conducive to butterflies, the Butterfly Habitat of Strybing Arboretum in San Francisco and the Hallberg Ranch’s Butterfly Preserve in Sebastopol are two northern California locales to do so. Natural Bridges State Park in Santa Cruz and Ardenwood State Park in Fremont both contain Monarch sites where the butterflies rest by the thousands on migration. This year, Chapel Park on Mare Island in Vallejo has been host to a horde of Monarchs. But the most rewarding place to see butterflies is in your own garden or yard, the place where you live. ☼
In the early 1990’s, a number of water agencies started various water conservation programs. These programs were the result of a Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), “first signed in 1991 by a group of urban water suppliers, environmental interest groups, and other interested parties.”

“Water suppliers signing the MOU agree to develop and implement comprehensive conservation Best Management Practices (BMPs) using sound economic criteria.” One such program was the East Bay Municipal Utility District’s free water audits. An auditor would come and interview the resident about their water usage. The auditor would also measure the lawn water usage by putting several cups on the lawn to measure how much water the lawn was receiving. The audit would end with some parting gifts of a bag of faucet aerators, a couple of low-flow shower heads and a displacement water bag to fit inside the toilet tank, and a printed report and recommendations to be mailed in to the customer at a future date.

Another program was the ULFT Toilet Rebate Program offered by the City of Sunnyvale. The homeowner would buy a 1.6 gallon ultra-low flush toilet and they get a rebate of $75 in the mail.

“Since its early beginnings, similar water conservation programs have been introduced and 170 urban water suppliers across California have signed the MOU since 1991.” In 2014, the California Water Action Plan - A 5-year Plan Towards Sustainable Water Management, came about and has been updated.

Our own Solano County Water Agency has their residential rebate programs, including the Water-Efficient Landscape Rebate Program to water customers that convert their lawn to a sustainable watershed appropriate landscape.

Let’s pause for a moment... For almost 30 years, these water conserving programs has continued to expand, even after the drought ended. Of course it came back again. It was gone and it’s back again. Or did we ever get out of the drought?

It’s really hard to think about conserving water when it’s raining buckets outside; the lawn is flooded; and our precious roses are drowning. But the reality is, after the rainy period, drought or not, comes the months and months of dry period where the leaves on the Magnolia tree start dropping from thirst and our lawns reflect the “golden” California hills.

We all need water to survive all the time. Our beloved pets and precious plants need water to survive. Even our most hated garden pests need water. So how can we help our garden survive those dry periods without emptying the water reserves? We can design a low-water landscape.

What if we already have an established landscape? A vegetable garden? A lawn?

The UC Agriculture and Natural Resources has a 4-page handout with some very good practical water conservation tips (Publication 8036) - http://anrcatalog.ucanr.edu/pdf/8036.pdf.

- Analyze your design and available space - Get to know your property. What kind of soil you have, the sun and wind exposure, shades, the microclimates. Consider how you use your garden - entertainment, play areas.

- Prepare your soil - add compost, which improves soil structure, water retention and drainage; remove weeds before you plant.

- Limit turf areas - use turf only where it serves a purpose, such as in play or entertainment areas.

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Put plants in the right places - use low-water use plants like California natives, group plants with the same water needs together.

MULCH, MULCH, MULCH! and MULCH! - 3” of coarse mulch, like wood chips, helps keep moisture longer in the soil and also blocks weeds from growing.

Appropriate maintenance - prune correctly and at the right time. Apply fertilizer appropriately, pull weeds when young, mow the lawn higher. Irrigate efficiently - water only as much as is necessary, use drip irrigation.

These are some of the things we can do in the garden and there are many more. How about planting edibles with non-edible plants in the garden? Step-out the door, pick some lettuce for your salad and some flowers for the entryway.

And as we continue to learn to conserve water, let’s keep in mind the top action item in the California Water action Plan -

Make conservation a California way of life.

Clockwise from Right-Artichoke, Dusty Miller (Centaurea cineraria), CA Poppies, Rhubarb, Cardoon

Don’t forget to purchase tickets for our new event. See inside Master Gardeners personal gardens, ask questions and learn more about gardening.

SOLANO COMMUNITY COLLEGE SPRING PLANT SALE
The Horticulture Club at Solano Community College will host its annual Spring Plant Sale from Thursday through Saturday, May 10, 11, and 12. The plant sale will feature varieties of tomato plants, including heirloom and hybrids, many varieties of pepper plants, vegetable starts, CA natives and drought tolerant plants, trees and plants for outdoor landscaping, herbs, succulents, seasonal flowering plants, house plants, floral arrangements, and more … all in time for Mother’s Day. The plant sale will be in the Louise Wilbourn Yarbrough Horticulture and Plant Science Institute (formerly Building 1000) on the College’s main campus in Fairfield, 4000 Suisun Valley Road, with convenient parking in Lot #6. The sale will be held Thursday, May 10 from 8:00 a.m. to 6:00 p.m., Friday, May 12 from 8:00 am to 5:00 pm, and Saturday, May 13 from 9:00 am to 2:00 pm. Proceeds from the sale provide scholarships, equipment, and reference material for SCC Horticulture students. Cash, checks and credit cards are accepted. For further information, contact Ken Williams at 707-975-6856.
PART I
I learned about Garden Journals while taking my Master Gardener course. It sounded like an OUTSTANDING idea and with the best of intentions, I vowed I would start mine. I did not succeed the first year. Or the second year, or the third year.....you get my drift. Now......5 years later, I just completed my first year of entries. It took some work finding the right balance that fit my very busy lifestyle, being out of the country 4 months a year, and one that would not waste my time and miss the whole reason for having one. Who needs more busy work?

So what stopped me from starting?

* I obsessed on trying to find THE BEST GARDEN JOURNAL. What was I thinking? You can buy pre-made ones anywhere....just Google "garden journals" and bam, you can waste days looking at them all. And then....you buy one with some being at a great cost.....especially if you never fill it out....(Remember all those baby books for your kids you never finished?) I found out, a year later, there is no best template because what is important to one gardener is not important to another. Garden Journals need to reflect the size and nature of the Garden itself and no published journal I ever found, ever fit mine.

* I obsessed about when the perfect time to start would be...... should it be first of year, or perhaps the date of last frost, no wait, maybe just during growing season, nope dormant time is important too....whatever.... and then I missed my own deadlines over and over and just never started.

* I obsessed about it looking perfect. Like I think I am a magazine editor or something! I even fretted over it being on a computer/tablet, or perhaps written old school in pencil somewhere.....Do I need a binder? How do I get pictures in there? Do I need pictures? I had dreams of pictures documenting every change, every plant along in it's life. Wrong!.....What was I thinking? Really? Who carries their cameras or phones with them when gardening? Perhaps some do, but when I am ankle deep in mud and manure and my hands are full of garden joy, the last thing I want to do is stop and take a stupid picture. I have also found that my garden is my haven away from being part of the technology web of the collective world. If they can't text me, call me, email me, I can not be found. I am not giving that up.

* I could not decide on what was important to me at first. I know that sounds silly, but it seemed like everything was important, especially after being trained properly. I had to really think about what I was going for here....a novel about my ever changing garden or make a working tool that improved my chances of success? I also had to come to the realization that no one would likely see this journal but me. So lets say when I finally wrote my first observations they were not designed for publication, but to remind ME of when I saw it, so next year I would be looking for it.

I JUST DID IT
So I started in early December of 2016 and have been continually grateful for having notes. It had all my successes, failures, weather sightings, pests seen, things added, and most importantly, things I LEARNED last year. I chose December to start only because I was pretty much house bound with weather, most things were dormant or getting there, and I needed a rest after my busy fall season preparations. It just made sense to start easy and go from there. I looked at samples of journals from a variety of places and decided to make my own using categories that were important to me.

CATEGORIES I CHOSE AND WHY
I have to say here that I did not see the magic of this system until I had journal entries for 6 months and saw their unique value. I decided to put my journal in my computer and decided to just write stuff down and worry about categories later. After I got into the swing of things I started writing reminders for myself for the future. As I developed what I wanted to be reminded for, I found my categories , my reminders and chore lists. They come back to me right at the perfect time. All I have to do is read what I wrote before and there it all is. I adjust deadlines constantly based on real world observations, not on those little seed or plant directions. My garden is unique to me, with all my micro zones, and when I need to look something up after a failure, I can do so and then I add that to my notes to try next time. No pressure, no guilt. What worked? What did not work? I can decide what to give up on, and what I adjust after some research and try again. Change is good. We are always learning. I have not added pictures yet, but I might do this eventually. Maybe I should add pictures on big stuff like documenting shade and sun during different seasons.... So what categories did I come up with? Let me share. I do highly recommend that you do as I did and not set any guidelines until you see what is important to you. Again, do not make a category to watch until you are ready to do so. You can always add, subtract and change. It is your journal.

So......my recommendations are to start writing your reminders now. See what pops up. You should start seeing a pattern of what is important to you, and what you need to know for next time. In the next article (Part II in the Summer 2018 edition) I will share what I came up with and let's compare. ☺
Are there weeds growing in your garden and do you pull one out and have hundreds more take its place the next day? (Ok, I did exaggerate a little!) Ever wonder what a weeds name is and the best way to manage it in your garden?

Common weed plants are sometimes defined as “a plant that grows where it is not wanted”. You might know the names of some common weeds like, spurge, field bind weed, creeping wood sorrel, mallow and many others. Some people call any plant a weed if they don’t want it in their garden!

Keeping gardens free of common weeds is important because they compete for water, soil nutrients and sunlight for plants we want to grow. Sometimes they serve as hosts for insect pests and pathogens. Personally, as a home gardener, I also want keep my garden free from weeds so I can see my flowers and plants. I think weeds can be notoriously pushy!

“Weed Management is an easy concept in theory; simply remove unwanted plants and prevent new ones from growing.” However, it can be more difficult for various reasons. Weeds produce abundant numbers of seeds that germinate unevenly and can remain viable for years in the soil. For annual weeds you must prevent seed production and deplete seed reserves in the soil. For hardy perennial weeds the underground vegetative reproductive organs must be destroyed to prevent seed production.

Some weeds spread by both seed and rootstock. An example is the field bind weed (Convolvulus arvensis) a hardy perennial. “Effective control requires prevention of seed production, reduction of stored carbohydrates by deep tillage of the root system…” Field bind weed can grow new plants along its underground system and by seeds in the soil.

An excellent way to find information (scientifically studied) about managing specific weeds can be found in University of California (UC) Statewide Integrated Pest Management (IPM) Program’s “Pest Notes” for Home Gardeners and Landscape Professionals. You will find information to identify a weed, its life cycle, and how and when it reproduces. You will find options for removing the weed or at least decreasing the numbers of the weed in your garden beginning with the most effective method that is least harmful to people and the environment.

Here are some ways to find “Pest Notes” and other UC resources to help identify and manage common weeds:

- If you would like, you can look at UC IPM Introduction to Weed Photo Gallery: [www.ucanr.edu/PMG.weeds.html](http://www.ucanr.edu/PMG.weeds.html). Select the plant form or leaf characteristic that best matches your weed and follow the prompts to the UC IPM Pest Note which has information about the weed.

- Know the weed name? You can use the Internet and enter “UC Davis” followed by the weed name and click on “UC Management Guidelines” for the weed to get to the “Pest Note.”

- Master Gardener Hotline: Call 24 hours a day 7 days a week to ask gardening questions. You can access the hotline from our website [www.solanomg.ucanr.edu](http://www.solanomg.ucanr.edu) and send us an email (with pictures of the weed if you can) or by calling (707) 784-1322 to leave a message. A Master Gardener will get back to you as soon as possible. Our website has a great article about weeds – the good and the bad. Yes, a good side sometimes!

- Master Gardeners are at Farmer’s Markets in Benicia, Vallejo, and Vacaville (See Page 10 for details). You can take a sample of a weed (in a plastic bag please) or take a picture of the weed and a leaf (also a flower if possible) and a Master Gardener will help you identify the weed. ☼

Footnotes


3 University of California Integrated Pest Management, Pest Note, Publication 7462, “Field Bind Weed, revised 10/11
# SPRING GARDENING GUIDE

## PLANTING

### APRIL
- Edibles: Loose-leaf lettuce, culinary herbs, chard, carrots, radishes, spinach, sorrel
- Warm-season annuals: Ageratum, alyssum, bedding dahlias, impatiens, lobelia, petunia, phlox, portulaca, salvia, sunflower, zinnia
- Perennials: Ceanothus, lavender, coreopsis, penstemon, rudbeckia, dwarf plumbago, scabiosa, verbena

### MAY
- Edibles: Beans, corn, cucumbers, eggplant, melons, okra, peppers, pumpkins, squash, tomatoes, watermelon
- Butterfly, bee and hummingbird attractions: agastache, alstromeria, bee balm, coneflower, coral bells, fuchsia, honeysuckle, penstemon, salvia
- Plant chrysanthemums for fall color
- Perennial shrubs, trees or vines
- Loose roots of pot bound nursery plants before planting in the garden

### JUNE
- Edibles: Melon, beans and corn from seed; tomato, squash and cucumber seedlings
- Successive plantings of basil and cilantro
- Summer annuals: Cosmos, marigolds, portulaca, sunflowers, zinnias
- Summer-blooming perennials: Daylilies, gloriosa daisy, Russian sage, salvia, yarrow

## MAINTENANCE

### APRIL
- Control weeds—pull or hoe them as soon as they appear
- Fertilize and clean up around azaleas, camellias, and rhododendrons
- Fertilize citrus
- Tune up motor, and sharpen blades on lawn mower. Mow often enough that you cut no more than 1/3 the length of the grass blade in any one session
- Spray olives, liquidambar, and other messy trees with fruit control hormone or blast with hose to curb fruit production

### MAY
- Aerate and fertilize lawns
- Fertilize citrus and established perennials and vegetables
- Deadhead spent flowers to encourage new bloom; pinch back petunias and fuchsia
- Allow spring bulb foliage to yellow and dry out before removing

### JUNE
- Roses: Cut back faded blooms to 1/4” above first five leaflet that faces outside bush
- Fruit trees: Thin apples, pears, peaches, and nectarines, leaving about 6” between fruit
- Sprinklers: Summer heat increases water needs by 2” per week. Adjust sprinklers for adequate coverage and irrigation
- Fertilize annual flowers, vegetables, lawns and roses
- Dig and divide crowded bulbs; allow to dry before replanting

## PREVENTION

### APRIL
- Bait for snails and slugs, following all product instructions
- Rid new growth of aphids with a blast from the hose every few days
- Dump standing water to slow mosquito breeding

### MAY
- Tune up drip irrigation systems
- Build basins around the bases of shrubs and trees; mulch those and garden plants to conserve moisture and reduce weeds, leaving a mulch-free margin around plant crowns and stems
- Stake tomatoes and perennials
- Remain vigilant against snails, slugs and aphids

### JUNE
- Mulch to keep roots cool and to retain moisture
- Check underside of tomato leaves for hornworms
- Spray roses with Neem oil to help control aphids, black spot, whiteflies, and powdery mildew
- Inspect garden for earwigs
- Remain vigilant against snails and slugs