



THE YOLO GARDENER

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A Different Twist: Fairy Gardens

Sue Fitz, UCCE Master Gardener, Yolo County

The modern art form called the “Fairy Garden” has deep roots in human history, dating back to when humans began expanding into the arboreal forests of the European continent. Trying to hew a home and living from the dank, primeval forest that covers the northernmost edges of these lands must have been unbelievably harsh. It’s not difficult to see how constant exposure to danger, from toddlers disappearing into the forest, trees falling the wrong way on woodcutters, unexpected snowstorms, and the like, could start to seem like a deliberate attempt to repel the human invaders. The idea of the forest harboring natural spirits who were not happy about having their homes cut down took root, and in an attempt to placate these malicious spirits, people constructed alternative living at the forest edge. These spirits of nature took many names, depending on the culture involved - Divas, Wee Folk, Nymphs, Hobgoblins, Brownies, and Fairies. The idea that they existed became folklore, passed down through the generations, although, in modern times, the character of these natural spirits changed to benign and cute (thus Tinkerbell).



A sample Fairy Garden created at a public UCCE Master Gardener Class presented by the author in Esparto. Photo by Carolyn Nordstrom

Creating a miniature garden to go along with the fairy house got a start at the World Fair in Chicago in 1893. Japan, up to this time an insular and mysterious country, entered the fair, building a pavilion that included a tea house, and the American public got its first exposure to bonsai and saikei (miniature landscapes). During its six-month run, the Chicago World’s Fair had an attendance of 27 million people - a quarter of the entire population of the United States attended. A journalist, from the widely circulated New York Times newspaper attended the fair, and wrote an

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article about the tiny trees and landscapes. The idea of miniature garden plants and gardens swept the country.

Meanwhile, in England, plant explorers had been bringing new plants back to Britain for more than a century. Many of these plants were from alpine areas and could not be planted straight into the garden. Stone feed and water troughs were pressed into service to re-create the scree environment these tiny, unique plants required. Artistically arranged displays of alpine plants became the badge of the advanced gardener.

In the 1950's, Anne Ashberry, a nursery owner in Essex, England, realized that elevated trough gardens were accessible to those who had trouble bending over or getting down on the ground due to age or disability. Using mainly alpines and slow growing conifers, and including walls, paths, bridges, and statuary, her creations were truly miniature garden scenes. Her book, *Miniature Gardening* published in 1951, became widely circulated. The concept of tiny gardens that anyone could grow was taking root.

But what triggered the *current* fairy garden craze? Epcot Center in Florida has a flower and garden show every year. Sometime around 2009 or 2010, they showcased a Tinkerbell garden, complete with multiple fairy residences. Attendance at Epcot Center averaged ten million visitors a year during this time, so is it any surprise that two years later, every nursery and craft store in America sprouted fairy gardens and all the accoutrements like, well... magic? Add in the soaring popularity of Pinterest at the same time, and well, here we are, UCCE Master Gardeners of Yolo County, giving workshops on how to design and build fairy gardens.

Items needed for a simple fairy garden:

- A Container - twelve to eighteen inches in diameter, approximately six inches deep, with drainage holes, Terra cotta bulb pots, plastic pots, metal cookie tins, sturdy baskets work well
- Fir-bark based potting soil (Avoid peat-based soil. It's too wet.)
- A fairy house about six by six inches by six inches - can be anything (bird house, tea pot, etc. Check thrift stores for ideas.
- Three or four plants half again as tall as the house - use small houseplants or bonsai starts
- Two or three plants half as high as the house
- One or two flat growing plants - a six pack of a low groundcover works well
- Accessories to your taste - pieces of wood, bark, and rock, a fairy about two inches in height, acorns, tiny pinecones, other forest-y objects. Commercial fairy garden furniture (expensive), poke around in thrift stores for interesting small objects.

Construction Steps

1. Line the basket (if using a basket) with a black plastic garbage bag, trim off excess. Poke a few holes in bottom of bag.
2. Fill container three quarters full of moistened potting soil- don't use bone dry.
3. Place the fairy house in the back third of the container. Plant the taller plants behind it, wrapping around the side of the house slightly. Adjust the planting depth so the finished soil height is an inch below the top of the container.
4. Plant the medium height plants alongside the house. You may want to add some soil under the house at this point to raise it up to the finished soil height of the container.
5. Now is a good time to fiddle with your rocks, twigs, bark, etc. placing them alongside or in front of the fairy house. Use flat stones to create a patio or walkway. Use a fist size rock to suggest an outcropping. Use a thick piece of wood for a bench, to line a path, or hold soil back if you want an elevation change.
6. Plant the flat growing plants in front of the house, on either side of the path, or to create a lawn. A pool or stream can be made by using blue flower vase marbles or crushed blue rock. Situate your fairy and any store-bought items.

7. Carefully drizzle water around plants and objects to settle the soil. Tuck sphagnum moss on top of any exposed soil for a finished look. Push any visible edges of the garbage bag under the soil with the tip of your scissors.
8. Check the scale of your design. To create a believable landscape, objects should be in correct proportion to each other. Do not buy a six-inch fairy when the house is only six inches, she is too big, not in scale. The plants may need a bit of a trim, so they frame the house, and don't overwhelm it.
9. Have an obvious focal point, a place where your eye naturally goes to first when you look at the garden. It will probably be the house, since it should be the most massive item in the composition. Do not have everything be the same size, the eye will bounce around and not be able to 'enter' the scene.
10. It can be helpful to Google pictures of fairy gardens and study them. Ask yourself WHY you don't like what you are looking at, more than likely the scale will be off or there will be no focal point.
11. Miniature gardens do not have to be fairy gardens. Try using succulents in the same size container, including a handful of two or three-inch-high, realistically colored plastic dinosaurs. This generates an entirely different vibe, less sweet, but still appealing. A Japanese stroll garden, with tea house, bridge, and stone lanterns would also be very attractive. The possibilities are endless. 🍅



The author demonstrates how to build a garden at her class in Esparto. Photo by Carolyn Nordstrom

Winter Blooming Plants That Will Feed Our Pollinators

Michael Kluk, UCCE Master Gardener, Yolo County

Many of us try hard to have flowering plants in our gardens that will support pollinators. But winter tends to be quiet, wet and brown. We don't think about pollinators during the short, cool days and long nights winter brings. Some pollinators are here, however. Honeybees (*Apis mellifera*) still forage during the sunny days of our mild winters. And Anna hummingbirds (*Calypte anna*), with their bronze-green backs, are with us year-round. Those birds and bees need a place to get a meal in the winter. In late winter, other hummingbirds passing through our area and a few early emerging species of native bees may also be foraging. Here are some ideas for planting both perennial and annual flowers during the winter to provide nectar and pollen that will also brighten up your yard with a few blooms during those short gray days. Dozens more plants that fit the bill can be found with an internet search. Consider both annual and perennial species. The annuals are quick, dependable and, with a little luck, will get you started this year. The perennials have staying power and will decorate your garden for years with foliage, and some with flowers, during the warmer months as well.

Perennials

Vine Hill Manzanita (*Arctostaphylos densiflora*) is a California native that grows six to eight feet tall and wide. It accepts pruning, adapts to a variety of soils, can be grown in part shade and requires little to no added

water. The bell-shaped flowers appear in winter and are a favorite of hummingbirds and bees. Smaller cultivars are available.

Valley Violet *Ceanothus (Ceanothus maritimus)*- is a bee magnet. This low growing evergreen shrub produces spectacular clusters of dark violet flowers from February into early spring. It is tolerant of our heavy Valley soils and can thrive in sunny or partially shady areas. Plant on a low mound to avoid saturated soils. As with all ceanothus, do not disturb the roots any more than necessary when transplanting. Once established, which can take two to three years, it requires very little summer water. Valley Violet is a UC Davis Arboretum All-Star.

Valentine Emu Bush (*Eremophila maculate*) is native to Australia. It is a mounding four by five-foot evergreen shrub that blooms from fall through spring. It prefers full sun but can tolerate some afternoon shade. Its red, tubular heart-shaped flowers reach a peak in mid-February, just in time for Valentine's Day. Prune it back after blooming to maintain a compact shape. It needs to be watered only once or twice per month in the summer once established.

Coastal Gem Grevillea (*Grevillea lanigera*) is a four-foot wide by one-foot tall shrub. It blooms from December to March. Hummingbirds love the pink flowers. It prefers full sun but can handle some afternoon shade. It has low water needs although will require some irrigation in the summer.

Bush Germander (*Teucrium fruticans*) is another UC Davis Arboretum All-Star. It has purple blossoms that can extend from fall to spring. Native to the western Mediterranean, it is extremely tough, drought tolerant and disease free. The full-sized version needs a lot of space being up to eight feet tall and ten feet in diameter. The compactum cultivar is a much smaller three-foot-wide and tall plant.



Fuchsiaflower gooseberry (*Ribes speciosum*) are particularly attractive to hummers. This open form bush sports a profusion of hanging red flowers that peak in February. It has arching growth to four to six feet tall and wide. Plant in partial shade and give it some water in the summer or it will drop its leaves. It has thorns, so be careful.

Winter Daphne (*Daphne odora*) is a native of China. It is a four-foot tall and wide evergreen shrub that does best with afternoon shade in our climate. Daphne does not like soggy soil so plant on a low mound. The flowers open in December and remain through early spring. They are tubular, generally pink and extremely fragrant, earning the Asian nickname of "plant with a thousand-mile scent." Daphne generally do not like root disturbance so transplant with care. All parts of the plant are poisonous to humans and domestic animals. The sap can give some people dermatitis. The flowers will not harm pollinators. This is an Arboretum All-Star, recognized for its many positive traits.

Chasmanthe is a genus of plants in the iris family. *Chasmanthe floribunda* is a good choice growing about three feet tall with orange flower spikes that peak in January. By late spring the foliage has usually died back so spreading plants can take its place. It spreads by multiplying corms and seeds. It is considered invasive by some but is not listed officially as an invasive plant. If you do not want it to spread, plant corms in a pot above ground or a #5 nursery pot buried in the ground and cut off the seed heads before they split. It puts on a beautiful show in the middle of winter. Bees and hummingbirds love it.



Annuals

Snapdragons (*Antirrhinum majus*) come in sizes from eight inches to three feet tall. Flowers come in a huge variety of colors and shapes. Some cultivars have double or bell-shaped blooms. Snapdragons should get full sun and will bloom from fall to late spring.

Violas (*Viola tricolor*), also called Johnny jump-ups, will bloom through the entire winter and self-seed readily so you will probably have them jumping up year after year. Very attractive in mass plantings or as a low edging to taller plants. They are trouble free and put a bright face on a gray day.

Calendula (*Calendula officinalis*) aka pot marigold provides color from late fall through spring in our mild-winter climate. Colors range from the common orange to cream. Plants are one to two feet high and wide. Calendula plants need at least six hours of sun and some water during long dry spells in the winter. They will do well in pots and most soils as long as they have good drainage. They reseed readily.




Sweet alyssum (*Lobularia maritima*) is actually a perennial but generally grown as an annual. It forms a low mounding mat six inches high and up to nine inches in diameter. It has a wonderful aroma and the profusion of flowers covering the plant are favorites of bees and other pollinators. It works well as a bedding plant or in pots. Sweet alyssum will bloom throughout the year but is particularly welcome in the winter when blooming plants are at a premium. It readily reseeds.



Borage (*Borago officinalis*), also known as star flower, is an annual herb that grows from two to three feet high. It has striking blue flowers that are a favorite of pollinators. Commonly thought of as a spring bloomer, it will often start in February in warmer parts of your yard. The bristly leaves have a mild cucumber flavor. They are often chopped up as an addition to a cool weather salad. Borage will readily reseed.

Chinese pinks (*Dianthus chinensis*) are actually biennials that are often grown as annuals. They will bloom in every season. Regular deadheading and the occasional shearing will promote additional blooms. Flowers are fringed with dark centers. Most modern cultivars form a one foot by one-foot mound, but some can be found that will grow as tall as three feet. They should be planted in areas that drain well and need to be protected from slugs and snails. Hummingbirds love them.

It is not too late to plant perennials. They may not flower for you this year but will for years to come. It may be tricky to plant annuals now if we have a cold snap, but success could still be found in a sunny spot with a southern exposure. A few blooming plants will make the winter days seem a little less cold and gray and certainly brighten the day of our resident pollinators.

Thanks to Don Shor and his regular column in the *Davis Enterprise* and the UCCE Master Gardeners of Sacramento County for suggesting the plants in this list I was not familiar with. 

Resilient Bee Landscapes

Tanya Kucak, UCCE Master Gardener, Yolo County

From a bee's point of view, the landscape has changed dramatically over the past few hundred years. According to John Muir, "When California was wild, it was one sweet bee-garden throughout its entire length, north and south, and all the way across from the snowy Sierra to the ocean." Even in 1894, he decried how "plows and sheep have made sad havoc in these glorious pastures, destroying tens of thousands of the flowery acres like a fire." Much more has changed in the 125 years since then. In towns and cities as well as on farms, bee habitat has become scarcer and more fragmented.



Chacon at work in the UC Davis Arboretum. (From her website)

Kim Chacon's goal is to create resilient bee landscapes. Chacon is a PhD student in the UC Davis Geography Graduate Group focusing on bee habitat analysis and design. I chatted with her in October. She also spoke at the California Native Plant Society's (CNPS) Gardening for Biodiversity in a Climate Crisis symposium in September.

"Think of pollination as infrastructure," Chacon said. It is both necessary and fundamental. Bees are a keystone species, which means they provide ecological services that benefit many other species and have a unique and crucial role in the ecosystem. About "seventy-five percent of the world's food crops depend at least in part on pollination," according to a report by the United Nation's Food and Agriculture Organization.

Bees are the most efficient and most important pollinators. But with Colony Collapse Disorder and other vulnerabilities causing declining numbers of European honeybees, native bees are becoming a crucial backup. The numbers of native bees, too, are declining, but "the reasons are not as well studied."

California has sixteen hundred species of native bees, which are primarily solitary. Many native bees' nest in bare patches of sunny ground; others nest in dry plant stems or tree cavities. Their habitat includes the flowers they forage for both pollen and nectar as well as their nesting areas. Most native bees forage about a quarter mile from their nest; others range as little as one-tenth of a mile or as much as one mile. By contrast, European honeybees forage up to two miles from their hive.

Habitat fragmentation is "often cited as the main threat to native bees," according to Chacon. Patches of habitat that become smaller and more isolated from each other are considered to be fragmented, and therefore less ecologically resilient. Her research goals were to define, understand, and "strategically and scientifically solve habitat fragmentation for bees." To do this, she used the UC Davis Arboretum and Public Garden as her study area. The long linear arrangement was ideal for spotting habitat gaps.

Even better, every one of the fifteen thousand plants in the arboretum has already been mapped (and as an undergraduate studying landscape architecture and environmental horticulture, Chacon had worked on the database!). She walked through the entire arboretum once a week for a full year, observing, noting, and photographing every "unique bee/flower association," identified to the genus level, each time. She treated each of the thirty-five gardens in the arboretum as a separate spatial unit. If she saw bees new to her, Chacon netted and collected them so she could identify them under a microscope or consult experts.

Chacon saw bees "every single week" during her year of research. In January 2017 the weekly walk took a couple of hours, but by May or June it became necessary to spend three days on her weekly observations. Observations peaked at the end of May. Here are some numbers:

- 7788 unique bee/flower associations for the year
- 303 plant genera visited by bees
- 28 bee genera observed (6 of these rarely)

Two gardens in the arboretum had more than twice as many bee visits as any other garden. The Mary Wattis Brown (MWB) Garden of California Native Plants peaked in May, and the Ruth Risdon Storer (RRS) Garden peaked in August. Both gardens are large and complex, featuring drought-tolerant plants with long bloom times. The repetition of plants within these gardens, “like threads woven in fabric,” provides paths for bees, Chacon said.

Native flowering plants often peak in the spring, so it was no surprise that the native bees flocked to the MWB garden. Chacon also noted that the numerous trees in the MWB garden provide part-shade microclimates. *Heucheras* and other flowering plants under the trees bloom longer than those exposed to the sun.

The RRS garden was designed for year-round color and features Arboretum All-Stars, which include some California natives as well as plants from other Mediterranean climates that perform well with low maintenance. Herbs in flower are terrific bee plants: rosemary (recently reclassified as a *Salvia!*), culinary sages, lavender, oregano, and mints. Chacon said many of the plants in the RRS garden would be good candidates for small urban gardens, providing lots of variety in a small space.

The number-one bee plant by far was *Salvia*, which had nearly twice as many bee visits as the next genus. The diversity of *Salvia* species attracted different bees and flowered at different times. Number two was *Eriogonum*, the native buckwheats. The rest of the top ten plant genera that had the most bee visits were *Eschscholzia*, *Rosmarinus*, *Gaillardia*, *Erigeron*, *Rosa*, *Aster*, *Scabiosa*, and *Lavandula*.

Chacon recommended two books that list bee-garden plants based on field testing: *California Bees and Blooms: A Guide for Gardeners and Naturalists* (G. Frankie et al., Heyday Books, 2014) and *Attracting Native Pollinators* (The Xerces Society, Storey Books, 2011). She found additional plants that bees like in her research.

For instance, Chacon was surprised at the popularity of *Heliotropium*, which had almost as many bee visits as *Ceanothus*, but was not listed as a bee plant in either resource. (Though *H. curassavicum* is a native rhizomatous groundcover, it can also be invasive or even weedy.) Trees can also support bees, depending on the time of year. In her study, bees used the flowers of *Heteromeles* (toyon), *Cercis* (redbud), *Lagerstroemia* (crape myrtle), *Parkinsonia* (palo verde), and even *Eucalyptus*.

“More plants everywhere” is Chacon’s dream. Pavement, roofs, and even lakes or ponds, “instead of being planted or ecologically beneficial, [are] just taking up space or creating gaps.”

Individual gardens can provide good bee habitat. But if they are isolated bubbles of habitat in a community of lawns, the bee populations won’t be as resilient. You have to “put on your bee glasses” to design for bees, Chacon said. For better genetic diversity and ecological resilience, and a better chance of weathering climate change, a network or corridor of habitats is far more valuable. “Plant with local conditions in mind,” she said.

If you already have a yard buzzing with a diversity of bees, think about supporting the crucial work of bees on a landscape level. If your house is in a homeowners’ association (HOA) or you have an active neighborhood group, one way to help bees is to suggest some plants that every front yard can incorporate to provide better pathways for bees. “Look for spatial bottlenecks,” Chacon advised, and add “steppingstones” of habitat throughout your neighborhood or city. “Tackle areas that are deficient in habitat.”

Chacon has posted some of her photos on her website <https://www.beelandscapes.com/>, and she plans to share her data online as well.



A Catalog of Catalogs

Jack Kenealy, UCCE Master Gardener, Yolo County

As the first rains are falling, I reach for my pad and pen and begin planning for my Spring garden by compiling my seed and plant orders from various publications offered by different nurseries, seed banks, and exchanges. Most of the seed catalogues I use come in the mail, the result of past orders and specific requests. Others I find online. What follows is a list, a catalog if you will, of the catalogs I use each year in the planning process and which I recommend.

There are uses for seed catalogs besides merely placing orders. I save copies of most of them to assist in plant identification. Last year I was especially attracted to a flower, a cock's comb celosia which I was able to identify from a photo I found in a catalog. Also, many catalogs include valuable information regarding the vegetables and varieties found in their pages. These I save for use as a reference during the growing season. Others contain compilations of short snippets of history regarding long gone seed companies, where and how different varieties came to our shores, and other interesting factoids that make for interesting reading.



Perhaps among the most useful of catalogs, *Johnny's Selected Seeds*, (<https://www.johnnyseeds.com/>) is targeted at the commercial grower or the more sophisticated home gardener. If you are curious as to the amount of seed needed per one-hundred-foot row or the average yield per acre, then this catalog is for you. Resistance Codes for Vegetables are listed by type (Fungus, Bacteria, Virus, and Mold) as well as the specific Blight, Mildew or Wilt. In the case of Tomatoes eighteen separate resistance codes are provided. At the bottom of each page are the meanings of the legends which appear at the beginning of each listing. A pair of scissors, for example, indicates a cut flower, while a fork and spoon indicate an edible flower. Exceptional cold or

heat tolerances are noted as are several other characteristics including, but not limited to, insect attraction, greenhouse or container performance and whether the variety is an heirloom.

But the outstanding characteristic of Johnny's catalogs is the range of important and useful information contained in each section. The section on Cucumbers, for example, contains definitions for gynoecious (all female flowers) and parthenocarpic (fruit without pollination), a list of a dozen resistance codes, a seed germination guide showing germination rates at various soil temperatures as well a text box which addresses the following topics: 'Culture', 'Transplanting', 'Direct Seeding', 'Diseases', 'Pests', 'Harvest', 'Storage', 'Days to Maturity', 'Avg. Direct Seeding Rate', 'Transplants', 'Seed Specs' and the number of seeds per 'Packet'. Finally, there are charts, especially useful in the case of carrots, corn, and cucumbers depicting photographs of each variety next to one another on a graph or grid showing the dimensions of each variety.

Unfortunately, the 2020 edition of the *Baker Creek Heirloom Seed Co.* catalog has been sold out and is unavailable to order this year. A PDF of the catalog is available at their website <https://www.rareseeds.com/>. Located in the Ozarks in Missouri, Baker Creek recently opened a seed bank in Petaluma, California. They do much of their vegetable trials in Yolo County near Esparto, so there is a local aspect to this company. An expanded version of their free catalog, *The Whole Seed Catalog* is available for purchase (thirteen dollars) at various locations or online. Baker Creek promotes rare and unusual varieties from around the world as well as more common fruit and vegetables. Wild apples from Tajikistan, white soul Alpine Strawberries, seven-foot-long Gourds from East Serbia, and Japanese Giant Red Mustard are but a few of the exciting and exotic varieties available from this valuable source. Large color photographs of each vegetable variety fill each page. There are herb and flower sections as well that.

Seed Savers Exchange (<https://www.seedsavers.org/>) began in 1975 from a community of gardeners saving and sharing rare, open-pollinated varieties of seeds. This is a fascinating catalog of time-tested vegetables, herbs and flowers each with its own history. A portion of the paragraph on Three Heart Butterhead lettuce is typical. “Steve received the seed from Amelia Scharlach Schini whose grandmother brought it with her when she emigrated from Alsace-Lorraine in the 1880’s. It is still grown by a few elder members of the Apostolic Christian Church. Small chartreuse butterhead with crisp, tender leaves and a mild flavor”.

Peaceful Valley Farm and Garden Supply of Grass Valley California puts out a series of seven catalogs each year and are well worth requesting or reviewing online at <https://www.groworganic.com/>. Among the catalogs are seeds, tools, natural pest and weed control, fertilization, bare root trees and berries, and fall plantings. Peaceful Valley has a wide selection of nut trees, fruit and stone fruit trees, citrus and berries of all kinds, this in addition to a complete line of vegetable and herb varieties.

One quality of a catalog I appreciate is the diversity of varieties within a type of vegetable. Most editions contain one or two varieties of artichoke, asparagus or kohlrabi and a great many tomatoes, cucumbers or corn. Territorial Seed Company (<https://territorialseed.com/>) publishes a catalog each year with multiple varieties of vegetables in the above vegetables and more. This catalog has sweet potato slips of several varieties; these slips are among some of the harder species to find.

Territorial also has an informative text box at the beginning of each species section with discussions of soil temperature, seed depth, days to emergence, soil temperature for transplants, plant spacing, culture, transplanting, common insects and controls, common diseases and disease prevention, harvest and storage.

I have had success with seeds ordered through Sow True Seed (<https://sowtrueseed.com/>). Perhaps because they sell customized seed packets, I received blank seed envelopes for saving harvested seeds and these became very useful. In addition to what one might expect in terms of vegetables, herbs and flowers, Sow True Seed’s website and catalog includes more books than typical. Burpee’s catalog, (<https://www.burpee.com/>) sells Burpee products exclusively of course, but the Burpee seed company has a long and interesting history which dates back to the 1880’s with Atlee Burpee’s intellectual curiosity and love of scientific research into Darwin and Mendel’s theories of hereditary. I enjoy growing some of their newer varieties including corn that has been bred for smaller containers. Botanical Interests (<https://www.botanicalinterests.com/>) is also worthy of review and I’ve had good luck with their seeds as well.

No garden is complete without tomatoes and more than six hundred heirloom tomatoes can be found at Tomato Fest (<https://www.tomatofest.com/>). I’ve grown Rowdy Yates Reds for the last couple of years and I highly recommend this on-line catalog as a great source of both seeds and information. Several categories permit a gardener to select varieties suited to whatever conditions might exist, various types, colors and temperature tolerances are available here.

Pinetree Garden Seeds & Accessories, (<https://www.superseeds.com/>) in addition of a complete listing of vegetables includes sections on sprouting seeds, tobaccos, teas, spices, soapmaking, essential oils and mushroom

kits as well as sections on supplies, books, even knitting wools and patterns. The Natural Gardening Company (<https://www.naturalgardening.com>) is not a huge affair at a mere sixty-seven pages, but it does contain extensive sections on leeks and eggplants. I had great success this year with two of their eggplant varieties.

Most of the catalogs that come to me are predominantly oriented to vegetables although all or most of the editions cited here have large flower sections. Select Seeds (<https://www.selectseeds.com/>) is exclusively a flower seed or plant catalog. Large and colorful photographs accompany each descriptive paragraph together with legends indicating whether the variety needs full sun to shade, attracts bees, butterflies or hummingbirds, provides cut flowers, grows in containers or is heat and drought tolerant.

If Bulbs are an interest, here are a couple of catalogs I would recommend. Breck's (<https://www.brecks.com/>) ships bulbs directly from Holland according to their cover and is a good source for all things bulb including hostas, gladiolas, peonies and dahlias. For tulips, daffodils, or iris, Beauty from Bulbs, published by John Scheepers (<http://www1.johnsheepers.com/>) is an excellent resource. Finally, Stark Brothers catalog (<https://www.starkbros.com/>) has a tremendous selection of berries as well as fruit and nut trees



California Bees and Blooms: A Guide for Gardeners and Naturalists

Sue Fitz, UCCE Master Gardener, Yolo County

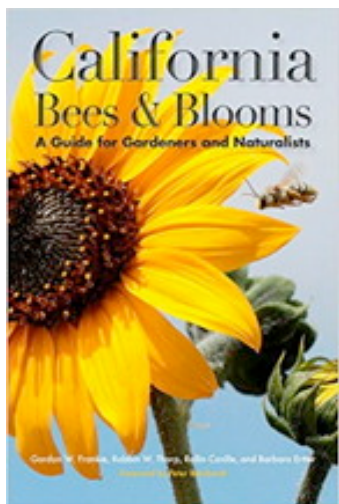
One of the pleasures of creating my garden, is watching all the buzzing, flitting and humming going on once flowers start to open. Some plants even seem to vibrate, their visitors dense enough to set foliage a quiver. But who ARE these guys, partying in my yard? Yes, I know they are pollinators, but I'd like to know more about my guests, their names, lives, floral preferences; any quirks they might have. To do that, I have to be able to identify them, but how do I go about finding that out? I know of no entomology classes geared for gardeners. General insect guides are too broad to be useful. Website information seems to be heavily weighted

towards East Coast insects. It's not like anyone has published a book of common pollinators found in California flower gardens, right? Wrong, somebody has, (at least for bees) and it's wonderful! Even better, the book includes large color pictures of the most likely bees to be seen. And, as icing on the cake, they provide a list of commonly available garden plants that are most attractive to local bees.

California Bees and Blooms is a collaboration between three U.C. bee biologists and a botanist.

- Dr Gordon Frankie is a bee biologist that runs the Urban Bee Lab at U.C. Berkeley. From 2005 to 2017, he studied native bees in garden settings in a dozen California cities from Riverside to Redding. This study is the heart of the book. His students counted the kinds and numbers of bees once a month from early spring to late fall for each flower garden. They also recorded which plants were preferred by which type of bee. This information was at first compiled into lists on the Bee Lab's website (www.helpabee.org). Dr Frankie decided to expand this

information into this book, in the hope it will encourage gardeners to choose to alter their gardens function from purely ornamental, into habitat gardens as well.



- Dr Robin Thorpe, a bee biologist at U.C. Davis, the premier expert in identifying western United States bee species, gives clear information on the difference between the bees discussed, greatly aiding bee identification.
- Dr Rollin Coville, a bee biologist at U.C. Berkeley took the amazingly detailed close up pictures of the bees most likely to be found in urban gardens. These pictures are invaluable for identifying what's flying around in the garden.
- Dr Barbara Ertter, a U.C. Berkeley botanist, provides information about the fifty-three plants recommended as being the most attractive to bees in the garden.

The book extends far beyond insect identification and a plant list. There are chapters devoted to discussing bees in general, how to catch and refrigerate a bee to allow for easier identification, how to design a garden in a way to attract bees attention, and how to modify the garden to provide water and nesting habitat.

I'm not a big book collector, and only have a small shelf of garden books, but *California Bees and Blooms* is worth every inch of shelf space it takes up. I constantly grab it and take it into the garden, every time I spot a new bee species. I also bring it along when I go plant shopping at nurseries so I can be sure what I purchase will be popular with my garden residents. I highly recommend this book to anyone who is curious about what's happening in their garden and want to encourage a diverse and lively population of native bees in their plantings.

As an adjunct to this book, the pictures within it have been turned into a pocket-sized card set called *Common Bees in California Gardens*, that can be purchased separately, making it easier to have at hand when working in the garden.



A Public Appeal

Dear Gardening friends,

The Holidays are right around the corner, and it's time to think about end-of-year giving. There are many worthwhile charities in the area, but why not consider donating to Master Gardeners in Yolo County? As you may know our projects include education in schools, demonstration gardens around Yolo County, information tables at farmer's markets and special events, and public workshops, to name a few. In our mission to provide the best gardening information to the public, we make the community a more beautiful and healthier place to live.

Please help the program to continue to grow! If you are trying to find the right gift for the person who has everything, consider donating to the Master Gardeners in his or her honor. We will recognize donor names in an upcoming Yolo Gardener unless you would prefer to be remain anonymous.

To include the Master Gardeners of Yolo in your charitable gifts this year, please make checks out to U.C. Regents and mail to:

*Master Gardener Program of Yolo County
70 Cottonwood Street
Woodland, CA 95695*



Winter Gardening Tips

Peg Smith, UCCE Master Gardener, Yolo County

Yes, it is winter – so far rather mild with some good gardening days interspaced between the rain. With the ‘warmish’ temperatures of October and November my Magnolia ‘Alexandrina’ is rather confused, already pushing leaf and flower buds. The day length was signaling time to shed leaves, but the temperature was signaling time to push buds. Observing this Magnolia for over 40 years it has steadily come into bloom earlier and earlier and now regularly blooms early in January rather than end of February, early March. As gardeners we need to pay attention to the smaller scale yearly seasonal weather changes and the more long-term effects of changing climate and adjust accordingly.

If you are considering planting any of the stone fruit varieties in your home orchard it is important to look at the ‘chill hours’ required. Chill hours are the number of hours when the nighttime temperature sits between 32-45°. These colder air temperatures are needed to trigger good fruit production. It used to be common to have stone fruits needing over 1000 chill hours. In response to climate change many of the newer varieties available need only 400 – 700 chill hours. All stone fruit trees available have the information about chill hours on the detailed nursery label.

Interested in planting citrus? The important information to be aware of is HLB or citrus greening disease <http://ipm.ucanr.edu/PMG/PESTNOTES/pn74155.html> a disease that has decimated the citrus industry in Florida. Once a citrus tree is infected by the bacterium carried by the insect, Asian citrus psyllid, there is no cure and the tree must be removed. In California there are strict protocols for nursery growers and plants are labelled clearly when meeting these growing standards. **At the present time citrus greening disease is present in southern California, but not northern California so please do not transport any citrus fruit or plant material from southern California when on your holiday travels.**

When fall and winter come gardeners have a tendency to ‘clear the decks’ and rake everything but a slightly messy garden gives shelter through the winter to many of our beneficial insects, so a moderate approach is useful to encourage these beneficials. Lift a scattering of leaves and you will most likely find overwintering lady beetles. Come the spring these very useful beneficial insects will emerge, lay eggs and then the developing larvae will consume large numbers of aphids when they emerge in hoards in the spring. But it is important to clean up any old fallen fruit as this will reduce the possibility of bacterial or fungal disease infecting the new spring growth or developing fruit. With the winter rains make sure pots and trays don’t accumulate standing water, mosquitos only need a very shallow amount of water to lay eggs and produce larvae as soon as the temperatures are ideal for them.

Most of all take a walk in your garden often and observe. It may look uniformly dull and as if nothing is happening but there is much small-scale beauty and discovery in a winter garden.

Enjoy doing some research and planning for the spring. What would you like to change or add to your garden? What new vegetable do you want to try to grow this year? Local websites such as sacvalleycnps.org (California Native Plant Society) and arboretum.ucdavis.edu are great resources for ideas and plant varieties to transition your garden to a reduced water use landscape.

WINTER CLEANUP

- Continue to remove fallen leaves, spent annuals and vegetable plants.
- Add disease free plants and leaves to your compost pile.

- Clean garden pots and store for future use. Turn all unused pots on end to prevent water collection and breeding areas for pests and diseases. Treat pots with a dilute solution of bleach.
- Sharpen, clean and oil garden tools.
- Properly dispose of any old or unneeded pesticides and herbicides. The Yolo County Landfill accepts household hazardous waste every Friday and Saturday from 7:30 AM – 3:30 PM.

WATER

- Adjust the irrigation systems or turn off once the rains begin.
- Check potted plants for moisture, too much water and inadequate drainage can lead to root rot.
- Make sure pots sheltered from the rain by eaves get any supplemental watering needed.
- Consider collecting rainwater for watering plants during dry periods.

PROTECTION

- **Protect frost sensitive plants during heavy frost** including citrus with a frost cover. Plastic sheeting is not recommended to protect plants because it cannot breathe and traps moisture. Old sheets or commercial frost protection covers work well.
- Adding a string of old holiday lights can provide additional heat. (The newer holiday lights (LEDs) do not generate enough warmth to be effective.)
- Watering the soil will also help the soil retain heat and can help the plant's roots and lower branches survive.

PLANTING

- December is the last month to plant spring blooming bulbs such as daffodil, tulip, anemone, and crocus.
- What to plant now: cool season annuals: Primroses, pansies, violas, snapdragons, calendulas and poppies.
- cool season perennials: Cyclamen Hellebores, Daphne and Iberia.
- herbs: cilantro, flat and curly parsley
- bare-root fruits and vegetables: strawberries, berries, rhubarb, grapes, fruit trees, artichokes, asparagus, horseradish, onions, and garlic.
- Keep up slug and snail abatement with hand picking and beer traps.
- Use row covers to protect seedlings, if plants are sensitive to cold nights.
- Extend your harvest time by planting vegetables every two weeks in December.
- Late winter is the best time to plant or transplant most any shrub, roses, or tree.
- After you have discarded your summer vegetable plants, turn the soil over and add compost.
- Sow favorite vegetable seeds in trays early February for your summer garden.

FERTILIZER

- Apply a fertilizer to dormant roses to encourage bud break.

PRUNING

- Roses can be pruned in late December through early February.
- Last chance to dormant prune fruit trees and grape vines.
- Spray deciduous fruit trees and roses with dormant oil to smother pests, such as insect eggs, mites, and scale.

MULCH

- Very important to lay three to four inches of bark mulch in the garden to retain moisture and prevent soil erosion from winter rains. Make sure that the mulch does not cover the crown (the interface area at the base of the plant where the branch growth emerges upwards and the root growth descends) of a plant. Covering that area with mulch will allow fungus and bacteria to thrive.

For further information on the above points refer to these websites: www.ucanr.edu/sites/YCMG and www2.ipm.ucanr.edu

RECOMMENDED BOOKS


California Master Gardener Handbook-Second Edition.

This handbook will be your go-to source for the practical, science-based information you need to sustainably maintain your landscape and garden and become an effective problem solver.

Home Orchard: Growing Your Own Deciduous Fruit & Nut Trees.

Step-by-Step information from soil preparation and planting to watering and fertilizing; pruning and grafting to thinning pest control and harvesting.

Western Garden Book of Edibles – Sunset Menlo Park

Illustrates ideas for growing vegetables in spaces large and small. Gives details on the best season and growing conditions for a variety of fruits, vegetables and nuts. Describes most common pests and diseases and their solutions for each crop. 

**Questions about your garden?
We'd love to help!**

UCCE Master Gardener, Yolo County Hotline.....(530) 666-8737

Our message centers will take your questions and information. Please leave your name, address, phone number and a description of your problem. A Master Gardener will research your problem and return your call.

E-Mail..... mgyolo@ucdavis.edu

**Drop-In..... Tuesday & Friday, 9-11 a.m.
70 Cottonwood St., Woodland**

Web Site http://yolomg.ucanr.edu/

Facebook.....UCCE Master Gardeners, Yolo County



UC MASTER GARDENERS - YOLO COUNTY PUBLIC WORKSHOP SCHEDULE

January 2020

Dates and times subject to change.

Please check at <http://yolomg.ucanr.edu/> for updates.

Workshops are open to the public and are free.

Workshops are held in several different venues throughout the county.

Check the venue address for those in which you are interested.

DAVIS

Date	Time	Topic	Venue
Saturday, January 18	10:00 – 11:30 AM	Rose & Ornamental Dormant Care & Pruning	CPG*
Sunday, January 19	2:00 – 4:00 PM	Gardening Forum and Q&A	Davis Library**
Sunday, January 26	2:00 – 4:00 PM	Davis Year-Round Kitchen Gardening	Davis Library**

*CPG (Central Park Gardens) on B Street between Third and Fourth Streets, Davis, CA 95616

**Mary L. Stephen, Davis Library, Conference room, 315 E 14th Street, Davis 95616

WOODLAND

Date	Time	Topic	Venue
Saturday, January 18	10:00 -11:00AM	Rose Pruning and Care	WCC*
Saturday, January 25	11:00 AM - Noon	Year-Round Kitchen Gardening	Woodland Library**

*WCC Woodland Community College, Building 400, 2300 E. Gibson Road, Woodland, CA95776.

** Woodland Library, Leake Room, 250 1st Street, Woodland, CA 95695

ESPARTO

Date	Time	Topic	Venue
Saturday, January 11	10:30 – Noon	Fruit Tree Pruning	Polestar Farm*

*Polestar Farm, 25491 County Road 21A, Esparto, CA95695



U.C. Cooperative Extension
UCCE Master Gardeners of Yolo County
70 Cottonwood Street
Woodland, CA 95695

The Yolo Gardener – Winter, 2019

Send a Letter
to an Editor!

email: mgyolo@ucdavis.edu

Please put: *Yolo Gardener* in the subject line

or

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Woodland, CA 95695

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This newsletter is a quarterly publication of the University of California Master Gardener Program of Yolo County and is freely distributed to County residents. It is available through the internet for free download:

<http://yolomg.ucanr.edu/>

Jennifer Baumbach, UCCE Master Gardener Program
Coordinator Yolo and Solano Counties