



THE YOLO GARDENER

Spring 2020

A QUARTERLY PUBLICATION BY THE UCCE. MASTER GARDENERS OF YOLO COUNTY

Woodland Community College Plant Sale

Sue Fitz, UCCE Master Gardener, Yolo County

Editors Note: Due to the Corona virus this event may be postponed. Please check our website: <https://ucanr.edu/sites/YCMG> for updated information.

One of the best kept garden secrets in Yolo County is the spring and fall plant sales at Woodland Community College. Held the first two Saturday mornings in both April and October, the sales are a joint venture between the College’s horticultural program, the UCCE Master Gardeners of Yolo County, and the horticultural program at Woodland High School. Each group specializes in a particular type of plant, so there is a wide range of plants to choose from.

The college mainly concentrates on providing vegetable plants, mostly in four-inch pots. The spring sale offerings are multiple varieties of the usual suspects- tomatoes, peppers, eggplants, squash and melons, as well as a large selection of herbs, and less common vegetables like tomatillos, okra, pumpkins and gourds. Depending on student interests, they may also offer annual and perennial flowers.



Master Gardeners take inventory of the plants for sale.

UCCE Master Gardeners from Yolo County offer a wide range of drought -tolerant landscape plants in one-gallon pots. Master Gardeners are plant-crazy people, they scour nurseries near and far to find the best and coolest plants to grow for themselves. They then donate cuttings from their gardens for propagation for the plant sale, so you can be sure to find something interesting and rarely seen when you shop. Just for fun, a small group of them specialize in growing heirloom tomatoes. They pour over specialty catalogs so they can provide about thirty new types every year, as well as a small handful of old stalwarts.

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During the plant sale, the Master Gardeners also offer workshops at the college in a nearby class room, and are available for questions as well.

The high school provides annual and perennial pollinator plants, California natives and succulents, from seeds and cuttings taken from the display gardens that surround the agricultural science area of the school. Occasionally the kids will decide to grow something offbeat, like squirting cucumbers, mouse melons, cotton, peanuts, etc. The plants are supplied mostly as four inch and quart pots.

All the plants offered have been grown successfully in the ground here in Yolo County, before being selected to be propagated for sale, so there is no worry of buying something that will not grow in our area. Pricing is very reasonable, and parking is free at the college on weekends. The money the three groups collect goes to provide for the horticultural programs for the two schools, and the Master Gardeners use theirs to provide funds for workshops and public education. While cash is appreciated, checks are ok as well. At the moment, credit and debit cards are not able to be accepted. A list of the plants each group plans to offer for spring of 2020 follows.

Woodland High School Plant List - Emphasis on pollinator plants

**Arctostaphylos densiflora*- dwarf manzanita
 **Achilla millefolium*- white form
Aquilegia chrysantha- golden columbine
Asclepias curassavica- tropical milkweed
 **Asclepias speciosa*- showy milkweed
 Assorted succulents- agaves, aloes, senecios, euphorbias, echeverias, sedums, etc.
Buddleia davidii- sterile dark purple form
Bulbine frutescens- orange bulbine
Calamintha nepeta- calamint
Calandrinia spectabilis- rock purslane
Coreopsis grandiflora- large-flowered tickseed
Cosmos sulfurus- yellow cosmos
Cuphea ignea hybrid- orange form
Cuphea ignea hybrid- pink form
Dymondia margaretae- silver carpet
Dorycnium hirsute- hairy canary clover
Dorichos lablab- hyacinth vine
 **Epilobium canum*- California fuchsia
Erigeron karvinskianus- Santa Barbara daisy
 **Eriogonum arborescens*- Channel Island buckwheat
 **Eriogonum grande*- red buckwheat
 **Frangula californica*- coffee berry
Gaillardia x grandiflora- blanket flower
Gaura lindheimeri- white gaura
Gomphrena- 'Fireworks'
 **Grindelia camporum*-Great Valley gumweed
 **Helianthus annuus*- lemon queen sunflower
Lantana camara- hybrid lantana
Lavendula dentata- French lavender
Lavendula multifida- fern leaf lavender

Lavendula stoechas- Spanish lavender
Leonotis leonurus- lion's tail
Lepechinia hastata- Chilean pitcher sage
 **Lepechinia calycina*- California pitcher sage
Lobelia laxiflora- Mexican lobelia
Malva sylvestris- zebra mallow
Mina biloba- Spanish flag vine
 **Monardella villosa*- coyote mint
Pavonia praemorsa- yellow mallow
 **Penstemon palmeri*- desert penstemon
 **Penstemon pseudospectabilis*- desert beardtongue
Perovskia atriplicifolia- Russian sage
 **Phyla nodiflora*- lippia
Portulaca grandiflora- moss rose
Ratibida columnifera- Mexican hat
Russelia equisetiformis- firecracker plant
 **Salvia apiana*- white sage
 **Salvia brandegeei*- Santa Rosa Island sage
Salvia canariensis- Canary Island sage
 **Salvia clevelandii*- Cleveland sage
Salvia coccinea- red Texas sage
Salvia farinacea- mealycup sage
Salvia leucantha- Mexican bush sage
Salvia microphylla- hot lips sage
 **Salvia spathacea*- hummingbird sage
Salvia uliginosa- bog sage
Santolina chamaecyparissus-lavender cotton
Scabiosa atropurpurea- wine colored pincushion flower
Scabiosa ochroleuca- yellow pin-cushion flower
Scented geraniums- various types
Sideritis cypria- Cyprian ironwort

**Sphaeralcea incana*- orange desert mallow
Stachys byzantina- lamb's ears
Statice perezii- sea lavender
 Strawberries
 **Symphyotrichum chilense*- California aster
Teucrium chamaedryas- wall germander
Tithonia rotundifolia- Mexican sunflower
 **Trichostema lanatum*- wooly blue curls
Verbena bonariensis- tall verbena
 **Verbena lilacena*- Cedros Island verbena
 *California native

**Woodland Community College - Plant Sale List
 Flowers/Decorative Outdoor**

Alyssum, Oriental Nights
 Bachelor's Button
 Celosia, Chief Red Flame
 Celosia, Flamingo
 Coleus
 Dahlia, Decorative Double
 Dahlia, Giant Hybrid
 Gomphrena, Fiery Sunrise Mix
 Love in a Mist
 Pansy, Got the Blues
 Pansy, Swiss Giants
 Statice, Seeker Mix
 Yarrow, Cerise Queen
 Yarrow, Colorado Mix

Peppers

Big Jim
 California Wonder Bell
 Chinese Giant
 Criola de Cocina

Cubanelle
 Garden Leader Monster Bell
 Golden California Wonder
 Gypsy
 Habanero
 Jalapeno
 Jimmy Nardello
 Jolene's Red Italian
 Long Thin Cayenne
 Midnight Dreams
 Padron
 Pimiento New Mexico
 Poblano/Ancho
 Serrano
 Sunbright Golden Bell
 Sweet Banana
 Sweet Purple Beauty
 Tesuque Chile
 Yellow Monster
 Eggplant
 Astrokam
 Black Beauty
 Hybrid Mini "Hansel"
 Millionaire

Herbs

Basil, Holy
 Basil, Lemon
 Basil, Red Freddy
 Basil, Sweet Italian
 Basil, Thai
 Chives, Polyvert
 Dill
 Lemon Balm
 Onion, Red Carpet
 Onion, Walla Walla
 Oregano, Greek
 Parsley, Italian Flat Leaf
 Parsley, Moss Curled
 Rosemary
 Sage, Broadleaf
 Spearmint
 Thyme

House Plants

Ficus benjamina
Ficus elastica
 Kangaroo Paw Fern
Monstera deliciosa
 Peperomia, Ruby Cascade
Peperomia obtusifolia
 Philodendron hederaceum
Pilea peperomia
 Plectranthus, Cerveza N' Lime
 Pothos
Sansiveria trifasciata
 Spider Plant

Tomato

Ace 55
 Baby Cakes
 Better Boy
 Big Beef F1
 Blueberries
 Celebrity
 Chocolate Sprinkles
 Delicious
 Early Girl
 Roma
 San Marzano
 Sungold

Squash/Melons

Cucumber, Garden Sweet
 Cucumber, Lemon
 Cucumber, Marketmore
 Melon, Honeydew Green Flesh
 Melon Cantaloupe, Hale's Best
 Squash, Acorn Table Queen
 Squash, Delicata, Honey Boat
 Squash, Waltham Butternut
 Squash, Yellow Crookneck
 Squash, Zucchini Dark Green
 Watermelon, Crimson Sweet
 Watermelon, Sugar Baby

Master Gardener Plant Sale List

Sun Perennials (* means that they can tolerate some shade) ** means mostly shade/filtered sun

* <i>Aeonium arboreum</i> – Succulent	Aloe. Succulent
<i>Agave americana</i> – yellow ribbons and Blue	<i>Aloe x nobilis</i> – Golden Toothed Aloe. Succulent
<i>Agave parryi</i>	Aloe
Albion everbearing – Strawberry Plant	<i>Aquilegia chrysantha</i> - Golden Columbine

Asparagus ornemental
 **Bulbine frutescens* - orange
Campsis Radicans - Trumpet vine
Caryopteris incana – Common
 Blue-Beard
 **Coprosma* ‘Tequila Sunrise’ -
 mirror plant
 Cornus, Dogwood - White
 flowering
Cotoneaster microphyllus - Evergreen
 **Cotyledon orbiculata* – Pig’s Ear
 *Geraniums:
 Citronella & Coral
 **Hebe* ‘Patty’s
 purple’
Hemerocallis fulva
 - orange daylily
Iris Spuria - blue
Iris unguicularis – Algerian Blue
 **Lavandula dentate* - French lavender
Lavandula multifida - Fernleaf Lavender
Lavandula stoechas – Spanish Lavender
Lavatera thuringiaca - Tree Mallow-pink
Leonotis leonurus - Lions Tail, Orange Flowers
Leucophyllum frutescens ‘Texas Ranger’ -
 Grey/Green

**Liriope spicata* - Creeping Lily Turf
 **Lobelia laxiflora* – Mexican Lobelia
 **Lychnis coronaria* - Rose Campion
 **Maidenhair Fern
 Peruvian lily-Alstroemeria, Rose colored
Phlomis fruticose - Jerusalem Sage, Yellow Flowers
Salvia x jamensis ‘Jam’e Sage’
Sarcococa ruscifolia – Sweet Box
Sphaeralcea munroana - Globe Mallow, Orange
 Flowers
 ** *Sutera cordata* - Bacopa white
Tagetes lemmonii - Copper Canyon Daisy
 **Teucrium Fruticans* - Bush Germander, Lavender
 Blue Flowers
 **Zephyranthus candida* - White rain lily

California Natives

Baccharis pilularis – Dwarf Coyote Brush
Cercis occidentalis - Western Redbud
Epilobium canum - California Fuchsia
Heteromeles arbutifolia - Toyon, Red Berry
Phyla nodiflora - “Lippia repens” groundcover
Salvia Clevelandii - Cleveland Sage
Salvia mellifera – Black Sage



Selecting Your Tomatoes at this Spring’s WCC Plant Sale

David Studer, UCCE Master Gardener, Yolo County



Master Gardener Treva Valentine and Randy Tafoya, WCC greenhouse technician move tomato plants

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One of the features of the annual WCC Spring plant sale are the tomatoes. UCCE Master Gardeners, Yolo County, spend months selecting, planting, and growing dozens of different varieties. Their selections are based on their own experiences and those of others who have sampled tomatoes at various tomato tastings in previous years.

First, some fun facts.

- The wild tomato is probably native to the Andes Mountains of Peru and/or Ecuador. Pre-Columbian natives of Mexico (the Aztecs?) may have been the first to domesticate the plant. They called these plants *tomatl* in their native Náhuatl language.

- Conquistadors first introduced tomatoes to Europe where they became popular especially in Spain and Italy. Interestingly enough, European settlers to the "New World" introduced them to North America. They didn't become the backyard vegetable garden staple we know today until the early 20th century.
- Tomatoes belong to the Night Shade family--as in deadly night-shade and belladonna. The fruit is acidic--not poisonous, but don't eat the roots or leaves which contain the neurotoxin solanine.
- As a result of our long, hot, dry summers, California produces 95% of the processed tomatoes (for paste, sauce, etc.) in the United States (35% of the world production).

What you should know before selecting the "perfect" tomato plant for your garden.

- Tomato plant varieties have two growing habits--determinate and indeterminate. Determinate varieties grow in compact "bushes" 3' to 4' tall and produce and ripen all of their fruit within a short one to two-week period making them good for canning, stewing, and sauce production. They also don't need as much staking or caging and take up less space. Indeterminate tomato varieties keep growing and producing fruit until they are killed by frost. Some vines get as long as twelve feet. Depending on the weather, one can still get a fresh tomato off the vine as late as Halloween!
- Heirloom vs. hybrid (regular). Heirloom tomatoes openly pollinate which means that you can save the seeds and plant them next year to get the same tomato plant. Hybrids have been cross pollinated in a controlled environment to produce tomatoes with desirable characteristics like firmness, increased fruit production, earlier ripening, disease resistance, etc. Gardeners once assumed that heirloom tomatoes had better flavor but less consistent quality than hybrids. This is not as true today.
- Size, shape, and color are more about personal taste and usage. Tomatoes come in sizes as small as grapes or as large as softballs. They can be round, squatty, elongated, oval, or pear-shaped. Colors range from nearly black to deep red to orange to yellow to green. A mix of different colored tomatoes makes one beautiful salad--I'm just sayin'!
- Ripening times vary by variety. The earliest you can expect tomatoes from your plants is probably June. You might be able to speed this up with a greenhouse and a lot of TLC but the results may not merit the effort.
- Bottom line: plant what you will eat and for that taste may be the most important factor to consider. The top two standard sized tomatoes in the 2019 tomato tasting at the Woodland Farmer's Market were 'Lucid Gem' grown by Laughing Lizard farm, and 'Big Beef' grown by Eckhoff Ranch. The winning cherry tomato was 'Sungold', a perennial winner, grown by Chavez Farms. The three top tomatoes in 2018 were 'Amish Gold', and 'Sweet Pineapple' and 'Sungold' (AGAIN!?). Other high scorers that year included 'Pink Brandywine' Cherry, 'Chocolate Stripe' and 'Virginia Sweet'.

The chart.

- The following chart contains the tomato varieties available at the Master Gardener/Woodland Community College plant sales on the first two Saturdays in April at Woodland Community College. (April 4, and April 11, from 9:00AM to 1:00PM)
- Thank you to Erin McDermind for providing this chart with the advice that if you are looking for 'Hawaiian Pineapple' or 'Green Zebra', you should get there early.
- The Plant sale focuses on heirloom varieties, but you can buy many other varieties both heirloom and hybrid from the local garden center or nursery.

2020 Heirloom Tomato Varieties

Annual Spring Plant Sale – UCCE Master Gardeners of Yolo County
Woodland Community College

Many of the varieties of tomatoes below have been grown for several years by local Master Gardeners at their homes or in our demonstration garden at Woodland Community College. The variety description is taken from seed catalogs, the “Yolo County” comments are based on our experience growing them, and taste tests at the Woodland Farmers Market.

Variety	Type	Description	Color	Ripens
Arkansas Traveler New this year	Ind.	Well known for its ability to produce fruit in hot weather. Abundant crops of deep pink tomatoes that are 6 to 8 ounces and very flavorful.	Pink	Late
African Queen	Ind.	Large potato leaf plants produce heavy crops of 1-2 lb., 3-5”, jade-pink, lightly fluted beefsteak tomatoes with red flesh and delicious flavors. Yolo County: <i>Great flavor, good producer.</i>	Pink	Mid
Amana Orange	Ind,	Huge light orange beefsteak. Excellent sweet almost tropical fruit flavors. Yolo County: <i>Top scorer in 2017 tasting; good producer.</i>	Orange	Late
Big Rainbow	Ind.	Sweet tasting 2# beefsteak fruit. Very striking sliced, as the yellow fruits have neon red streaking through the flesh. Yolo County: <i>A favorite for color and taste.</i>	Yellow	Mid
Black Krim	Ind.	Beefsteak with intense flavor slightly salty. Fruits slightly flattened. Purple/black with green shoulders. Yolo County: <i>Good producer and scores high in taste tests, Master Gardener favorite</i>	Black	Mid
Green Zebra	Ind.	Small, round yellow/gold with green zebra stripes and lime-green flesh. Heat loving with lemon/lime flavor. Yolo County: <i>A must have but doesn't last long off plant.</i>	Green	Mid
Hawaiian Pineapple	Ind.	Large beefsteak with nice pineapple flavor, yellow/orange. Yolo County: <i>Scores high in taste and appearance.</i>	Yellow	Late
Legend	Det.	Short, bushy plants produce 3-4” smooth round fruit with few seeds. Great for salads and canning. Strong tolerance to west coast blight strains. Good for containers. Yolo County: <i>Must have for many Master Gardeners</i>	Red	Early
Lime Green Salad New this year	Det.	Fruits are 3 to 5 oz., chartreuse inside, full of juice and a luscious, tangy flavor. A good variety for growing in containers. Small plants produce abundant sprays of round, lime-green tomatoes that ripen further to an amber color. Yolo County: <i>Extremely hardy plant, quite tasty and performs great in containers.</i>	Green to amber	Early
Mule Team	Ind.	An all-purpose tomato. Vigorous plants bear plenty of 8 to 12-ounce round, bright red tomatoes with excellent flavor and texture. Abundant harvest, long season. Yolo County: <i>Good producer, tasty.</i>	Red	Mid
Paul Robeson	Ind.	Purple/black beefsteak fruit slightly flattened round shape; up to 4” with green shoulders and red flesh; earthy, exotic flavor won “Best of Show” at Carmel Tomatofest. Yolo County: <i>A favorite black slicer scoring high in taste.</i>	Black	Mid
Pink Berkley Tie Die	Ind.	Heavy producer of dark pink/purple fruit with green stripes. Very meaty with excellent flavor Yolo County: Yolo County: <i>Favorite for Master Gardeners' own gardens.</i>	Pink	Early

Variety	Type	Description	Color	Ripens
Pork Chop	Ind.	True yellow medium sized slightly flattened beefsteak. Very sweet with hint of citrus Yolo County: <i>Scores high at Woodland tomato tasting.</i>	Yellow	Mid
Rose	Ind.	Amish heirloom, crack resistant, large, meaty fruit with excellent flavor. Vigorous plants provide a lot of leaf cover preventing sunburned fruits. Yolo County: <i>abundant producer, great flavor</i>	Pink	Mid
Sioux New this year	Ind.	Reliably large harvests even in hot weather. Extraordinary taste in a round, red medium tomato. Yolo County: <i>New this year</i>	Red	Mid
Virginia Sweets	Ind.	Large, yellow beefsteak fruit with red stripes. Sweet rich flavor from abundant harvests. Yolo County: <i>Good taste with moderate productivity</i>	Yellow	Mid
<u>Paste/Sauce/Drying Tomatoes</u>				
Costoluto Genovese	Ind.	Heat loving meaty, heavily lobed shape. Full flavor slightly acid, favored by Italian and American chefs. Good for sauces Yolo County: Abundant producer	Red	Mid
Principe Borghese	Det,	Short plants with high yields of big clusters of small plum shaped fruit. Prized for drying as retains flavor. Italians hang whole plant to dry, but also great for salads or canning. Yolo County: <i>The best ever for drying.</i>	Red	Mid
<u>Cherry/Grape/Plum Tomatoes</u>				
Amish Gold	Ind.	Cross between Amish Paste and Sungold; 1 ½ to 2" oblong shaped with pointed tip; color and flavor of Sungold and meatiness of Amish Paste. Sweet/tart tomato flavor. Yolo County: <i>One of top three taste test winners in 2018</i>	Orange	Mid
Black Plum	Ind.	Looks like a small mahogany paste tomato but has thin walls. Sweet tangy flavor with a steady crop throughout the season. Yolo County: <i>Brought back by request; good producer all summer; good taste.</i>	Black	Mid
Cuban Yellow	Ind.	Long clusters of grape tomatoes on tall, vigorous plants. Sweet and refreshing. Fruit can be picked individually with very little cracking. Yolo County: <i>New this year.</i>	Yellow	Late
Green Doctors	Ind.	Great flavor, making Green Doctors a favorite new green variety. Small tomatoes are about 3/4-inch and borne on long trusses. Yolo County: <i>Good producer, great flavor. Gets golden tinge when ripe.</i>	Green	Late

Explanation of Terms

- **Heirloom** – Always open pollinated plants, which means the seeds can be saved and used to reproduce the same tomato. Heirlooms have generally been saved for their superior qualities and passed on generation after generation.
- **Determinate (Det.)** – The plant grows to a certain point then stops and sets fruit which then mostly ripen in a short period of time. Height is often four feet or less and may not need staking.
- **Indeterminate (Ind.)** – The plant grows continually until it dies at the end of the season, continuing to flower, set, and ripen fruit. Plants can get quite large and most often produce best when staked or grown in a wire cage.

Variety Names shaded in orange are heat tolerant.

Let's Plant.

- First, have patience. Tomato plants may be available as early as March but they should not be planted in the garden until nighttime temperatures consistently stay above 50°F and the ground is warm enough to comfortably sit on. You can buy your plants early but keep them in a warm, sunny place and water them just enough to keep the soil damp (not wet) until planting time--mid-April through May. You can plant even later but tomato plants struggle to set fruit as the summer temperatures exceed 90°F.
- Choose a sunny location in the garden. Tomatoes do best with at least 6-8 hours of full sunlight.
- Tomato seedlings can get leggy but they have the ability to grow roots from the stem. So, you can pick off the lower leaves and bury the tomato plant into the ground up to the top 4-6 leaves. This will help the plant produce more roots and be a little sturdier. If the plant is really long and leggy, you can dig a little trench and lay it in with the top gently bending to stick up above the soil's surface.
- Staking or caging the plant should be done soon after planting. This may look like "overkill" with a three-foot diameter cage standing four feet around a few small leaves sticking out of the ground but tomato vines can grow rapidly and it will be a much greater challenge if you wait until the vine actually needs it. Trust me, I know. Stakes or cages should be sturdy. You can find them at the local nursery but be sure that they are substantial enough to hold up a good-sized vine. Remember some vines can get as long as 12' as mentioned above. The vine can be woven in and around the cage leaving space for tomatoes to hang, ripen, and provide access for harvesting.

Challenges.

- Irrigate regularly to keep the soil moist--not wet. Extreme fluctuations in soil moisture can lead to fruit cracking and blossom end rot. Adding a layer of compost mulch around the root zone will mitigate fluctuations in moisture and help reduce weeds that compete with the plants for nutrients.
- Avoid fertilizing at least until the plants flower and begin to set fruit. Excessive nitrogen encourages vegetation but will delay flowering and fruit set and makes the plant more attractive to pests like aphids and hornworms.
- Disease resistance is bred into most hybrid tomato varieties. Tomatoes sold by commercial nurseries and garden centers should indicate on the label the particular resistance with the code VFN. This indicates the plants resistance to Verticillium wilt, Fusarium wilt and nematodes. There also might be a "T" to indicate the resistance to Tobacco mosaic virus. These diseases often exist in the soil. If you are concerned about them but still wish to grow heirloom tomatoes, use large pots or half wine barrels filled with bagged soil from the garden center.

So, what do you do with all of these tomatoes?

- Eat 'em! Many cherry tomato varieties like 'Sungold' or 'Amish Gold' taste like candy fresh off the vine. Tomatoes are great in soups, salads and sauces, for gazpacho, or on a BLT. Yum!
- If you are interested in canning, contact the Master Food Preservers of Sacramento County at <http://sacmfp.ucanr.edu> for information on local workshops and links to the Statewide program.

Thanks Yolo County UCCE Master Gardeners Erin McDermid and Steve Radosevich for their contributions to this article. Happy Gardening!



Raise Your Gardening Game with Raised Beds

Michael Kluk, UCCE Master Gardener, Yolo County

Raised beds are very popular and for good reason. They improve access to your plants and help to keep your garden area clean and organized. Raised beds generally improve drainage. You can typically grow more in less space. You have better control over soil quality and content. It is harder for weeds to invade and easier to pull out those that do. Soil in a raised bed will often warm up faster in the spring, extending your growing season. While raised beds are popular for growing vegetables, they can also be a good place for your ornamental plants and even berries and fruit trees, especially if your soil tends to become saturated in the winter.

The un-raised bed



Many of the benefits of raised beds can be realized by simple mounds. They will establish your growing areas and pathways. That allows you to improve the soil in the beds year after year while the soil in the pathway becomes compacted. They can help keep weed pressure down and improve drainage. As an added bonus, they require only a little elbow grease to create, bypassing the material costs, time and work needed to construct regular raised beds. If you are thinking of installing raised beds, mounds may be a good place to start. You can later build formal raised beds or decide a simple mound is good enough.

Raised bed materials

Raised beds can be made from a number of different materials. Wood, generally redwood or cedar, is the most common. Both of these can be pricey but will last for many years. If you want to avoid the cutting of more trees, used redwood is often available and can be a lower cost alternative. Pine or fir wood can also be used but will generally begin to rot in a few years. Painting with latex paint or lining beds with plastic or butyl rubber pond liner are options. All have possible negatives from cost or potential chemical toxicity although that has not been proven.

Because of the cost of redwood or cedar, many people have turned to pressure treated wood for raised beds. At one time, that was a really bad idea. Up until 2004, pressure treated wood was infused with chromated copper arsenate (CCA for short), which contains arsenic. It is no longer available to the general public although is still sold for specialty purposes to contractors and should not be used for raised beds. There is some evidence that the arsenic will leach into the soil and can be taken up by some species of plants. Currently, pressure treated wood is most commonly impregnated with Alkaline Copper Quaternary (ACQ), or also known as Copper Azole. This is much less toxic than CCA and pressure treated wood is much cheaper than redwood or cedar but may still not be a good choice for a vegetable garden in particular. There is no evidence that the copper, or other chemicals infused in the wood, can be taken up by vegetables but it is not legal to use it in an organic operation. So, if you want to be cautious avoid using it.

Concrete or “cinder” blocks are another option. These are relatively cheap and will last a very long time. The “cinder” refers to the waste from coal fired power plants that are often used as the aggregate in such blocks. These cinders can contain heavy metals and chemical



compounds that you might be wary of. However, there is no evidence that these materials leach into the soil or are taken up by plants in the bed.

Various types of metal, galvanized or otherwise, can also be used to construct raised beds. These may need to be framed with wood, although woods other than redwood or cedar can often be used since they will not necessarily be in contact with the soil. Used metal sheeting is often available for little or no cost.

Composite or “plastic” wood used for decking is another material that can be used to make a rot-proof garden bed. This material is often flexible so will need to be stiffened with a section of wood running down its length. But a 2” x 2” is generally enough and, again, it is not necessary to use redwood or cedar because there will be no direct contact with soil.



Construction

Many people opt for a much deeper bed than necessary. Deep beds require additional construction materials, more cost and more complicated construction than a shallower version and are generally unnecessary. A clear exception to this is if, because of difficulty bending over, you need the additional height. You may also want a deep bed if you build your beds on an existing concrete slab or in an area that regularly floods in the winter saturating the soil for long periods. But for most all other applications, a six to eight-inch-deep bed will suffice. The roots of plants growing in a well-constructed raised bed will reach down into the native soil so more depth is simply not necessary.

While people often complain about “heavy” valley soils, they are high in plant nutrients and hold water extremely well. Supplied with substantial amounts of organic matter (compost) and kept from drying out to the extreme, they provide a perfectly good base for any raised bed.


The key to capitalizing on the strengths of your underlying soil is to integrate it with the soil you use to fill your raised bed. If there is a clear line of demarcation between the two, plant roots will be reluctant to go through it, limiting your growing space to the depth of your bed. So, before you put your bed in place, work a generous amount of compost, at least two inches into the soil it will be sitting on. More would be better. Break up the native soil so that the new soil integrates with it when shoveled in. It is a good idea to mix the two together with a spading fork even more once the first layer of new “bed soil” is added.

One of the advantages of raised beds is that they can provide some degree of gopher protection if those little critters are one of your gardening challenges. To keep them out, one-half inch hardware cloth, not chicken wire, is necessary since they can slip into a surprisingly small space. Wrap the hardware cloth up on the outside of the bed or the inside surface of the sides and secure it. Simply securing it to the bottom of the sides will often result in its sagging enough under the weight of the soil that gaps form wide enough to allow a gopher to enter. You can take that from someone with first-hand experience.

Soil for a new Raised Bed

Most people installing a new raised bed will need to purchase soil to fill it. There is no legal definition of “top-soil” so you are not sure of any particular quality or content. Presumably you will have bulk soil delivered from a landscape supply company. It is important to see the product before it is dumped in your driveway. Does

it seem like good soil that crumbles in your hand but is not too sandy and with a good amount of organic matter in it? One popular option is a 50/50 mix of top-soil and compost sold by most suppliers. This ensures that your beds will have a goodly amount of organic matter which is always a plus. You can also make a similar mix by ordering both top-soil and compost, generally for less cost.

Raised beds can provide a good growing environment for both annual and perennial plants. However, they can also be expensive and difficult to build well. Research multiple materials and building approaches to find the best option for you. 

Sustainable Land Practices for Climate Change

Deborah Sorrill, UCCE Master Gardener, Yolo County

Editor's Note: This is the first part of a three-part series on climate change.

Where do greenhouse gas emissions come from?



Have you ever thought you would like to help solve climate change? But the problem seems so big and complex, it's hard to think about? We have all seen the pie charts showing agriculture's contributions to GHG (Green House Gases). In the United States, we contribute about 9% to farming GHGs. Looking at our contribution to the problem world-wide, we are the second greatest GHG emitter behind China. This is worrisome.

Do you know of any global solutions? To my surprise, there are many innovators researching and enacting solutions on climate change. Land management practices promoting carbon removal from the atmosphere are essential. Some of these principles are central to “regenerative agriculture”.

Regenerative agriculture employs the same procedures as small organic farmers. They rely on cover-cropping, no till methods, and avoid pesticides and herbicides, to improve topsoil, water retention, and biodiversity. Some of this work is being done by the University of

California system under Agriculture and Natural Resources (ANR).

On the University of California Cooperative Extension Capitol Corridor Blog - “The Cover-Cropped field is the Disruptor”, UCCE cropping systems specialist, Jeff Mitchell, has been building soil on a research plot for twenty years. He believes building up the soil is key. He says: “The soil in test plots where cover crops were grown are loaded with far more organic matter ... The organic matter improves water absorption, making the land more resilient to drier conditions. Fields with cover crops also sequester carbon and produce crops that maybe more nutritious.”

While this seems like a good start, many commercial farmers are reluctant to convert to regenerative farming. Large farms rely on expensive equipment to plant crops. The yields need to be as large as possible to keep a profitable margin and stay in business. Also, there is a cost to purchase more seed for planting cover crops. An added production step must follow to till and reseed for commercial production. Those extra steps lower the profit margin.

When no fertilizers or pesticides are used, the development time to produce improved topsoil becomes another entry barrier. For farmers working on small profit margins regenerative practices seem risky. Still, we know that soils are being worn out by not replacing organic matter. This leads to desertification and releases more carbon into the air.

A Stanford University study states: "The estimate is that we are now losing about 1 percent of our **topsoil** every year to erosion, most of this caused by agriculture." The United States is losing soil at a rate 10 times faster than the soil replenishment rate."

Some mid-west farmers have proven commercial yields can be just as high or higher than traditional commercial techniques.

There are 900,217,576 acres of farmland in the US according to the 2017 Census of Agriculture. How is it possible to help farmers who feel they cannot afford to make a transition to regenerative farming? Here is one bold solution from Indigo Ag that may help.

The Terraton Initiative (<https://terraton.indigoag.com/>) was announced by Indigo Ag 2018. CNBC named this initiative first on the list of fifty top business disruptors. They use regenerative farming practices, along with high tech data to monitor crops. To scale to global solutions, they are teaching farmers regenerative techniques and supplying seed coated with mycorrhizae to accelerate plant growth. In addition, they are developing market transport systems networked with marketplace buyers to purchase the crops. Last year, they had expanded into five countries outside the United States. If you want to explore further, they are working on carbon tax credits and carbon sequestration too.

David Perry, the owner of Indigo Ag, grew up on a farm in Alabama. This is important to note. Because this seed company listened to commercial farmers' concerns, then applied their business solutions to accelerate commercial farming's ability to move toward sustainable land management practices at a global scale.

Here is my point; they listened empathetically, applied common sense and business expertise, creating a new solution with global implications. This can impact climate change and the whole planet benefits

So, are you saying to yourself, I still don't see how *I* can affect climate change and GHGs? Well, check out part two on climate change for urban and suburban landscapes.

Part 2.0 will be in the Summer issue of the *Yolo Gardener*. (*Pssst – the magic words are cover crops and grassroots*)



Monarch Waystation

Tanya Kucak, UCCE Master Gardener, Yolo County

Did you see any monarch butterflies in your garden last year? If not -- or if you want to see more this year -- consider creating a monarch waystation. That's a pollinator garden designed especially to cater to the needs of monarchs.

Backyard pollinator gardens provide "critical habitat" for the precipitously declining numbers of monarch butterflies, according to Tom Landis, a founding member of the Southern Oregon Monarch Advocates. Landis spoke recently at a California Native Plant Society meeting.

Monarchs are the large orange and black butterflies that are famous for migrating south for the winter. They are "tropical butterflies that have adapted to a wider range" by migrating. They can fly five hundred to two



Tom Landis is a retired U.S. Forest Service nursery specialist. In the past 5 years, he has given more than a hundred presentations about monarch conservation.

thousand miles -- up to forty miles a day -- to reach overwintering sites. A monarch that was tagged in Canada (with an adhesive tag on the wing) was found 61 days and 2423 miles later in Mexico. Monarchs that live west of the Rocky Mountains overwinter on the California coast south of Monterey. East of the Rockies, monarchs overwinter in Mexico.

Monarchs breed from March to September, creating four generations. In each generation, the monarchs progress from egg to caterpillar to pupa to adult butterfly. The first three generations last six to ten weeks each. The last generation of the year is called a "super generation" because the adult butterflies migrate southward, overwinter, breed, and then migrate northward. This super generation lasts six to seven months, from September until March or April. The same individual adult butterflies who fly south in October and November come back north in March and April to lay eggs and start the annual cycle anew.

With climate change, the butterflies and the plants monarchs depend on may be out of sync. If monarchs leave their overwintering sites earlier in the year because the weather is warmer in early spring, the milkweed plants they need to lay their eggs on may not have "grown enough to be usable," Landis said. And if the butterflies start their southward migration later because autumn is warmer than usual, the nectar they need to sustain themselves for the long journey, from late-blooming fall plants, may be harder to find.

The number of monarchs, estimated at 1.2 million in 1997, has declined to less than 25 thousand as of 2019, Landis said. Reasons for the population crash include the following:

- loss of habitat in overwintering sites
- loss of habitat at breeding sites
- diseases, parasites, and predation
- climate change
- pesticides

Monarch waystations can fill in the gaps by providing four essential features: milkweeds, nectar, shelter, and water.

Milkweeds

From March to September, monarchs seek out milkweed on which to lay their eggs, since the caterpillars eat only milkweed leaves.



"Cultivated milkweed is four times more attractive to monarchs for egg laying," Landis said. He speculated that the plants grown in gardens are less stressed and healthier than wild milkweeds.

Though California has several species of native milkweeds, the most common ones -- narrow-leaf and showy milkweed -- die to the ground in winter and may not produce enough leaves to support caterpillars by March or April. Landis suggested experimenting with less-common species of native

milkweeds that might produce more foliage earlier, such as heartleaf milkweed. For more information on native milkweeds, see the guide to the common milkweeds of California published by the Xerxes Society.

“Use source-identified, locally adapted seeds and nursery plants,” Landis said. Though rhizomes produce bigger plants faster, be aware that showy milkweed spreads aggressively, he said.

Monarch Watch recommends at least ten milkweed plants, including two or more species, or else a larger number of plants of a single species of milkweed.

Nectar

Native plants that produce nectar are especially crucial early in the season, when the butterflies are depleted from their northward migration, and late in the season, when they need plentiful nectar to "build up fat reserves" for their long migration and overwintering.

"The flowers in home gardens produce more nectar than plants in the wild," Landis said, because they are more likely to get watered and thus are less stressed.



If you are buying new plants, Landis advised looking for "neonic-free" plants as well as avoiding pesticide use in the garden. In "sublethal doses, neonicotinoids can cause disorientation" in bees or butterflies, Landis said. Neonicotinoids are pesticides that become distributed throughout a plant, including the pollen and nectar.

Some perennial and woody natives that provide plentiful nectar during the breeding season, March to September, include:

- Early: willows, manzanitas, ceanothus, oaks
- Midseason: sages, sunflowers, gumplant, buckwheats, coyote mint, lupines
- Late-season: coyote brush, hummingbird fuchsia, goldenrod, asters

Plant “natives only” in natural areas, Landis said. In backyard gardens, “plant natives if possible,” but some introduced plants are okay. Plan the garden so that something is always in bloom from early spring to fall.


Shelter

Monarchs roost in trees at night and during inclement weather. A tree, hedgerow, or cluster of woody shrubs can offer shelter. Monarchs also seek shade on especially hot days.

Water

Butterflies drink water and absorb minerals from mud puddles. They require sodium to reproduce.

For more information on monarchs, see the following websites.

- *Monarch waystations and general information: <https://monarchwatch.org>
- Migration information: <https://journeynorth.org/monarchs>
- Monarch conservation: <https://xerxes.org/monarchs>
- Downloadable pdf on California native milkweeds: <https://xerxes.org/publications/identification-and-monitoring-guides/native-milkweeds-california-pollinator-plants>
- Citizen advocacy: facebook page of Western Monarch Advocates 

These Are A Few of My Favorite Things

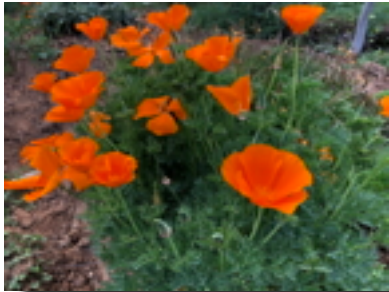
Michelle Haunold Lorenz, UCCE Master Gardener, Yolo County

*Raindrops on roses
And whiskers on kittens
Bright copper kettles and warm woolen mittens
Brown paper packages tied up with strings
These are a few of my favorite things
—Oscar Hammerstein II*

The song made famous by Julie Andrews in the *Sound of Music* always pops into my head about this time of year. The weather is warming up and the tips of iris bulbs poke their pointed heads up through the soil. Daffodils and tulips are already in full bloom.

As I prepare for Spring, I am reminded that there are a handful of plants that I am drawn to again and again. I find myself planting them in a new garden I'm working on for a client or recommending to fellow gardeners. The ease, color, scents, attractiveness to bees, butterflies and hummingbirds or a combination of these traits makes these plants my go-to plants over and over again. What follows is a short list of some of my all-time favorite plants and flowers.

1. **California Poppy (*Eschscholzia californica*)** - With its feathery pale green-blue foliage and breath-taking deep orange blooms, the state flower of California is ubiquitous in fields and gardens. It is one of the



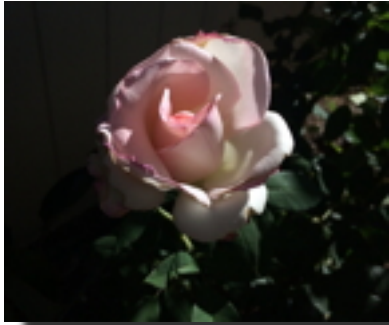
easiest plants to grow and requires virtually no care. One of the first plants to bloom after the cold winter season, bees happily buzz around the poppy collecting pollen while its cheery color brightens up the garden. Regularly grown as an annual this tender perennial self-sows so you never need to replant. It tolerates dry clay soils or moist shaded beds so its naturally tolerant nature makes this a must for the beginning gardener. Sowing hint: sow seeds in late September and forget about them. Scatter them wherever you want blooms; no need for specific sowing depth or soil type. They will start to put out feathery leaves in December and start blooming by late January or early February. Do not

purchase six-packs from a garden center or nursery: they do not transplant well because of their long taproot. This is one plant that starting from seed directly into the soil is a must for success.

2. **Whirly Blue Sage (*Salvia clevelandii* 'Whirly Blue')** - Woody shrubs are an essential backbone of every well-designed garden and the Whirly Blue Sage should take the gold medal for low-water gardens. Branching woody stems with green-gray intensely fragrant foliage followed by whirls of bluish-purple flowers in the springtime, this shrub can withstand even the harshest conditions of a low-water garden. Growing to about four feet high and three feet wide, it is a plant that could go front and center as a focal point, or to provide the backdrop to other low-water plants. Its loveliness color, shape, and smell as well as its attractiveness to bees, butterflies, and hummingbirds make this plant my top go-to shrub. Once it is established (after watering for the first year you plant it) it can go up to a month with no additional water in our hot summer climate without losing any of its attractiveness.



3. **Roses (*Rosa* spp.)** - With thousands of varieties and cultivars, there is a color or shape for every garden. From climbing to shrubby, ornamental roses are one of the easiest plants for novice gardeners to have



success with. Roses have a reputation as being fussy and difficult to care for, but this simply isn't true. Meet their basic needs: full sun, moderate water, and a balanced fertilizer once a year, and they will happily produce blooms from spring through early winter. Prune them back to a few strong canes each January and you will get a whole new crop of blooms the next year. The one issue they have is they are attractive to aphids; these tend to appear usually around April. But you don't need chemicals or pesticides to control aphids; simply wash them off with a strong blast of water and your roses will continue to grow and bloom with little other problems. I choose my roses based on fragrance and color; I need my roses to smell like roses! But some people prefer

selecting for color or shape. The beautiful thing about roses is there is a rose for every preference. And yes, raindrops on roses are simply delightful.

4. **Yarrow (*Achillea millefolium*)** - Yarrow is not only an attractive ornamental plant for the garden but one of the most important pollen plants for bees in this area. This easy to grow perennial is perfect for both beginners and advanced gardeners, Itit comes in a variety of colors (white, yellow, pink, or red) and blooms for an extended period from spring through late fall. Perfect for a low water garden, it blends well with native grasses and other low water perennials. Pest free, it requires little care and when planted *en masse*, it creates an eye-catching backdrop as well as provides food for butterflies and hummingbirds.



5. **Seven-Up Plant (*Stachys albotomentosa* 'Hildago')** - The Seven-Up Plant is a tender perennial and comes by its name from the fruity scent of the leaves, which smell exactly like the popular soft drink! Pale-green ridged leaves whirl around the square stem creating a spreading clump. Spikes of pale apricot colored tubular flowers poke out in late February and are highly attractive to hummingbirds. It is also a perfect plant for a garden plot that gets morning sun but afternoon shade. It does best with evenly moist soil and must be protected from the hot afternoon sun. Mine is planted underneath a dwarf nectarine tree where it is protected but the beauty and scent are easily accessed. Mix it in with columbine, ground orchid and other part-shade loving plants for a stunning spring display.



There are many more plants that I could add to this list, but hopefully this will get you thinking of your own “favorite things.” Maybe you too will be inspired to recommend them to a fellow gardener.



Spring Gardening Tips

Peg Smith, UCCE Master Gardener, Yolo County

What a difference a year makes! This was the beginning of the Spring Tips for 2019. “The ground, with all our wonderful rain, is saturated and patience will be needed before heading out to turn the soil or replant a bed.” In spring of 2020 we are facing cracked and dry soil that, depending on how much clay is in the soil, can

be hard as a rock.

Ornamental and fruit trees are bursting into bloom and would certainly appreciate a deep soaking as they produce their spring leaf canopy and fruit. Deep soaking for trees and ornamentals is best done around the leaf canopy circumference as that is where the active root growth is happening. If the rain situation does not turn around to a wetter cycle in the spring this may be a year where a monthly deep soaking will be necessary to ensure the health of the larger plantings of the garden.

As always take the enthusiasm of spring gardening at a pace that preserves the best tool a gardener has – their body. Lift carefully with the knees, break larger digging projects into smaller areas, hydrate well, and take plenty of breaks.

One great benefit of this weather is that it is easy to get out and tackle any improvement projects we might have considered, raised beds for vegetables or conversion to a more low-water landscape planting. There are many local sources to find California natives, and plants from other regions of the world, such as Australia and the Mediterranean, that have similar climates to Yolo. A walk through the Woodland Community College demonstration garden, Central Park Gardens in Davis or the UC Davis Arboretum will show many samples of plants that thrive in Yolo County.

Spring Cleaning

- Examine trees and shrubs for winter damage. Prune damaged foliage and branches.
- If you haven't pruned your roses and fruit trees, this is the last month to ready them for their spring bloom. Cut back seasonal grasses.
- Save the pruning of cherry and apricot until the summer when the fruit is finished.
- Do not prune early flowering plants such as magnolias, camellias, viburnum and forsythia. It is best to prune them after the blossoms are spent or wait until early fall.
- Apply the final application of dormant oil spray to all fruit trees before the buds swell. Roses need to be sprayed to prevent over-wintering insects and fungal spores.
<http://www.ipm.ucdavis.edu/PMG/GARDEN/PLANTS/rose.html> *
- Apply final application of copper and dormant oil to peach and nectarine trees.
<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7426.html> *
- Spray a fungicide to control anthracnose on sycamore and ash trees.
<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7420.html#MANAGEMENT>
- Weeds are starting to sprout, so take care of them before they take over. "Get 'em small, get 'em often". Mulch will also help control weed growth.
- Once your spring bulbs have finished blooming, dead head (remove blossom ends), however, don't remove the leaves until they turn yellow. This will help the bulbs store energy for next spring's bloom.

*As always please carefully read and follow label instructions and properly dispose of excess materials.

Fertilizing, Composting and Mulching

Your plants are hungry. Begin to lightly cultivate your perennial garden, being careful not to dig too close to your plants. Not all of the dormant perennials will have emerged so take care. Loosen the soil as soon as it is not too wet to work.

- Add soil amendments, such as compost, peat moss and organic fertilizer.
- Roses and fruit trees need special attention now. In addition to organic rose food and soil amendments, add a cup of alfalfa pellets and to each rose plant. Alfalfa contains a natural plant growth stimulant (triaconitol) that has been shown in some studies to improve plant growth.
- Be sure to use fertilizer that is recommended for each plant type. In particular, too much nitrogen will make the plant produce an over-abundance of leaf growth which will not be as sturdy. This weaker growth

is more susceptible to sucking insects. Applying more nitrogen above the product recommendation will encourage leaf growth not, bloom development.

- Resume your fertilizing schedule for your lawn and fruit trees.
- Fertilize your spring blooming plants, after they bloom and repeat for the next three months.
- Fertilize your houseplants.
- Mulch your garden to a depth of 4 inches. The reward will be fewer weeds and less watering in the months ahead.
- Mulch is good for water conservation but to attract our native bees, also wonderful pollinators, you need to leave some bare soil for nesting possibilities many of the native bees are ground nesters and need bare soil that is not too firm and not too soft in which to burrow and lay their eggs. Both native and honeybees need a shallow water source.

Planting

- Perennial plants need attention now.
- Remove any old woody growth.
- Dig and divide crowded perennial plants.
- Select early blooming annuals,
- Plant candytuft, pansies, violas, dianthus.
- Select summer blooming plants.
- Bulbs, corms, tubers can be planted now.
- Some colorful choices are cannas, begonias, lilies, and dahlias.
- Shade plants include: Columbine, coral bells, Island Alumroot, and Giant Chain Fern.
- Drought tolerant and sunny location plants include: Yarrow, blue gamma grass, California fuchsia, penstemon, California goldenrod, any of the native salvias (hummingbird sage grows well in Yolo).
- Replace old, worn out shrubs and roses. Be sure to select these plants with care to insure they have the correct growing conditions. Plants that need 8 hours + of sun per day will not do well in the shade. Careful selection ensures healthy plants that are easy to grow and maintain. Young plants need additional water to help them through their first summer as they establish a healthy deep root system.
- After you have completed your planting, be sure to lightly fertilize your plants and mulch well. Remember that plants do better if the crown of the plant (where stem meets root ball) are planted at or slightly above grade.
- If you are planning to grow your vegetables from seed, begin your seedlings indoors under lights or in a greenhouse. By late April you can harden off your seedlings by moving them outside for a few hours each day. Steadily increase the time outside each couple of days so that when your seedlings are transplanted into your vegetable area they will be able to tolerate the outside conditions. The soil temperature needs to be about 60 degrees Fahrenheit before you set out your young summer vegetable plants.

Disease and Pest Control

If you have applied your dormant oil and fungicide, your plants will be off to a good start.

- Periodically check plants, especially roses, for signs of black spot, rust and mildew. These often appear first on the interior or lower parts of the plant. If the spring is especially rainy, you will need to be more vigilant, and either remove the affected leaves or spray more often. Don't be alarmed if your rose leaves have neatly cut out curved sections - that is just the native leaf cutter bee collecting the leaf segments to

line the laying sites for their young. Tolerate a little leaf damage and be glad these native bees are populating the garden.

- While you are checking for disease, note whether slugs, snails and earwigs are munching on your plants. As the weather warms, aphids, mites, thrips and scale creep into your garden. These pests are usually kept in check by a variety of beneficial insects such as lacewings, mantises, ground beetles, *Tachinidae*, and robber flies. Many plants attract beneficial insects including yarrow, alyssum, feverfew, dill, parsley, coriander, penstemon, and asters.

If you need to use commercial pesticides, consult <http://ipm.ucdavis.edu/> for excellent information on controlling pests and diseases with the least environmental damage.

Here is the link to Seasonal Landscape IPM Check:

<https://www2.ipm.ucanr.edu/landscapechecklist/checklist.cfm?regionKey=2>

Lawn Care

Lawn can still have a place in the garden when managed well. Deep soaking, without having water run-off encourages deep root growth. This is the key to a healthy summer lawn. Lawn does not need to be watered every day. Even with our hot summers a deep soak once or twice a week will carry a lawn through the hottest season. Lawn does surprisingly well if given a modicum of care with deep soaking and regular fertilizing.

Check your irrigation system and be sure that the lawn is getting the proper amount of water. To allow water penetration into heavier clay soils you made need to adjust your irrigation to water in cycles, one after the other, with a break in between. The cycle time depends on when the water begins to run off and be wasted. Run the sprinklers and time how long it takes before water begins to run off the lawn. Set this delivery of water time, possibly 15-20 minutes, pause to allow the water to penetrate then repeat water again for 15 – 20 minutes or until run off. Check with a trowel to see how deep the water has penetrated and repeat, if necessary, to accumulatively penetrate to around 12". This deeper penetration of water will encourage deeper, extensive root growth so that in the summer heat your lawn will be quite happy with one deep soaking a week delivered in this way except in a very hot prolonged heat wave. Raise the mower blade to a height of 3 inches, as spring gives way to summer.

- Re-seed thin spots in your lawn and begin your fertilizing and mowing schedule in March.
- While it is easier to use commercial fertilizer, applying a light topcoat of compost to your lawn will greatly benefit your lawn's growth and health. Leaving grass clippings on your lawn by using a mulching mower will add needed nutrients. If you do not mind a slightly untidy lawn as the grass clippings break down they will make excellent compost.

Final Spring Touches

- Paint the lower trunks of young trees with water thinned white latex paint to prevent sunburn and borer problems. Stake tall growing perennials and vegetables before they begin to bend over in late spring.
- In late spring, thin fruit trees, leaving 6 inches between each fruit. This will help the remaining fruit to mature properly and keep the branches from being over-weighted and splitting.
- Deadhead spent flowers to assure a long blooming season in your garden. When California poppies begin to fade trim back for a second bloom.
- Plant containers with your favorite annuals and herbs.
- Clean and re-stock bird feeders. Sharpen and maintain garden tools.
- Hang your hammock or set out your favorite garden chair. Relax with some lemonade and take time to enjoy a new gardening book or listen to a local garden radio program.

UCCE Master Gardener Events in Yolo County

Spring is a great time to work in the garden, shop local plant sales, and attend a FREE UCCE Master Gardener, Yolo County workshop. Check our website for more information: <http://www.ucanr.edu/yolomg> or

visit us on facebook.com.

Events and Plant Sales: Please check websites as dates and details may change.

Included in this newsletter is the schedule for UC Master Gardener – Yolo County free public workshops and plant sales. Come and join us! (Note: not available at this time. Please check our website for updates <http://www.ucanr.edu/yolomg>)

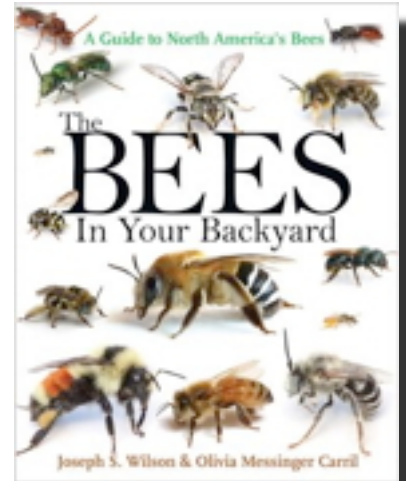
UC Davis Arboretum Plant Sales <http://publicgarden.ucdavis.edu/plant-sales> Due to the current public health considerations of the coronavirus the UC Davis Arboretum Plant Sale dates are under revision. The Plant sale inventory is available as a pdf on the website. <https://arboretum.ucdavis.edu/>

Fair Oaks Horticultural Center http://sacmg.ucanr.edu/Fair_Oaks_Horticulture_Center/Workshop_Schedule/

Books:

If you are interested in providing plants and habitat for our native bees: *The Bees in Your Backyard*, Joseph S Wilson & Olivia Messenger Carril, Princeton University Press.

For details on how to grow the common to the less common edibles: *The Western Garden Book of Edibles* published by Sunset.



**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..... mgolo@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

Free UCEE Master Gardener Workshops

All UCCE Master Gardener, Yolo County workshops for April, 2020 have been cancelled. Please check our website: <https://ucanr.edu/sites/YCMG> for updated information on future workshops.



U.C. Cooperative Extension
 UCCE Master Gardeners of Yolo County
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The Yolo Gardener – Spring, 2020

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

A handwritten signature in black ink that reads "Baumbach".

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