# **Garden Notes**



April - June 2019

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## **Coordinator Corner**

Marcy Sousa, Master Gardener Coordinator

The weather is wet but beautiful, the bees are buzzing, and I hope you are enjoying some gardening when we get breaks from the rain! Spring is the busiest time of year for our Master Gardener

program! We just celebrated the half-way point of our 19-week training program for our new group of Master Gardener trainees. If you are out and about, you may see us at some of the local community events taking place like the Lodi Arbor Day celebration or the Earth Day event at Victory Park. Check out our calendar of events to find out what we have going on throughout the community.

I hope you find this edition of Garden Notes full of helpful gardening info and tips! Happy Gardening!



Master Gardener Trainees ribboning soil

# **Companion Gardening**

## Susan Mora Loyko, Master Gardener

Gardeners and their gardens are a lot like people. Some people who from outside appearances have nothing in common, meet and immediately realize they have similar likes and dislikes, as they become friends. In other instances, folks who have similar likes and dislikes and would appear to have what it takes for a life-long friendship eventually discover there's just no

chemistry to maintain a relationship.

Plants in the garden are much like people. When some are grouped together the results can be disastrous while others planted together not only grow well but thrive when in

close proximity. With plants this is known as "companion gardening".

Many long-time gardeners learn early on that plants need companions to not only grow but also flourish. Except for growth and fruiting, plants are relatively idle objects. They are rooted in one place with little control over their surroundings and seemingly have little to do

with anything around them. But take a closer look into your garden's plant life, the relationship between plants is varied - similar to relationships between people. In the garden, certain plants support each other while others, well, just don't get along and others may be extremely adversarial.

Plants, like people, compete for resources, space and nutrients. Certain plants grow rapidly, crowd others out and take more than their fair share of the resources needed to grow; water, sun and nutrients. Some release toxins that can harm or kill other nearby plants. Other plants play nicely

with one another by adding nutrients to the soil, drawing beneficial insects into the garden or by confusing insects in search of their host plants. Although it may sometimes feel like your garden is unmanageable, gardeners really do have control what does and does not take place in the garden. Planning before planting your garden will help to create a healthy and compatible

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# **Spring Garden Chores**

## Sue Davis, Master Gardener

Soft green leaves and delicate flower heads celebrate spring and renewal. If your garden needs some renewing, now is the time.

April Ideas

Plant -

New trees and shrubs need a planting hole about twice the

width of the root ball. Build a cone of soil in the center of the hole tall enough so the new plant will be level with the surrounding soil when placed on top of it. Gently knock the plant from its pot. Use your fingers to uncoil and separate any bunched-up roots. If the root-ball is solid, use a knife to score four 1/2-inch-deep cuts around the sides and one on the bottom (don't do this on bougainvillea). Set the roots atop the cone, refill the

hole, and water thoroughly to eliminate air pockets. You should be able to see the beginning of the root flare on trees at or above the surrounding soil. Add a 2- to 3-inch layer of mulch around the plants, keeping it a few inches away from trunks and stems. This is a good time of year to plant citrus trees.

**Freshen up** your container gardens with new plantings of colorful annuals. Small plants are plentiful at nurseries and will quickly brighten your containers.

Tomatoes, peppers, eggplant, leeks, carrots, cucumber, corn,

green beans, and squash can be planted in mid-April once the soil stays warm overnight. Tomatoes, peppers and eggplant will fare best if planted as transplants; the rest grow well from seed.

#### <u> Maintenance</u> –

Add a layer of rich compost as you plant fruits and vegetables. It will give them a good start and help produce a larger yield.

Continue composting as you groom your garden. To process your compost pile quickly, keep it as damp as a wrung-out sponge and turn it frequently. If you can't turn your compost as frequently as you'd like, don't forget that the "let-it-rot" method also works; it just takes longer.

**Thinning** improves the size of fruit, reduces the risk of broken branches, and keeps trees producing annually rather than in

alternate years. Before apples, Asian pears, nectarines, plums, apricots, and peaches reach an inch in diameter; gently twist off enough fruit to allow 4 to 6 inches between remaining fruit.

Houseplants will appreciate a monthly feeding from March through October.

**Check** your sprinklers to be sure they are working properly and not wasting water. There is a comprehensive spring tune-up

guide for sprinklers in the 2010 April - June Master Gardener Newsletter which can be <u>found here</u>. **As temperatures rise**, deep-water established plants often enough to prevent wilt and promote deep rooting. Check the soil moisture around roots with a moisture meter probe or by digging down with a trowel. Soaker hoses apply water directly to the soil with very little evaporation.

Maintain your lawn: Fertilize now ease or organic fertilizer according to

with a balanced slow release or organic fertilizer according to the directions on the package. Organic fertilizers react more slowly but will eventually provide a lush result. If crabgrass has been a problem in past years, you may want to consider a preemergent/fertilizer mix. Help preserve our waterways by avoiding getting granules on hardscape surfaces which can wash into drainage systems.

In May



Plant -

Annuals planted in May provide good summer color. Flowers in six packs are a good buy. They'll catch up quickly to those growing in 4-inch pots and jumbo packs. (However, to produce instant color for a special event, use 4-inch plants.)

**Summer-blooming vines**, grown up a narrow structure, add color and height to even the smallest gardens.

Before planting, set a sturdy structure with enough height and heft to support your vine (adding a structure later is difficult). As shoots grow, train them to the support with self-gripping Velcro, plant tape, or twist ties.

Vertical accents in borders can be achieved by growing tall, upright bedding plants behind shorter

## **Community Connections—Ornamental Grasses**

## Steven Hightower, Sonoma County Master Gardener

Master Gardeners are a statewide, even nationwide, community of people who love to garden and who willingly share what they've learned in an effort to make gardening inclusive, enjoyable, and fulfilling. In this larger community of like-minded people, we often share articles with one another. This article is one that was developed by a Master Gardener from Sonoma County and that is timely for our Spring Newsletter.

#### **Pruning Ornamental Grasses**

Ornamental grasses have become increasingly popular in home landscape use. Recent books such as Richard Darke's Encyclopedia of Grasses for Livable Landscapes and John Greenlee's American Meadow Garden promote them, as do many gardening magazines. We have several in Top Plants for Sonoma County, and I've increasingly used grasses in my garden over the last few years.

Ornamental grasses are generally low maintenance. Once established, most only need periodic combing, and sometimes, depending on the variety, an annual cut-back. General advice often states to cut them back in the fall, but here, where our winters are mild, many can provide texture, contrast and color in the winter garden, so I often leave the chore until early spring.

For grasses that are to be cut back hard, it's easiest to wrap the whole clump with a piece of twine—some suggest masking tape—and then cut below that with well-sharpened shears. An old web or leather belt works great and is re-usable. That way the whole bundle of grass comes away clean without leaving a mess of stalks. Larger and tougher grasses may take a hedge trimmer, or even a small chainsaw.

Which then to whack, and which to leave?

The lowest-water grasses I have are *Muhlenbergia rigens* (deergrass), *Festuca californica* and *Festuca idahoensis*. With little water in the summer, these survive, but brown up quite a bit. I comb the dead material out a couple of times a season—a small fine handrake works, but rubber-gloved hands work even better—run your gloved fingers from the base of the grass to the top. And they get cut back to a few inches (not flush to the ground) around February, but not necessarily every year. Muhlenbergia capillaries (pink Muhly grass) should also be sheared fairly low in early spring.

I love blue grasses. *Festuca glauca* (blue fescue) and *Helictotrichon* sempervirens (blue oat grass) are great performers, and don't need to be cut back very often, but should be glove-combed out periodically to keep them looking good. A great fescue that I recently discovered is Festuca mairie (Atlas Fescue) and it gets treated the same way.

Calamagrostis x acutiflora 'Karl Foerster' looks lovely with its tall tan seed heads through the winter, so it gets cut back to 3-4 inches in February or March. *Miscanthus sinensis* (maiden grass) gets cut to around the same height then too, as does the Nasella tenuisima (Mexican feather grass). This latter re-seeds easily, so watch out for it to move into areas of the garden where it's not wanted.

Pennisetum orientale 'Tall Tails' (oriental fountain grass) is another of my favorites – it's similar to the more common P. orientale, but stands 4-5' and works well in a tall perennial border. I cut it back before the new growth starts to appear, but after the cold weather is over—again, February or so. Cut back to about 3-4 inches above the crown of the plant. For Sesleria autumnalis, cut the clumps back in the spring to encourage new grow growth and to maintain good form and habit. I've recently planted some Carex pansa (California meadow sedge) and Festuca ovina (sheep's fescue) as a tiny lawn-like area. They'll get trimmed to 4-5 inches a couple of times a year.



## Pests of the Season

## Regina Brennan, Master Gardener

#### Weed: Creeping Woodsorrel

Creeping woodsorrel, Oxalis corniculata, is a common, widespread perennial weed. It grows in a prostrate manner (low and creep-

ing) and forms roots and stems where nodes contact the soil. It grows in both full sun and shade if the area receives adequate moisture. Because it is a perennial weed, it can bloom almost any time during the year, with spring being a time of heavy flowering and seed formation. When seedpods mature, they rupture and seeds are forcefully expelled, landing up to ten feet from the plant. It isn't known how long seeds remain viable in the soil. Creeping woodsorrel grows rapidly, forming a taproot. Seedlings begin flowering in about 4 weeks. If you pull creeping woodsorrel from the ground, the taproot or stolons often beak off and remain in the soil, allowing the plant to regrow. Try to control plants before they flower and set seed. Infested sites require constant vigilance and continuous weed removal. Preemergent herbicides can be used to prevent seedling emergence. You can control established plants with hand weeding, hand cultivation with hoes and weeding tools, and post-emergent herbicides. For additional information see UCIPM Pest Notes Publication 7444





Pest: Earwigs

Earwigs are generally easily recognized by most home gardeners as pests that can devastate young seedling vegetables and annuals overnight. Not everyone knows, however, that earwigs also have a beneficial role in the landscape and have been shown to be important predators of aphids and insect eggs. Earwigs feed most actively at night and seek out dark, cool, moist places to hide during

the day. An interesting note is that earwigs are unlikely to cause damage to turf and mature ornamental plants. Earwigs feed on a variety of dead and living organisms, including insects, mites and growing shoots of plants, as well as soft fruit such as strawberries. A key element of an earwig management program is trapping. A low-sided can, such as a cat food or tuna fish can, with ½ inch of oil in the bottom makes an excellent trap. Fish oil such as tuna fish oil or vegetable oil with a drop of bacon grease can be used. These traps are most effective if sunk into the ground so the top of the can is at soil level. Baits often aren't effective where there are other attractive food sources. For additional information see UCIPM Pest Notes Publication 74102

#### Disease: Bacterial Blast (Citrus Blast)

Infections caused by the pathogen Pseudomonas syringae are an annual problem in the Sacramento Valley. The fruit of lemons are most susceptible to infection. The bacterium infects small injuries caused by thorn punctures, wind abrasions, or insect feeding. Diseased areas are covered with a reddish brown scab, with small black spots on the fruit progressing to large black spots on the fruit the longer the fruit remains on the tree. Wet, cool and windy conditions during winter and spring favor development and spread of the blast bacterium. An examination of four different lemon trees in a one-block radius in Stockton revealed all had disfigured fruit to some degree. Cultural control on existing trees includes pruning out dead or diseased twigs in spring after the rainy period to reduce the spread of the disease. Also recommended is scheduling fertilization and pruning during spring or early summer to prevent excessive new fall growth, which is particularly susceptible to blast infection. Organically acceptable methods include applying copper and Bordeaux sprays each year at the onset of cool, wet periods. When choosing a pesticide, always read the label carefully to determine environmental impact. See UCIPM 3441.



## **Plants of the Season**

Lee Miller, Master Gardener

#### Tree: Liquid amber or sweet gum (Liquidambar styraciflua)

A deciduous tree native to warm temperate areas of eastern North America and tropical mountain regions of Mexico and Central America. It can go by a variety of common names: American storax, hazel pine, bilsted, redgum, satin-walnut, star-leaved gum, or alligatorwood. It is pyramidal in growth and can reach a height of 100 feet or more and spread as wide as 50 feet, though commonly less in spread. It has become a popular ornamental tree in temperate climates. The best-selling point for the tree is the fall foliage of star shaped five-lobed leaves which turn from yellow to crimson. The tree has proven to be tolerant of a wide range of soils and pH levels. The major drawback is the very abundant, inch diameter, spiny fruit which remain on the tree and drop off all winter causing a nuisance to be raked out of your lawn or garden. There is a solution for this problem. You can plant *Liquidambar tyraciflua* 'Rotundiloba' which is a sterile, non-fruiting cultivar that does not produce the spiky "gumballs."



Nuisance gumballs from a liquid amber tree.



Blue heaven' Buddliea hybrid, courtesy of Plants Delight Nursery

#### Shrub: Butterfly Bush (Buddleia davidii)

A great shrub for Central Valley gardens. It is drought and deer resistant, provides nectar to adult butterflies, beneficial insects and hummingbirds with lovely fragrant and showy blooms. Butterfly bush is easy to grow and will bloom from July until frost. Various cultivars provide a range of colors from white, pink to dark purple. 'Black Knight' is a dark purple that will grow to 15 feet. A sunny or partly shaded area with well-drained soil is a good spot for your Buddleia. If the soil is good quality, there is little need to fertilize. These bushes grow from 6 to 15 feet and can spread from 4 to 12 feet, so allow sufficient room. Butterfly Bush needs to be pruned back annually in late winter of early spring to encourage new growth and to remove old or dead wood and broken or diseased limbs They bloom on new wood, so it should be cut down low to the ground in cold areas or to 2-3 feet here in the Central Valley. Dead heading is important to encourage more blooms.

#### Perennial: Alstroemeria

Also known as Peruvian lily or lily of the Incas is a genus of plants in the family Alstroemeriaceae. They are all native to South America. Many hybrids have been developed with colors including white, yellow, orange (Sussex gold is pictured), apricot, pink, red, purple and lavender. Alstroemeria grows from a cluster of tubers. The leaves are alternately arranged and are resupinate, i.e., twisted on the petioles so that the undersides face up. The flowers resemble a miniature lily and have a vase life of two weeks or more. The plants bloom in spring and summer and are hardy to 23°F. The plants need at least six hours of sunlight, and afternoon shade is appropriate in the Central Valley. They need regular water and well-drained soil.



Place the plants no deeper than they were growing in containers and about one foot apart; water well. Some have long stems (28-40 inches) while some of the newer hybrids are shorter-stemmed (12-16 inches). To encourage new blooms, pick flowers by pulling the stem off the base of mature plants rather than cut them. For some views of gorgeous alstroemeria, see: <a href="https://www.sunset.com/garden/flowers-plants/alstroemeria">https://www.sunset.com/garden/flowers-plants/alstroemeria</a>. For more information on growing see: <a href="https://www.wikihow.com/Grow-Alstroemeria">https://www.wikihow.com/Grow-Alstroemeria</a>.

# **Herb Study**

## Pegi Palmes, Master Gardener

Welcome to our newest newsletter column devoted to Herbs! We hope to provide you with information about herbs, focusing on how they are used: medicinal, culinary, or decorative, as well as how and where to grow them. Both the American Herb Society (HSA) and the International Herb Association (IHA) are great resources for everything Herb.

There are many definitions for herbs, and this one from Holly Shimizu, author of

HSA's Essential Guide to The Beginner's Herb Garden, seems to cover it best: Herbs are defined as plants (trees, shrubs, vines, perennials, biennials, or annuals) valued historically, presently, or potentially for their flavor, fragrance, medicinal qualities, insecticidal qualities, economic or industrial use, or in the case of dyes, for the coloring material they provide.

With popularity growing in edible gardening, healthy eating, hand crafts and wellness, there are a number of gardeners interested in growing herbs. Herb gardening can be one of the most fulfilling types of gardening producing great fragrant, colorful, useful and often edible plants.

#### To get started, think about how you want to use the herbs.

The first step is to decide what type of herbs you want to grow. Knowing what you would like to grow will help you evaluate your growing conditions and determine specific plant types and varieties. Think about things like fragrance, attracting pollinators, beautifying landscapes, color combinations, culinary, herbs to dry for use later, or herbs to use in crafts. This will help you choose which herbs to plant, based on your planned use.

#### Where is the perfect place for your herbs to grow?

Most herbs don't do well when they are over-cared for. Many herbs are guite adaptable to a variety of growing conditions. Look to their native habitats for clues as to how diverse of a growing range they will tolerate. Many of the most popular culinary herbs such as oregano, rosemary, sage, tarragon, and dill thrive in full sun (defined as 6 hours of direct sun); however, the intense heat of the summer sun in the Central Valley of CA might re-





Annis hyssop plant

quire that you provide some shade. Basil plants, for example, have large fleshy leaves that sunburn easily. Some shade, especially in the afternoon, will help them do their best. Mint, chives, parsley and even cilantro are other examples of herbs that will tolerate some shade. Our Mediterranean climate is almost ideal for growing most herbs, being mindful of the intensity of the summer sun and the potential for low temperatures in winter.

#### Soil

As with any garden, the right soil is very important for success with growing herbs. Many are native to Mediterranean regions and require well drained soil. Many perennial herbs will also require good drainage to survive the winter months.

#### Garden design ideas

Selecting a theme is a fun way to design a garden. Culinary gardens could be based on a type of food, like pizza. Other ideas to consider might be a craft, medicinal, or a dyers garden dedicated to plants that yield colors for fibers. Gardens may be in the ground, in raised beds or in a wide array of containers. The primary requirement is good soil and drainage. Keep in mind containers can dry out quickly. You can also incorporate herbs into existing vegetable gardens or landscapes.

#### Herb of the Year

Every year since 1995 the International Herb Association has chosen an Herb of the Year™ to highlight, based on it being outstanding in at least two of the three major categories: medicinal, culinary, or decorative. For 2019 the Herb of the Year is Anise-Hyssop Agastache ssp. For more infor-

mation about this wonderful herb you can go to their website: https://iherb.org/herb-of-the-year/ or visit The Herb Society of America at: <a href="https://herbsocietyorg.presencehost.net/">https://herbsocietyorg.presencehost.net/</a>.

Our hope is that you will enjoy exploring the world of herbs as much as we do. If you have questions or comments, or would like more information about Herbs you can email us at: anrmgsanjoaquin@ucanr.edu.

# **Avoiding Food Waste**

## Trish Tremayne, Master Gardener

How about some free money? Does an extra \$2,200 sound like something you'd like to have this year? It's already yours. Unfortunately, if you're an average American family, you are probably losing that much money in food waste each year. Each day, we Americans waste enough food to fill an entire football stadium. Imagine the Rose Bowl overflowing with food... from side to side, from top to bottom. You get the picture! We're talking about those limp carrots in the vegetable drawer or the lunch meat in the back refrigerator that you forgot was there, the bread that got moldy or the mushy banana in the fruit bowl. It started out as good, healthy, wholesome food. It looked great at the market, and we thought we would eat it, but alas, we didn't.

Sometimes we prepare too much food. Large portions are the norm in America so we end up with more food on the plate then we can eat. More waste! Buying in bulk seems like an efficient way to purchase and quite often it is, if we use what we purchase.

Why is this important, (besides the dollar value) you ask? It's because of the carbon footprint of that food and how it contributes to global warming. Twenty-five percent of all fresh water used in this country goes to growing and processing food. Then there are the fertilizers and chemicals used to grow it, most often produced from fossil fuels if commercially grown. If grown organically, there is still the waste of organic resources. Then there are the fossil fuels used to power the tractors and fishing vessels. Trucks transport the food to the market and the waste to the dump. More fossil fuel is used to make the plastic packaging. Getting food in the United States from farm to fork uses 10% of our total U.S. energy budget. Of the food that is thrown away, 90% is discarded while it's still edible. At the dump, the food breaks down and forms methane gas, a form a gas that is more damaging to the environment than carbon dioxide.



#### Expiration dates and what do they mean?

These dates are not regulated by the USDA. Infant formula is the only product federally regulated. The date on the label is set by the manufacturer for peak quality. It also helps the market in rotating product. Basically, it is a suggestion, not a finite date. Studies have shown that many Americans are confused by what these dates mean and throw away perfectly good food, adding to the flow of waste.

#### What can we do about this?

There are simple steps you can take to help stop food waste, many of which you have probably heard before. Don't go to the grocery store when hungry, you will be tempted to impulse buy. Plan your meals for the week. Have a shopping list and only shop from that list. Check your cupboards and freezer for ingredients so that you don't buy something you already have. If it's something you don't use a lot of, buy the smallest amount possible. Some markets offer bulk spices and dried herbs where you can purchase small amounts. If your market offers bulk bins of grains, beans, nuts, protein powder and flours, you can purchase only what you need for the recipe or the amount you know you can use. The food will be fresher and quite often cost less. Plus, you save on packaging. All this is better for the environment.

Freezing extends the life of cooked foods but remember to label and date the packages before you freeze them. Keep a running list of what's in your freezer and then incorporate them into your weekly menu. And remember, things don't last forever in your freezer so FICO (first in, first out) is always a good rule of thumb.

Start a waste log. For one week or month track all the food you throw away, compost, or put down the disposal. To make it really impactful, you can put \$'s next to each item to remind you how much it cost.

Consider keeping a food log on your refrigerator door and add or subtract items as you put them in and take them out. It makes it much easier to remember what you have in your refrigerator if it's written down.

There are apps available that help avoid food waste and help you plan meals around the ingredients you already have on hand.

#### Use the Freezer

- 1. When you cook a meal that's big enough to have leftovers, go ahead and freeze them right away. You'll have meal ready for another day and you won't have to eat the same thing two nights in a row.
- 2. You can freeze sauces or soups in plastic freezer bags. Squeeze out as much air as possible before sealing the bag and stack them flat so they won't take up much space in your freezer.

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# **Growing Knowledge**

Lee Miller, Master Gardener

*Thriving During Challenging Times; The Energy, Food and Financial Independence Handbook* by Cam Mather Aztext Press, Canada. 317 p.

This is not your mundane grower's guide to vegetable gardening, but a life plan for independence that includes gardening as a major component to deal with uncertain times. As I see pictures of indigent people lining up at food banks, I always wonder how many could be growing much of their own food, if they just had the knowledge, the land, and the will to garden. Unfortunately, most of us today live in urban situations where gardening is difficult. Cam Mather has managed by frugality to overcome these restraints and live an independent life much in the manner of Scott and Helen Nearing, two other heroes of the back-to-the-land movement in the 60's.

This is a guide for living frugally when times are hard. Just how hard times will be in the future is anyone's guess. Mather postulates hard landings and softer landings for the economy, but the fact that the bloom may be permanently off the American Dream

and the progress concept is a possible future demanding more self-sufficiency in spite of globalization. Most food travels 1000-3000 miles to our tables at a high energy and greenhouse gas cost. This was not so 200 years ago when all food was local and the population only 4 or 5 million.

Cam Mather has been gardening for 30 years and started out on some clay subsoil that was all that was left in his subdivision after the topsoil got bulldozed away. Consequently, his first garden was a dismal disappointment. The next garden was more successful as he lived in a home that was a hundred years old and the soil profile was left intact. The garden thrived. Later, living in apartments, he was forced to rent garden space that was 20 minutes away by car. He observed people indiscriminately dousing plants with pesticides in this community garden, so became anxious to have his own plot. The next home had two large shade-providing black walnuts in the back yard which poisoned any vegetables he tried to grow, so he did the sensible thing and gardened the front yard. That being too small and somewhat controversial he decided it was time to find a country place and a big garden area. I have had similar experiences with gardening on city lots; not enough space and neighbors who whined about my composting!

Mather has learned how to garden by reading and conversing with fellow gardeners. I have to agree when he states that "It is not rocket science." However, it does take some skills and knowledge that are not learned overnight. The first step

THRIVING
Challenging Times
Challenging Times

Energy, Food, and Financial Independence Handbook

Cam Mather

is to find some available land; secondly to prepare it well by smothering/digging out the grass/weeds without losing topsoil. If you can, get a rototiller to work the soil. One tank full of gas can replace a day or more with the shovel and hoe at readying the soil for planting. If you must rely on a shovel, make sure it gets sharpened which makes for less efforts digging. This can save you money, since by digging you get lots of exercise and can quit your gym membership. Next, use compost which is the key to a successful garden; something all Master Gardeners know and advocate. He encourages taking, with permission, the neighbor's leaves and grass clippings, getting coffee ground at the local coffee shop, buying discounted broken bags of manure at local stores, and generally making lots of compost as cheaply as possible for a large garden.

Since Mather lives in Canada off the grid, with solar and wind turbine only for power, he does not opt for grow lights and heat mats for greenhouse production, but if you don't have such restraints, it is a good idea to grow your own tomatoes, peppers using these techniques. He does grow some, but later in the year when power for light and heat are not needed.

Mather gives many tips on gardening in this section of the book. It is a good overview of vegetable gardening where space is not at a premium. He recommends square foot gardening books only for those with space limitations. I could relate to most of his gardening experiences, such as experimenting each year with a few new vegetables and other aspects of life on a small planet as well. I recommend this book for anyone desiring to live more self-sufficiently and debt free.

## From the Garden

## Francha Barker, Master Gardener

Ask any gardener why they garden and you'll get a variety of reasons: to grow safe, healthy food; to be outside; to create; to add beauty; to make or save money; or to meet emotional or spiritual needs. Almost all those goals can be enhanced through the act of repurposing in and around the garden.

Pinterest currently has 386 ideas for garden reuse and repurpose; proof positive of the popularity of repurposing. And as repurposing grows, so lessens our area landfills. It's a gardening win-win.

Repurposing is the process by which an object with one use value is transformed or redeployed as an object with an alternative use value. This reusing can transform items that are no longer practical for their original purposes to valued, practical, and often whimsical items to enhance a landscape. We hope you are inspired with some of these creative repurpose projects.























# **Demo Garden**

Trish Tremayne, Master Gardener





In the Pollinator Garden at the Ag Center, the bees and other insects are happily visiting the lovely little blooms of Vine Hill Manzanita (Arctostaphylos densiflora 'Howard McMinn'). The evergreen shrub is easy to care for and drought tolerant. It has smooth, dark red bark and blooms throughout the winter and spring. It makes a beautiful accent plant in the garden.

The Demo Garden is located at 2101 E. Earhart Avenue, Stockton.

It is open 24/7/365. Come pay us a visit and be inspired!

# **How Do You Say That?**

Corinne Bachle, Master Gardener

There are many pronunciations in the world of gardening that are truly tongue twisters. This guide will hopefully help you through some of them.

Common Name	Latin Name	Pronunciation
Anise Hyssop	Agastache foeniculum	ag-ah-STAK-ee foe-NIK-yew-lum
Astilbe chinensis	Astilbe chinensis	ah-STILL-bee chin-EN-sis
Clematis	Clematis	KLEM-ah-tis
California Fuchsia	Zauschneria	zowsh-NER-ee-ah
Coneflower	Echinacea	eh-kih-NAY-shah
Rose of Sharon	Hibiscus syriacus	hy-BIS-kus seer-ee-AY-kus
Weigela	Weigela	wy-JEE-lah

Sources: Sunset Western Garden Book Fine Gardening Magazine

# The Help Desk—Bermuda Buttercup

Regina Brennan, Master Gardener

#### HOW DO I GET RID OF THIS TROUBLESOME WEED?

#### DESCRIPTION

Bermuda buttercup (buttercup oxalis), is a low growing perennial broadleaf plant with leaves that look like shamrocks. They are attractive, with bright yellow flowers associated with the welcoming of spring, but are a nuisance when they spread into garden landscapes. Beauty is indeed in the eyes of the beholder. Flowers bloom from November through April.

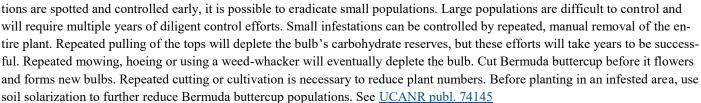
#### REPRODUCTION

Bermuda buttercup reproduces by bulbs and bulbets, not from seed. Cultivation, soil movement, and garden waste disperse bulbs and bulbets. Foliage dies and the bulbs become dormant when temperatures rise in late spring and summer. Small, whitish bulbets develop on the stem at the base of the rosette of leaves, and new bulbs form underground. A plant forms about a dozen small bulbs per year, each less than 1 inch long. What may start out as a few plants can become an infestation if a management control plan is not vigorously followed.

#### MANAGEMENT/PREVENTION

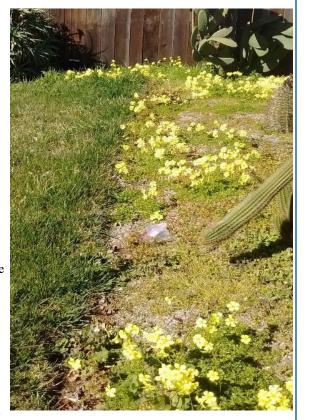
In many garden situations Bermuda buttercup can be managed with physical control methods such as hand-weeding during the growing season. In other cases, herbicides can be integrated into the management program. The effectiveness of any control method depends on where the weeds are growing. The herbicides that are available are nonselective, which means they will injure turf and ornamentals. Removing the top of the plant by cultivating or cutting it off won't kill the bulb. Herbicides also don't kill the bulbs, and regrowth from bulbs should be expected. Don't move soil from an infested site to one that is free of the weed as you will be sowing a new crop with bulbets too small to be readily detected.

The best control method for Bermuda buttercup is prevention. If new infesta-





In recent years Bermuda Buttercup, Oxalis pes-caprae, has been encroaching in natural areas and hillside plantings along California's coast. The oxalic acid present throughout the plants is poisonous to livestock if ingested in large quantities. Researchers are investigating approaches for controlling this invasive weed. Some suggest covering infestations with stiff cardboard, then covering the cardboard with a thick layer of organic mulch to kill the plants and weaken the bulbs, making them less capable of competing with desirable plants. Keep the mulch on the infestation until the mulch and cardboard have rotted, then plant competitive ornamentals into the soil-mulch mixture. See UCIPM Pest Notes Publ. 7444



## A Taste of the Season

## Julie Hyske, Master Gardener

Spring is a welcome invitation to start incorporating bright flavors and seasonal ingredients. With Easter just around the corner, why not include creamy parmesan spinach bake as a comforting side dish to dress up your favorite ham recipe? The creamy asparagus soup recipe is savory and smooth and can be served warmed or chilled. Finally, let's not forget a local favorite, strawberries! This make ahead dessert is perfect as a Mother's Day treat and brings glory to any spring time brunch. Yum!

#### Creamy Parmesan Spinach Bake

#### Ingredients

3 packages (9 oz each) fresh baby spinach

1 small red onion, chopped

1 tbsp butter

1 package (8 oz) cream cheese, cubed

1 cup sour cream

½ cup half-and-half cream

½ cup plus 3 tablespoons grated Parmesan cheese, divided



3 garlic cloves, minced ½ tsp pepper 2 cans (14 oz each) waterpacked artichoke hearts, rinsed, drained and chopped 1 tbsp snipped fresh dill 12 butter-flavored crackers ½ tsp seasoned salt

Preheat oven to 350°. Place half of the spinach in a

steamer basket; place in a large saucepan over 1 in. of water. Bring to a boil; cover and steam for 3-4 minutes or just until wilted. Transfer to a large bowl. Repeat with remaining spinach; set aside. In a large saucepan, sauté onion in butter until tender. Reduce heat to low; stir in the cream cheese, sour cream, half-and-half, ½ cup Parmesan cheese, garlic and pepper. Cook and stir until cream cheese is melted. Stir in the artichokes, dill, seasoned salt and spinach. Transfer to an ungreased 2-qt. baking dish. Sprinkle with cracker crumbs and remaining Parmesan cheese. Bake, uncovered, for 20-25 minutes or until edges are bubbly. Serves 12

#### Strawberry No-Bake Cheesecake in a Jar

#### Ingredients

1 1b fresh strawberries (washed, cored, and sliced)

2 tbsp granulated sugar

1 cup heavy cream

1/4 cup powdered sugar

1 (8 oz) package cream cheese

1 (14 oz) can sweetened condensed milk

1 tbsp vanilla bean paste (or vanilla extract)

2 tbsp fresh lemon juice

1 (5 oz) box shortbread cookies

2 tbsp unsalted butter, melted

Sprinkle strawberries with sugar and toss to coat. Set aside.

In a tall mixing bowl, whip the cream with an electric mixer fitted with the whisk attachment. Once trails begin to form, turn the mixer off and add pow-

dered sugar and continue to whip until stiff peaks form. Place whipped cream in the refrigerator until ready to serve. In a medium mixing bowl combine cream cheese, milk, vanilla and lemon juice. Beat with an electric mixer until mixture is smooth. Place in the refrigerator until ready to serve. Place cookies in a blender or food processor to crush. Blend on low until you have all cookie crumbs. Pour into a small bowl and combine with butter. Mix until all cookie crumbs are moist. Divide cookie mixture into 4 dishes (we used mason jars). Gently pat cookies down with a spoon or your fingers. Add cheesecake filling, divided evenly between jars. Top with 1/4 of strawberries in each jar. Add a dollop of whipped cream. Refrigerate 2 hours, or until ready to serve. Cheesecake keeps for several days in the fridge, covered. Serves 4

#### **Asparagus Soup with Lemon Creme Fraiche**

#### Ingredients

1 tbsp butter

1 tbsp olive oil

1 small onion, chopped

4 cups cut fresh asparagus (1-inch pieces)

3 medium red potatoes, peeled and cubed

2 cans (14½ ounces each) vegetable broth

2 tsp grated lemon zest

½ tsp salt

½ tsp pepper

1/4 tsp ground coriander

1/4 tsp ground ginger

#### Garnish:

1/4 cup minced chives

1/4 cup creme fraiche or sour cream

1 tbsp lemon juice

½ tsp grated lemon zest

In a large saucepan, heat butter and oil over mediumhigh heat. Add onion; cook and stir until tender. Add asparagus and potatoes; cook 3 minutes longer. Stir in broth, lemon zest and seasonings. Bring to a boil. Reduce heat; simmer, covered, 15-20 minutes or until potatoes are tender. Cool slightly. Process soup in batches in a blender or use an immersion blender until smooth. Return all to pan and heat through. Combine garnish ingredients; serve with soup. Serves 6



# **Coming Events—Spring 2019**

Corinne Bachle, Master Gardener

#### Saturday, April 6, 9:00 a.m. – 2:00 p.m. <u>LINDEN Community Garden Club</u> <u>PLANT SALE</u>

19147 E. Highway 26, Linden (Linden United Methodist Church rear parking lot) This annual sale features heirloom and hybrid tomatoes, p0eppers (sweet and hot), lots of other vegetable and herb plants, and flowers (annuals, perennials, and shrubs). Free coffee and cookies until 11 a.m. Master Gardeners will be there to answer your gardening questions.

## Saturday, April 6, 2:30 – 4:00 P.M. **Succulent Wreath Workshop**

Alden Lane Nursery, 981 Alden Lane, Livermore

You've seen them- loved them- and always wanted to have one! Join our crafternoon crowd and make your own wreath using a 12" wire form, moss, and 16 colorful succulents for an amazing custom designed delight. The cost for this class is \$85.00 and includes all instruction and materials. See our Alden Lane Cashiers to sign up today or call (925)447-0280. Class size is limited.

#### Saturday, April 6 9am—1pm <u>Lodi Arbor Day Event</u>

Hale Park

209 Locust St. Lodi

Master Gardeners will be there to answer your gardening questions.

### Monday, April 8, 10:00 – 11:30 a.m. <u>San Joaquin Master Gardeners and</u> <u>Master Food Preservers Workshop: All</u> <u>About Tomatoes plus Salsas & Preserving</u> Contact: 209-953-6100

Lodi Library, 201 W. Locust Street, Lodi Join the UCCE Master Gardeners and the UCCE Master Food Preservers as we teach you how to grow and preserve tomatoes. This class will be co-taught by both programs.

Please call 209-953-6100 by Thursday, April, to reserve your seat and class materials. Class size limited to 50.

Sunday, April 14 10 am—4 pm Stockton Earth Day Festival Victory Park, Stockton

BUS, BIKE or TAKE A HIKE Master Gardeners will be there to answer your gardening questions. Tuesday, April 16 10:30-12:00

#### San Joaquin Master Gardeners and Master Food Preservers Workshop: All About Tomatoes plus Salsas & Preserving

Robert Cabral Ag Center 2101 E Earhart Ave. Stockton

Join the UCCE Master Gardeners and the UCCE Master Food Preservers as we teach you how to grow and preserve tomatoes. This class will be co-taught by both programs.

Please call 209-953-6100 by Friday, April 12, to reserve your seat and class materials. Class size limited to 50.

## Tuesday, May 13, 10:00 – 11:30 a.m. **Growing CA Native Plants**

Lodi Library, 201 W. Locust Street, Lodi Join the UCCE Master Gardeners as we teach you how to grow CA Native plants and UC Davis Arboretum All Stars. Please call 209-953-6100 by Friday, May 10, to reserve your seat and class materials. Class size limited to 50.

#### Saturday, May 18th, 10:00 a.m.

#### <u>Make a STRAWBERRY HANGING -</u> <u>BASKET</u> — \$19.99 plus tax

Alden Lane Nursery, 981 Alden Lane, Livermore

Easy workshop for all ages. We provide all the materials to grow a 'fruitful' strawberry basket even if you live in an apartment or condo. We will show how easy it is to grow your own in a small space. Workshop includes 1-10" wire basket, swivel wire hanger, 6 pack of strawberries, soil and fertilizer.

# Tuesday, June 10th, 10:00 – 11:30 a.m. Conserving Water in the Landscape

Lodi Library, 201 W. Locust Street, Lodi Join the UCCE Master Gardeners as we teach you how to save water in your land-scape. Please call 209-953-6100 by Friday, June 7th, to reserve your seat and class materials. Class size limited to 50.

## Saturday, June 8th, 2:00 p.m.

## **Container Herb Garden Class**

Alden Lane Nursery, 981 Alden Lane, Livermore. Are you an apartment/condo dweller or someone who just wants to grow some herbs! We'll show you which ones do best in containers. How to grow them, what soil to use, what fertilizer to apply and how to control pest problems.

# **Companion Gardening**

(cont. from page 1)

#### Susan Mora Loyko, Master Gardener

garden. Taking a holistic approach to gardening and recognizing certain plants grown close together become compatible is an important concept to help build a healthy plant community.

As the gardener you control how your garden grows. By growing plants with good companions, you bring a healthy environment for all your plants. Planting without studying and researching before you start your garden to ensure can quickly bring your garden to ruins. Avoid planting vegetables in large patches or long rows and interplant with flowers and herbs. A large grouping of one type of vegetable provides opportunity for problematic pests. Try mixing flowers and herbs which will make it more problematic for pests to

find your veggies. The scent of flowers and herbs, as well as the change in color, is thought to confuse pests. Certain flowers and herbs will attract beneficial insects to the garden.

Other beneficial herbs and flowers to consider adding to your garden that can help your garden grow can also add beauty and protect plants from predators:

- Dill and Basil planted among Tomatoes can protect against Tomato Hornworms.
- Sage scattered about Cabbage reduces damage from Cabbage Moths.
- Marigolds are good when grown with just about any garden plant, repelling Nematodes which attack vegetable roots, especially Tomatoes.
- Some companions act as trap plants, luring insects to them. Nasturtiums will attract hordes of Aphids that the devastating insects will flock to them instead of other plants.



- Carrots, Dill, Parsley and Parsnips attract beneficial insects (Praying Mantis, Ladybugs, and Spiders) that dine on insect pests.
- Much of companion planting is common sense: Lettuces, Radishes and other quick-growing plants sown between hills of Melons or Winter Squash will mature and be harvested long before these vines need more leg room.
- Leafy greens like Spinach and Swiss Chard can grow in the shadow of Corn.
- Bush Beans tolerate the dapple shade Corn casts and, since their roots occupy different levels in the soil, don't compete for water and nutrients.
- Mint wards off Cabbage Moth and Ants.
- Thyme thwarts Cabbage Worms that feast on Brussels Sprouts, Cabbage, Cauliflower, Collards, Horseradish, Kale, and Kohlrabi.
- Lavender is known to deter Codling Moths, which wreak havoc on Apple Trees.
- Zinnias attract Ladybugs, so when planted near Cauliflower can ward off Cabbage Flies.

#### **Three Sisters Planting**

A familiar companion planting that supports each other is the Native American "Three Sisters Planting." This age old grouping involves growing Corn, Beans and Squash – often Pumpkin – in the same area. As the Corn stalks grow, Beans naturally find support by climbing up the stalk. Beans, as all legumes, fix nitrogen (add nitrogen to promote growth) in the soil, which supports the large nutritional needs of corn. Squash grows rapidly and the large Squash leaves shade out weeds and serve as natural weed block.

There are plenty of benefits to Companion Gardening.

- Shade large plants provide shade for smaller plants in need of sun protection.
- Natural supports tall plants such as corn and sunflowers can support lower-growing, sprawling crops such as cucumbers and peas.
- Improved plant health as one plant absorbs some substances from the soil, it may change the soil in favor of nearby plants.
- Healthy soil plants with long taproots, like burdock, bring up nutrients from deep in the soil, enriching the topsoil to the benefit of shallow-rooted plants.
- Weed suppression planting sprawling crops like potatoes with upright plants minimizes open areas, where weeds typically take hold.

Long time gardeners believe growing certain plants together improves flavor despite lack of scientific proof. Some plants attract beneficial insects that help to protect a companion while other plants (particularly herbs) act as repellents. In addition, plants that require a lot of the same nutrients as their neighbors may struggle to get enough, producing lackluster crops.

Plants that are not compatible with each other are sometimes called Combatants. For example:

- Garlic and onions stunt the growth of beans and peas.
- Potatoes and beans grow poorly near sunflowers.
- Cabbage and cauliflower are closely related but they don't like each other at all.

One of the keys to successful companion planting is observation. Consider journaling plant combinations and results from year to year to with other gardeners. Companionship is just as important for gardeners as it is for gardens.

# Spring Garden Chores (cont. from page 2)

## Sue Davis, Master Gardener

**Chrysanthemums** will provide beautiful fall flowers if you start seeds this month.

**Tomato and pepper** transplants can be planted this month. Seeds of pumpkins, beans, corn, squash, cucumbers, and melons can be sown in the garden around the middle of May. For interesting and unusual fall decorations, consider growing pumpkins or winter squash that are not your ordinary jack-o-lantern choice.

#### Maintenance -

**Bulbs** should be left in the ground until the foliage is dry and crisp.

Roses will continue to produce beautiful blooms through

summer and into fall if you deadhead spent flowers.

Aerate lawns that get a lot of heavy foot traffic and have compacted soil which makes it difficult for water, fertilizer, and oxygen to reach the roots. If you can't push a screwdriver up to its handle into the turf, it's time to aerate. Besides compaction, lawns on heavy clay soil or those on a steep slope should be aerated. Use an aerator that either produces a core or a water wash to dig holes. Spike aerators just add to compaction. If you

are using a machine aerator, be sure to mark and avoid all sprinkler heads. Some machine aerators require a lawn to be moist, but not soggy. Irrigate a day or two before aeration if soil is dry. **A mower** set at the highest or next-to-the-highest blade setting will help keep your fescue lawn healthy and use less water through the summer. Mow your lawn regularly so that no more than 1/3 of the height is removed at a time.

Water your lawn in the morning to discourage fungus diseases. You'll also lose less water through evaporation.

#### June Notes

#### Plant -

There's still time to get beans, corn, cucumbers, eggplant, peppers, pumpkins (start now for Halloween), summer squash, and tomatoes in the ground. These warm-season plants grow well as soil heats up, but need lots of irrigation. Conserve water by only growing what your family will consume.

**Plant basil and cilantro** now and you'll have fresh herbs all summer. Both annuals do well in pots and love sun and ample

water (easy to control if you are growing the plants in pots). Start basil from seedlings, but sow cilantro seeds directly in the pot – they germinate quickly. Begin harvesting when plants reach 6 inches tall.

Attract bees with a variety of flower shapes and colors. Look for flowers and plants that are native to our area for growing ease and as an attractant for honey bees.

#### Maintenance -

**Harvest** garlic and onions this month as well as potatoes at the end of the month.

Water plants early in the day to conserve water, ensure maximum growth, and minimize disease problems. Plan to water

deeply every 7 to 10 days or whenever the soil is dry at a depth of 3 inches.

**Apply a 2-inch** layer of mulch to conserve water. Wood chips used as mulch around plants can suppress weeds, conserve soil moisture, and enhance the plants' root growth.

**Most lawns** only need to be watered two or three times a week. A deep, thorough watering could lower that to once per week.

**During the summer heat**, lawns need about two inches of water per

week. To determine your sprinklers output, place several flatbottomed containers (such as tuna fish cans) around your lawn, turn on the sprinklers for a half hour and then measure the water in the containers. Adjust your sprinkler coverage if needed and reset the amount of time you water according to the results of your timed test.



# **Avoiding Food Waste**

(cont. from page 7)

## Trish Tremayne, Master Gardener

- 3. If you have an abundance of lemons and limes, squeeze the juice into ice cube trays and save the frozen juice for later.
- 4. Fruits like grapes, bananas, and strawberries can be frozen.
- 5. Freeze leftover wine in ice cube trays, later added to simmering meat dishes or spaghetti sauce.

#### Make the Most of Older Food

I," is a prons while minnment. IPM ots anywhere.

- 1. What do you do with old bread? Make French toast perhaps or put it in the food processor and make bread crumbs to use as a crunchy topping for mac and cheese and other casseroles. Cut the bread into small squares, season and toast on low heat in the oven to make croutons. Use in stuffing or bread puddings.
- 2. Use leftover rice to make fried rice or as a base for grain bowls topped with vegetables.
- 3. Freeze brown bananas for smoothies and banana bread. They are sweeter than fresh ones.
- 4. Old vegetables can be added into stews or stocks. You can also keep them in a bag in the freezer until you are making stock. Homemade stock will bring your cooking up to a whole new level.
- 5. Tomatoes can be pureed into tomato sauce or salsa.

#### Save the Smaller Amounts

- 1. A small portion of leftovers might not be enough for a meal, but it could make a good snack. Check the fridge for small servings before pulling out a bag of chips.
- 2. Leftover roasted chicken can be the base for a chicken soup or casserole. The bones can be added to stock.
- 3. Rinds of hard cheeses such as parmesan can be frozen and later added to soups for richer flavor.

#### **Prevention is Best**

- 1. Know what's in your freezer or fridge. Label well and review your inventory before you go to the grocery store.
- 2. Package foods properly. This helps to preserve the quality of the food.
- 3. Mason jars are an easy and inexpensive way to store bulk pantry foods. While you don't want to reuse a lid for canning, it's fine to wash and reuse them for storing dry goods.
- 4. Check your large bags of potatoes, onions, apples, and cartons of berries before you store them to make sure there are no signs of spoilage. You've heard the saying "One bad apple can spoil the barrel!"

In the garden, plant only the amount of food that you plan on eating or preserving. If you have extra you can always give it to your neighbors, friends or family, or donate it to a food bank.

## Have a gardening question? Call our hotline!

# San Joaquin County Master Gardeners

Phone: 209-953-6112 2101 E. Earhart Ave.

Suite 200, Stockton, 95206



E-mail: anrmgsanjoaquin@ucanr.edu

Web-site: <a href="http://sjmastergardeners.ucdavis.edu">http://sjmastergardeners.ucdavis.edu</a>

Program Coordinator: Marcy Sousa 953-6100

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Garden Notes is published quarterly by the University of California Cooperative Extension Master Gardeners of San Joaquin County.

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# FREE **HOUSEHOLD HAZARDOUS WASTE** COLLECTION EVENT

## **ACCEPTABLE MATERIALS**

**Household Hazardous Waste:** chemical cleaners, used oil & filters, paint, pool chemicals, fertilizers, automotive fluids, pesticides, 1 and 5 gallon propane tanks, etc.

Universal Waste: fluorescent light bulbs, batteries, mercury containing devices.

Electronic Waste: computers, monitors, printers, TVs, radios, VCRs, telephones, stereos, etc.

NO TIRES, LARGE APPLIANCES, EXPLOSIVES, OR RADIOACTIVE MATERIALS ACCEPTED



**APRIL 6, 2019** 

9:00 am - 2:00 pm Central Valley Waste 1333 East Turner Rd. | Lodi, CA

FOR MORE INFO: SJCrecycle.org or 209-468-3066











