WRITTEN BY GALVESTON COUNTY MASTER GARDENERS IN COOPERATION
WITH THE GALVESTON COUNTY OFFICE OF TEXAS A&M AGRILIFE EXTENSION SERVICE



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By Camille Goodwin MG 2008

You might be a Master Gardener if --- You're out in the garden weeding in a nice dress and shoes. You idolize local and national plant experts and seek out their lectures. Pots of plants awaiting planting tend to accumulate in your driveway. You arrive early so you

can be first in line when the botanical garden holds its rare plant sale. People ask how you're doing and you tell them about the powdery mildew on your zucchini. You buy a headlamp so you can garden better in the dark.

You might be a Galveston County Master Gardener if you're a volunteer who likes to help educate and expand programs of the Texas AgriLife Extension Service in our community. Most of us use our special Texas A&M training in horticulture to be actively involved in spreading the latest research-based horticultural education in our neighborhoods, through public speaking engagements, teaching one of our many *Gulf Coast Gardening* seminars, working at

Should you buy a rose that has rose hips? John Jons educates us on page 14. If you have Chamberbitter weed in your lawn and garden, you should get it under control immediately, page 13. How about a touch of tropical? Learn about plumerias on page 25. Have you been to the Discovery Garden recently where things are constantly changing and developing? Come soon to walk through the herb garden and checkout the many herbs growing (page 8), enjoy the orchard where the berms are now planted with flowers at the base of the fruit trees to keep down weeds. A new rain garden, teaching area and raised berry tanks are included along with new benches and a shaded oasis area to rest (page 15).

We are always looking for sensible ways to control bacterial and fungal diseases. Interns are investigating Serenade as a control for their tomato trials (page 16). Have you ever considered a robot lawnmower (page 17). If you are still considering ways to give back to our community, how about mentoring a new kitchen gardener? Urban Farm Seeding Galveston is looking for volunteers; see page 20 to learn about the project. Want to learn more about Galveston's



the hands-on events and greenhouse sales featured in our Discovery Garden and leading one of the many areas of our two annual public plant sales at the county fairgrounds.

Our award-winning newsletter delivers timely topics and the latest horticultural education out to more than 900 subscribers electronically with each issue and continues to grow in outreach with each publication. In this current edition you'll learn about perennials that bloom and will survive our summer heat in your gardens (page 4). Pages 6-7 feature an article on how pollination benefits the entire planet and how you can help pollinators. A variety of Gazanias just might be the new flowers you need in your landscape (page 12).

Learn about how the Hickory Shuckworm decimates pecan crops along with control methods on page 11.

oleanders? See page 22 to read their history and how to care and maintain these beauties. Donna Ward tells us (page 24) how to propagate some of the favorite plants we have growing in our gardens.

In our continuing series on how our MGs got their gardening genes, enjoy reading about the accomplished Stacey Phillips, Mary Demeny and Sandra Devall on page 28. Another worthy community activity several MGs participate in is Libby's Place. The story on page 30 will fill you in on recent happenings there. This is one of those activities where we may get more back from the participants than we give.

All our calendars and volunteer activities have been updated. The Carbide Update on page 26, new seasonal recipes are featured on page 31, and Dr. Johnson tells us about preparing your landscape for hurricane season in the Last Word on page 37.

Inside This Issue...

- 2 Intro by MG Camille Goodwin
- 3 How to Reach Us
- 4 Perennials to Take you Through the Summer by MG Stacey Phillips
- 6 Native Pollinators by MG Intern Hedy Wolpa
- 8 A Walk Through the Herb Garden by MG Joanne Hardgrove
- 10 Harvesting Pecans...Fall Ritual in Carbide Park by MG Lisa Belcher
- 11 Pecan Trees and the Hickory Shuckworm by MG Intern Hedy Wolpa
- 12 Gazanias, Sun Loving Beauties for You and Your Butterfly Garden by MG Intern Mary Leonard
- 13 Chamberbitter Weed by MG Pam Hunter
- 14 Q & A: Should I Buy Roses with Hips? by MG John Jons
- 15 Oasis in the Orchard by MG Pat Forke
- 16 The Use of Seranade Garden Disease Control for the 2019 Tomato Performance Trials by MG Intern Don Hogarth
- 17 Robot Lawn Mowers by MG John Jons
- 18 The Natural Beauty of African Violets by MG Elayne Kouzounis
- 20 Seeding Galveston and the 100 Kitchen Gardens Project by Cheryl Watson
- 22 The Oleander Galveston's Pride by MG Jan Brick
- 24 Trowels and Tribulations by MG Donna Ward
- 25 Plumeria Care Guide by MG Loretta Osteen
- 26 Discovery Garden Update by MG Tom Fountain
- 27 Meet Galveston County Master Gardener Joanne Hardgrove by MG Susan Meads-Leahy
- 28 Jobs, Family & Genes: it adds up to making GCMG's so special by MG Karolyn Gephart
- 30 Libbie's Place by MG Barbara Canetti
- 31 Seasonal Bites by MG Sandra Gervais
- 32 State Conference Awards
- 32 July Events by MG Nita Caskey
- 33 GCMGA April Meeting Minutes by MG Joanne Hardgrove
- 33 GCMGA May Meeting Minutes by MG Briana Etie
- 34 MG Hotline by MG Briana Etie
- 34 SmugMug by MG Sharon Zaal
- 35 Bulletin Board by MG Linda Steber
- 36 Recertification Hours by MG Ginger Benson
- 37 Last Word Hurricane Preparations Should Include the Landscape by Dr. William M. Johnson
- 38 Monthly Meetings and Invitation by MG Judy Anderson



Cover: Native Pollinator Photo courtesy of GCMGA Digital Library



Galveston County Master Gardeners are on Facebook with information about upcoming programs, Dr. Johnson's weekly column and more. Like us on Facebook and don't forget to opt to receive notifications. Share with others!

How to Reach Us



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We encourage your articles!

Due the 20th of each month.

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Thanks for your interest!

Perennials to Take You Through the Summer



By Stacey Phillips MG 2017

Do you ever wonder if perennials feel a bit like Cinderella? They're hard working, often overlooked choices for most gardeners, and sometimes take a back seat to their "step-sister" annuals—but I think perennials just get a bad rap! Perennials are a great option for introducing low maintenance, drought tolerant plants that also look beautiful and add vivid pops of color to a garden. An added bonus is that so many of them are na-

tive plants as well (roll out the welcome mat for pollinators).

Let's explore a few of my personal perennial favorites to help take you through the summer...

First up is the Black-eyed Susan/*Rudbeckia goldsturm* (Texas Native). This gorgeous plant is a type of coneflower that provides long-lasting continual blooms from spring though summer. This beauty is drought tolerant with blooms up to 5" across that make great cut flowers. Cut plants back in early spring after last frost, and apply a balanced fertilizer.

Next is *Salvia farinaceal* Mealy Cup Sage ('Victoria Blue' and 'Victoria White' both Native to Texas). There are some 900 species in the genus Salvia! Their easy-care attitude makes them ideal candidates for a colorful, low-maintenance garden. Sun and a well-draining soil may be all salvias need for months of bloom, although some varieties tolerate poor soil. As with all perennials, cut plants back in early spring after last frost, and apply a balanced fertilizer. Prune and fertilize again in midsummer to keep a bushy growth habit.

Another type of Salvia that performs beautifully in Galveston County is Autumn Sage/Salvia greggii (Texas Native). This perennial flowers constantly from late spring until frost. Autumn Sage is drought tolerant and prefers full to part sun, and grows about three feet tall and three feet wide, so be sure to give her plenty of space.

My next show-stopping perennial is the Eastern Purple Coneflower/*Echinacea purpurea* (Texas Native). This gem is a drought tolerant native that produces profuse blooms spring through summer. This plant should be grown in full sun to partial shade with well-draining fertile soil. This is another great choice for cut flowers since they last about a week.

If you're looking to have a fiesta in your garden, look no further than *Lantana urticoides* (Texas Native)! A member of the verbena family, Verbenaceae, Lantana is considered an herbaceous perennial or shrub, and there are more than 150 species of this plant. Lantana is extremely drought tolerant, as well as salt tolerant and deer resistant. This garden superstar is free-flowering from spring until fall, prefers



Black Eved Susa



Salvia farinaced



Autumn Sage



Eastern Purple Coneflower

Photos by MG Stacey Phillips



Lantana urticoides



Bat-faced cuphea



Firecracker plant

well-draining soil and blooms best when planted in full to part sun, and actually steps up bloom production as our summer heat intensifies. Shrubs can spread three to six feet, but don't be afraid to prune back regularly to achieve desired look/shape. Prune this plant back almost to the ground after last frost, as each year will bring all new growth. All types can be used in containers and the trailing types are great in hanging baskets.

Even though I love all of these perennials, I find plants in the Cuphea family to be truly interesting. The Cigar or Firecracker plant (*Cuphea ignea*) plant is a spreading perennial with orange and yellow tubular flowers. The Bat-Faced Cuphea (*Cuphea llavea*) is a low-growing, spreading perennial with a unique little flower. Its red tubular blooms with purple "ears" and tiny tubular blooms open at the end to resemble a bat's face. Both are drought-tolerant, sun-loving perennials.

That's a wrap, and hopefully after reading this, you'll no longer think of perennials connoting a bad rap! Find your favorite "Belle of the Ball"... I'm sure you'll love them almost as much as I do!



Examples of a few varieties of Lantana

Native Pollinators



By Hedy Wolpa MG 2018

Put down your fork, knife, and coffee mug and consider this:

Pollinators-butterflies, moths, bees, bats, humming-birds, wasps, flies, and beetles-uphold ecosystems all over the planet. Insects alone pollinate up to 80% of all plant species, and most of the world's human food crops require insect pollination. Insects also pollinate fields of livestock crops, such as alfalfa and clover. Don't forget about medicines and supplements that are plant-derived and depend on pollination by

insects and small mammals to ultimately reach pharmacy shelves. On average, one-third of every food, spice or condiment we consume, or beverage we drink, and more than half of the world's diet of fats and oils, are available to us because of pollinating insects, birds, and bats.

Pollination describes the activity in which pollen is transferred from the male parts of a plant to the female parts of the same plant, or another same-species plant, so they will reproduce. Plants don't move around on their own seeking pollinators, so insect and small mammal pollinators need to come to them (although the wind will naturally move pollen around, as will humans brushing against plants as they move through a garden). Some plants, like roses and peaches, with "perfect" flowers will self-pollinate. Other plants with "imperfect" flowers have all male or all female parts ONLY in each flower and require more help getting together, such as cucumbers and squash, and that's where our pollinator friends are needed. The transfer of pollen leads to fertilization and successful seed and fruit production.

A **pollinator** is an organism that assists in transferring pollen. There are thousands of species of pollinators such as bees, ants, beetles, butterflies, flies, midges, wasps, and moths. Although people may consider these insects to be a nuisance, they are a crucial part in any ecosystem. Hummingbirds and bats are also pollinators, carrying pollen in their feathers, fur, and noses. All of these insects and animals are abundant in Texas, making them our native pollinators. Not only do native pollinators provide us with a significant amount of food we eat and contribute to the economy, they assist plants in providing food and protection for wildlife, preventing erosion, and keeping waterways clean.

Flowers and pollinators

Some flowers have a general shape structure and attract a wide variety of pollinators. The flowers of other plants are formed to attract specific pollinators with color, scent, or structure. This is a mutualistic relationship as both plant and pollinator benefit from one another. Two examples:

The flowers of some orchids look like spiders and lure their specific pollinator, the *Cryptocheilus bicolor* wasp. This wasp attacks the flower, mistaking it for prey, and in the process the pollen attaches to the stinger. When the wasp attacks another orchid flower, it transfers the pollen onto that flower's stigma, completing the pollination process.



Monarch butterfly collecting nectar



Pollinating syrphid fly resembles a bee



Pollinator Wasp

The flowers of some plants have ingenious insect traps and pungent odors when their blossoms open. The large, colorful flower of Dutchman's pipe (*Aristolochia gigantea*), which is pollinated by flies and beetles, has an opening leading into a bladder-like trap. Dense, downward-pointing hairs in the floral tube prevent the pollinators from climbing out. They receive rations of nectar until, several days later, the anthers release their pollen and the flower tilts horizontally, allowing the pollen-laden flies to walk out and then crawl into another receptive floral trap. Look for Dutchman's pipe in our Pergola Garden!

Bees - Bees provide an important pollination service for most ecosystems worldwide, and one bee can pollinate 5,000 blossoms in her lifetime! Not only do native bees pollinate agricultural and commercial crops, they also play an integral role in the functioning of natural ecosystems. Among the most common native pollinators are solitary bees, aptly named because most don't assemble in hives or colonies. Bumblebees and honeybees are sociable, meaning they live in colonies, share work, and have multiple, overlapping generations. Bees can be generalist feeders and forage to gather nectar and pollen from a wide range of flowering plants, or specialist feeders, relying on a single plant species or a closely related group of plants, making them susceptible to the negative effects of landscape and habitat changes.

Butterflies - Like all pollinators, butterflies are closely linked to their environments, such that drastic changes in the ecosystem can be devastating to localized populations or species. Most butterflies are limited to one or a few closely related plant species that can successfully serve as host plants for the caterpillars, and females must lay their eggs on or near the host plant in order for the caterpillar to survive. Adult butterflies rely almost solely on nectar for food, and prefer colorful, fragrant flowers with surfaces that are flat and broad enough on which to land. Plants that depend on a single pollinator species, and likewise, pollinators that depend on a single type of plant for food (for example, monarch butterflies and milkweed plants) are interdependent. If one disappears, so will the other. Butterflies are migratory pollinators, and must attempt to survive migration through scattered habitats that contain little food due to over development and land use changes. The lack of fuel along migratory routes is much to blame for dramatically decreasing populations of migratory pollinators.

Beetles and flies - Flies and beetles are two important groups of native pollinators. Some flies resemble bees, allowing them to evade predation. Some pollinating beetles are quite small and difficult to see, while others are large and colorful. Syrphid flies are important pollinators and the larvae of some species eat insect pests, like aphids.

Hummingbirds play an important role in the pollination of numerous species of shrubs and vines. Hummingbirds are adapted to drinking nectar from tubular-shaped blossoms, which they help pollinate while feeding. For example, the ruby-throated hummingbird's long, thin bill is perfectly adapted to the deep tubular flower of plants like the trumpet creeper, allowing it to reach deep within the flower to the nectar.

Pollination isn't an activity that occurs only in daylight hours. Night pollinators are also very busy when the sun goes down. The vast majority of moths are nocturnal, and many are important pollinators of night-blooming flowers. For example, the design of the yucca flower is such that it cannot be pollinated in an ordinary manner. The yucca moth (*Tegeticula maculata*) is the only pollinator that is the right size and shape to pollinate yucca flowers. The female yucca moth has mouthparts that allow her to gather a ball of pollen from the yucca plant, which she tucks under her chin, then flies to another flower where she lays her eggs in the stigma. This process ensures that yucca cross-pollination occurs AND that the yucca moth procreates. As the yucca plant can only be pollinated by yucca moths, and yucca caterpillars only eat its seeds, both the moth and the plant depend on each other for survival.

Many **bat** species are generalist feeders, eating whatever is available at the time-night or day—thereby pollinating a variety of plants. Plants with nocturnal blossoms attract insectivorous bats that feed primarily on night-flying insects such as moths, beetles, fruit flies, mosquitoes, mayflies, and midges. Frugivorous and nectivorous bats eat fruit, pollen, or nectar from plants or flowers. Bananas, mangoes, dates, figs, peaches, cashews, avocados, and agaves rely on the nocturnal activity of bats for pollination.

Pollination is an ecosystem process that has evolved over millions of years to benefit both flowering plants and pollinators. Native pollinators have adapted to our local climate conditions, soils, and plant life and, thus, require limited management or maintenance. Sadly, populations of many of our native pollinators are declining. Urban expansion eats away at their natural habitat as roadways replace fields. Landscapers replace native vegetation with exotic garden plants and expansive lawns. Misuse of insecticide also kills pollinators, and herbicides decrease many weeds that are critical to a pollinator's life. At another opportunity, I'll expound on ways to protect and support our native pollinators. Meanwhile, here are three ideas to consider:

- Create a pollinator-friendly garden habitat, and install houses for bats and native bees.
- Practice safe use of pesticides, and utilize the least toxic methods for pest control.
- During hot, dry weather, remember to provide a source of water for beneficial pollinators.



Ruby throated hummingbird finding nectar in trump vine



Yucca moth pollinating at night

A Walk through the Herb Garden



By Joanne Hardgrove MG 2016

An herb can be a reminder of a favorite recipe our grandmother or mother made, or a special scent experienced on a memorable vacation. Also, for many, herbs provide medicinal, savory, or aromatic qualities which are used in everyday life. Webster's Dictionary defines an herb as a seed-producing annual, biennial, or perennial that doesn't develop persistent woody tissue but dies down at the end of a growing season.

At the Discovery Garden our herb garden is ready for an update to hopefully help you explore the

wonderful herbs this world has to offer. The herb garden will produce lovage, curry, green basil, bronze fennel, rosemary, cilantro, salad brunet, onion chives, garlic chives, Mexican mint marigold, purple sage, common sage, German thyme, sweet mint and spearmint to make the world inviting and pleasing to our senses.

As you wander around the herb garden, you will come upon basil. Basil is one of the most popular herbs and has been for centuries. It is a native of Africa and Asia and has been used since ancient times. There are over 150 varieties of basil; the most common is sweet basil which is green and a good companion with tomatoes and most vegetables. Basil is an annual and many varieties reseed year after year. Legends say that basil was found growing around Jesus' tomb after the resurrection. In the Greek Orthodox churches, basil is used to prepare Holy Water. Believers in Haiti say it offers protection against evil spells, and in Mexico it is sometimes carried in a pocket to attract money. Whatever one believes, there is nothing better than the taste of a sliced tomato with a sprinkle of fresh basil.

Salad burnet is a perennial herb which was brought to the United States by the Pilgrims. It was in many colonial gardens, including Thomas Jefferson's. Thomas Jefferson planted salad burnet in the fields to stop erosion and to provide food for his livestock. In the landscape, salad burnet can be used as edging plants because it remains small and orderly. In most climates it stays evergreen. In your garden pick the young and tender leaves for a mild cucumber taste to flavor a fresh green salad or cabbage dish. The leaves are also attractive garnishes and work well in butters, cheese dips, and in salad dressings.

Chives are natives of China, and legend states that Marco Polo ate chives on his adventures. He reported the tastiness and brought a few back on his return from Europe. Chives now grow wild in many European countries. In Romania, it's foretold that Gypsies use chives to tell fortunes. Both onion and garlic chives are easy to grow; they need sunlight and little water. Onion chives have bright green, round, and hollow leaves, while garlic chives' leaves are bright green, flat, and not hollow. Chives can be planted in the landscape as a garden border, instead of monkey grass or liriope. Garlic chives will reseed themselves so be sure to clip off the flower head or you'll have a garden of chives. Onion chives are much less likely to reseed and become invasive. Cilantro or coriander has been used as a medicinal and culinary herb for

more than three thousand years. It is mentioned in the Bible, and appears in Egyptian papyri. Spanish conquistadors introduced cilantro to Mexico and South America. Cilantro has a long history in Chinese medicine and cuisine, and is known as Chinese parsley. Many people do not like the smell of the plant. The name is said to come from the Greek word for bedbug because the plant smells like the unpleasant bug. Cilantro is an herb you either love or hate. If cilantro is not your favorite herb, the attractive flowers can be cut and added to a cut flower arrangement.

Fennel is also grown in our herb garden and dates back to ancient Greece. The Marathon Battle in 470 B.C. was fought in a field of fennel. In Greek mythology, knowledge was given to man by the god in the form of burning coal on a stack of fennel. Ancient Romans believed that chewing the fennel stalks would prevent obesity. Fennel was hung around the house to keep out ghosts and evil spirits. In medieval times, fennel was thought to bring good luck. Fennel has three main types: 1) Florence fennel has an enlarged bulb and is used as a vegetable, 2) wild fennel is bitter and of little use, and 3) sweet fennel. Sweet fennel comes in green and bronze types, both having the same flavor. Fennel is not picky about soil and likes full sun and good drainage. If you don't enjoy fennel, plant it for the swallowtail butterflies which utilize fennel as a host plant for their young to feed upon.

As you wander around the garden, you'll see an herb that is in gum, ice tea, and mint juleps. It is known as a hospitality and fun herb because of its fresh, lively taste. Yes, its mint. Mint got its name from Greek mythology. Menthe was a nymph who had the misfortune of having Pluto fall in love with her. His jealous wife, Proserpine, turned her into a mint plant. Mint is known as yerba buena, in Spanish. There are six hundred or more varieties of mint and it's very easy to grow. One disease that attacks mint is rust. If you have rust in your garden, pull the mint up and dispose it right away, and plant new mint in a container. Rust is difficult to treat when the plants are in the ground.

Another herb you will find in the herb garden is rosemary. Rosemary is an ancient herb that grew wild in the Mediterranean area and was used by ancient Romans and Greeks as a fragrance and for medicinal and magical purposes. This herb is known to enhance memory and increase mental health. Rosemary is a strong herb; small amounts of leaves should be used when cooking. Its piney flavor blends well with fatty foods, as roast meats, poultry, and fish, or with potatoes and legumes. You can also clean the house by combining rosemary with vinegar and use the mixture to clean the kitchen and bathroom. It will deodorize and sanitize without exposing you to harmful chemicals. Rosemary also produces attractive, lavender-colored flowers.

Sage is a good plant for warm climates. It likes to grow in full sun and dry soil; is drought tolerant and not attractive to many pests. Sage has grown in Europe since the Middle Ages. It's a native of the Mediterranean area and Asia Minor. The Chinese were fond of sage and would trade three chests of tea for one chest of sage. Ancient Greeks used sage to treat consumption, ulcers and snake bites. When planting sage, plant near broccoli, cauliflower, rosemary, cabbage, carrots, strawberries and tomatoes. The plants will thrive

being planted near sage, but avoid planting sage near cucumbers, onions, or rue. Sage has a strong identifiable smell as it grows and these plants grow poorly in sage's company.

Another herb called the "scent of the Mediterranean" is thyme. Thyme is fragrant and used world-wide. It's believed by ancient Greeks to have magical powers. Roman soldiers believed it gave vigor and courage in battle when they bathed in thyme water. It also was part of the embalming process by ancient Egyptians. There are three main groups of thyme: 1) upright varieties which grow to 18 inches tall, 2) creeping varieties which are about 6 inches tall, and 3) flat types which grow only 1-2 inches. The upright varieties are used in cooking. Stems of the thyme plant can get very woody, so trim the plant often to keep new growth appearing. Snip the plant back often because a severe pruning may kill it. If planted in your vegetable garden, thyme will help deter cabbage worms. Bees love thyme flowers and will be very happy to rest in the blossoms for hours

If you are looking for an ornamental herb for your flower bed, try planting Mexican mint marigold. It's a perennial herb with yellow, daisy-like flowers. The plants grow 24 inches tall and 18 inches wide, but don't mistake it for a mint. It's a marigold with a licorice flavor and is similar to French tarragon. Mexican mint marigold is a native to Central America and is very drought and heat tolerant. This herb can be used in fruit and green salads, blended with black tea for a spicy flavor, added to cider or fruit punch, or used as a garnish. When looking for this plant other common names are: Cloud Plant, Mint Marigold, False Tarragon, Texas Tarragon, Yerbanis, or Coronilla.

A perennial herb which is very aromatic and is a native of the Mediterranean region is lovage. This herb is used medicinally and is popular as an herbal remedy. Lovage is a tall and erect plant in the family Apiacease. In Europe, the leaves are used as an herb, the roots as a vegetable, and the seeds as a spice. The leaves are used in salads, to make soup or season broths, and the roots can be grated in a salad. Its flavor and smell are similar to a mix of celery and parsley, but with a more intense flavor. The name lovage is from "love-ache," ache being a medieval name for parsley.

The last herb found in the herb garden looks very similar to lavender in its leaf stage, but will look very different in bloom. The curry plant is a perennial herb which is used in culinary dishes, dried flower arrangements, and as a fragrant ornamental plant. It is a flowering plant in the daisy family Asteraceae. The curry plant smells like curry powder, but it's not related to the spice mixture or the curry tree, and is not used in masala for curry dishes. It has a bitter aroma of sage or wormwood. The young leaves are used in stewed meat, fish, or vegetable dishes in the Mediterranean. The leaves can also be used to flavor mayonnaise or be placed in the cavity of a chicken. When using curry leaves as a seasoning, it must be used sparingly. The flavor is not as a curry seasoning but extremely potent. The small flowers have a taste like blue cheese and are edible, but again, use only a small amount.

The upright beds are currently undergoing a makeover. Come visit our Discovery Garden (open to the public on Thursdays from 8:30 to 11:30 a.m.) and see our sweet bay tree, tea herbs, and other interesting herbs. I again invite you to smell, touch, and taste the wonderful herbs described in this article.



Purple Sage



Bronze Fennel



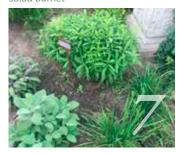
Common Sage



Rosemary



Salad Burnet



Chives and Mexican Mint Marigold



Cilantro



Herb Garden Before Renovation

Harvesting Pecans... an Annual Fall Ritual in Carbide Park

Editor's Note: Lisa Belcher prepared this article for publication in a fall 2018 edition of the Gulf Coast Gardening magazine. We were not able to publish her humorous article at that time but we present it in this edition.



By Lisa Belcher MG 2014

After a particularly heavy night of thunderstorms during late fall in 2018, I was at the Discovery Garden the following day with my fellow Master Gardeners. One Master Gardener encouraged us to pick up the pecans that fell the night before as there was a plentiful crop on the ground produced by 11 mature pecan trees located within the Discovery Garden.

During the late fall season over the past four years as a MG, I had seen a steady ritual of county resi-

dents showing up with their plastic bags collecting nuts produced by 24 pecans located outside of our Discovery Garden. I had never taken the time myself to gather any for my family. This would be the year of my bounty. I quickly grabbed a 5-gallon plastic bucket and started filling it to the brim.

While I was gathering the newly fallen pecans, I was dreaming of pecan pies, pecan sandies, or just freshly cracked and pop-in-your-mouth morsels. As I was walking to my car smiling, two Master Gardeners were smiling and shaking their heads. MG #1 stated "You will only get 50% good pecans out of what you collected." To me, those are Las Vegas odds. MG #2 replied "If you're lucky, you'll get 10% good pecans." I went with the Vegas odds and took my collected pecans home.

I was advised to put an old blanket on my patio table and let the wet pecans dry out since they had been harvested after a rain and dutifully that is what I did. I even went a step further and turned my precious, soon-to-be pecan pies, twice a day to ensure they completely dried out. The following Sunday afternoon was lovely and sunny. I convinced the husband that it was time to start cracking and we brought our Alexa out to play some music, opened a nicely chilled bottle of white wine, and went to work. The first couple of pecans were white, but dry and tasteless. I convinced myself and my husband that this is part of the "bad 50%" and soon we'd been finding the plump and tasty ones.

After I while, and a few big gulps of wine, I realized we were up to 30 duds, then 40 duds. Surely my other half wasn't counting too? "Can I get you another glass of wine?" I ask, hoping he wasn't counting too. Alas, he was counting and soon announced loudly "60!" I made a nervous chuckle and practically gulped my remaining wine.

The "dud count" continued... dud #67, dud #68, dud #69 and then dud #70. My husband stands up and says, "I'll be right back." He returns with a trash can and in a few seconds the cracked, bad pecans and the remaining uncracked pecans were unceremoniously dumped in the trash can. We sat there quietly, sipping the rest of our wine, listening to music, and all the while I was thinking "I should have gone with advice from MG #2 and bought my pecans from the grocery store!"

What lessons can be learned from this adventure?

First, if you plan to produce a quality crop of pecans in an area infested with hickory shuckworms, be prepared to implement an Integrated Pest Management (IPM) plan to control this insect pest! (See MG Hedy Wolpa's following article for more information on this insect pest.) Secondly, I'm also considering passing out printed copies of this article to handout to area residents later this fall who make an annual pilgrimage to Carbide Park's pecan orchard. As in past years, they will likely show up with their plastic bags to collect pecans produced by the trees in the pecan orchard adjacent to our Discovery Garden...perhaps I should also offer bottles of chilled white wine and tickets to Las Vegas!





Pecans Trees and the Hickory Shuckworm



By Hedy Wolpa MG 2018

We love our Texas pecan trees! La Marque's Carbide Park and the Discovery Garden are home to 36 mature pecan trees that were planted about 50 years ago. Although these beautiful trees take 12 or more years to mature, we look forward to harvesting pecans with great anticipation each fall, with thoughts of pies and other baked goods, bowls of nuts on the sideboard, sweet pralines, pecanflavored coffee, and so much more deliciousness!

Texas pecan trees (*Carya illinoensis*) flower in late April or early May, depending on the variety. The trees produce separate male and female flowers on the same tree, but they seldom bloom at the same time. Breezy spring days assist with pollination between trees to produce pecan nuts.

And while the nutrient-rich, buttery pecans are beginning to form, an insidious array of insects, mites, fungi, and bacteria begin their annual assault on the trees. The hickory shuckworm (*Cydia caryana*) begins its invasion during two especially vulnerable points in nut development: the water stage, when interior of nuts fills with water, or the gel stage, when the kernel fills with a gel-like substance.

The adult stage of the hickory shuckworm is a dark brown to grayish-black moth about 3/8 inch long. Female moths attach single eggs to the shuck using a creamy white substance that is visible on the shuck surface. Shuckworm larvae then tunnel into the shuck, interrupting the flow of nutrients and water needed for the kernels to develop normally.

Infested nuts are scarred, mature more slowly, and are usually of poor quality. Damaged shucks stick to the nuts and fail to open. These infestations may cause the nuts to fall before the shell can harden. Shuckworms overwinter as full-grown larvae in old pecan shucks on the tree or the orchard floor.

It is not unusual to find a mature pecan tree, or even an orchard of trees, with an impressive number of pecans scattered on the floor beneath the canopy in mid-to-late fall. You might gather hundreds of pecans, believing that your "harvest" will guarantee enough nuts to last through the new year. However, if hickory shuckworms have infested the pecan nuts, you will likely be disappointed to find rotted, deformed meats.



There are several practices for managing or eradicating the hickory shuckworm that growers can consider. Recommendations include the development and delivery of an Integrated Pest Management (IPM) plan to help growers implement a management plan that is both economically effective and environmentally safe.

Three nonchemical approaches to pecan pest management are choosing a pecan variety adapted to a growing region, maintaining adequate soil moisture and fertility levels, and conserving beneficial insects. The selection of a pecan variety that is appropriate for the growing region will help to ensure a good start for a tree that is expected to bear fruit for many decades.

Adequate irrigation during extended periods of dry weather conditions is also important to keep trees healthy and vigorously growing. This also provides a rich environment for the many beneficial insects that naturally appear around healthy growing plants and trees.

Predatory and parasitic insects that attack pecan insect pests include assassin bugs, lacewings, lady beetles, predatory mites, spiders, and many kinds of tiny wasps that parasitize insect pests. We can help conserve beneficial insect populations by minimizing insecticide applications and using selective insecticides that control pests with minimal damage to natural enemy populations.

In urban areas, it is important to understand that mature pecan trees can grow up to 50+ feet tall, thereby making application of sprayed insecticides problematic due to overspray or spray drift.

In orchards as well as home landscapes with a history of shuckworm infestations, growers should remove and destroy old shucks and dropped nuts during late fall and early winter. Dispose of shucks through household trash pick-up; do not place shucks in compost bins as it is possible that shuckworms can pupate from compost bins depending on how the compost bin is managed.

Most pecans in our Discovery Garden are likely infested with hickory shuckworms, as many MGs and county residents who have picked up pecans will attest. These trees are not treated with insecticides because of public safety issues concerning re-entry times after a spray application and spray drift. Master Gardeners have learned to enjoy the beauty and the welcoming shade that the pecan trees in the Discovery Garden provide during the summer season, with hopes that at least some of the pecans we gather will be tasty and healthful!



Gazanias, Sun Loving Beauty for You and Your Butterfly Garden



By Mary Leonard MG Intern 2019

While in the Discovery Garden admiring an array of spring flowers, some daisy-like flowers, Gazanias, caught my eye. The brilliant blooms seem to say, "Good Morning!"

Genus

Gazanias, treasure flowers or African daisies, are a species of flowering plants in the Asteraceae family, native of South Africa's rocky cliffs, and named after Theodorus Gaza, a 15th-century Greek-Italian scholar. Gaza in Latin means treasure. The genus, having originated in South Africa, is now

found in Swaziland, Mozambique, Tanzania, Australia, New Zealand, the Mediterranean and United States.

Cultivation

Gazanias are used as residential or ornamental plants, annuals in the north and perennials in the south. Treasure flowers prefer a sunny location, well-drained sandy soil, will resist drought conditions and are almost pest free. Too much water causes disease and root rot. The flowers close in the shade, at night, and during cloudy conditions. They may take a freeze of short duration. (Check out Gazania Colorado Gold. It has bright yellow colors and is reported to be cold hardy). Gazanias make great bedding plants. They are commonly used for ground cover, are perfect borders, and also do well in containers. Having flowerheads up to 3 inches across, they have stems 6-8 inches above the cluster. Hybrid mixes, found in your local nursery, have amazing flowers with brilliant colors of yellows, orange, reds, white, rings and eye-popping stripes, that bloom early spring through late fall.

Deadheading

Routinely remove all the faded, spent flowerheads from the plant. This promotes vigorous growth and an extended blooming season, while also preventing unwanted reseeding. If not deadheaded, flowers mature and go to seed (60 per flower). Energy goes to seed – less to flowers.

Varieties

Gazanias come in many different varieties and mixes. Two main varieties are the Trailing Gazania (*Gazania rigens*) and Gazania (*Gazania linearis*). The Trailing Gazania commonly used as ground cover, spreads along the ground in large clumps having leaves with rich green to blue-gray on top and silver-gray underneath alternately arranged on the stems, and forming

dense clusters and orange, black disked flowers. Gazania (*Gazania linearis*) has short underground rhizomes with stems that form smaller, rosette clumps of dark green to olive green leaves that spread close to the ground.

Growing from Seed

Gazanias reseed voluntarily. Toss faded, spent flowerheads where you want them or sprinkle the seeds in an area of prepared, raked, garden soil, and cover the seed with 1/8 inch of soil then water. Seeds will germinate in 15-20 days at 65-70 degrees.

Transplanting

Choose healthy, disease-free plants. Avoid dried or root bound plants, up for quick sale. When transplanting Gazanias, follow the directions according to the label. Dig a hole large enough so the roots have plenty of room to spread, about twice the width and 1-1/2 the depth of the plant. Mix the soil with compost or other soil amendments. Set the ball root in the hole at ground level and backfill with the amended soil. Water and eliminate air pockets.

Propagation

It is best to start propagating in the fall. Dig up the plant allowing enough space so as not to damage the roots. Divide the clumps into sections with healthy shoots. Plant each section in a hole twice the width of the root system and at the same depth as the original plant. Backfill with prepared soil. Water and keep the soil moist until new shoots appear.

Some Tips

Once established, care is simple and works well with similar adapted, flowering plants such as periwinkle, cosmos, verbena and globe amaranth. Fertilize three or four times per year with a balanced, slow-releasing fertilizer.

Are Gazanias Weeds?

According to Weeds of Australia – Biosecurity Queensland Edition fact sheet, Gazania linearis is considered an environmental weed in Tasmania, and many parts of eastern and southern Australia, invading coastal planes and grasslands and open woodlands. UC Berkley lists *Gazania linearis* as an invasive plant species in California. Originally introduced as an ornamental, the plant is now found in native vegetation and grasslands in San Francisco, Monterey, and Ventura Counties, forming a dense groundcover and out-competing other species.











Chamberbitter Weed



By Pam Hunte MG 2018

We have been waiting all fall and winter to get our annuals and perennials in the ground. Spring has finally arrived and everything has started to bloom, including the weeds, the bane of every gardener. This year I found a weed unfamiliar to me. I asked around to see if it could be identified but no one knew the name. Everyone knew it was a dreadfully pesky weed, known to drop hundreds of seeds from a single plant. No one could identify it.

Enter Dr. Johnson, he immediately told me to pull it out or it will easily take over a flower bed. For-

tunately, we caught it before it could do some major damage. This weed is called Chamberbitter (Fig. 1 & 2).

Chamberbitter (scientific name: *Phyllanthus urinaria*) is an herb species in the family of Phyllanthaceae. Chamberbitter is also known as gripeweed, leaf flower, shatterstone, stonebreaker or little mimosa. It is a warm season broadleaf weed that emerges from warm soils beginning in the spring. During mild winters in the Texas Upper Gulf Coast region, Chamberbitter can grow as a perennial.

Chamberbitter reproduces by seeds, which are found in the green, warty-like fruit attached to the underside of the branch (Fig. 3). Although of Asian origin, this weed is widely found in all tropical regions of the world. In the U.S., it is found in southern states such as Florida, Georgia, Alabama, South Carolina, New Mexico and Texas.

Chamberbitter grows upright and has a well-developed tap root. The plant, reaching around two feet tall and has small alternate leaves. The leaves are large at the tip and smaller towards the petiole. The leaves close (fold) at night and open in the day. The flowers are greenish-white, minute and appear at the axils of the leaves, as well as the seed capsules. Numerous small green-red fruits, round and smooth, are found along the underside of the stems, which are erect and red. The leaves are arranged in two rows of branchlets and are thin and oblong with smooth margins, resembling a mimosa seedling.

Management of Chamberbitter is best achieved through the integrated use of mechanical, cultural and chemical methods.

Mechanical Control

Mechanical weed control involves the physical removal of the weed from the soil. This is best accomplished by hand when weeds are young and small, or in

the seedling stage, and is made easier if the soil is moist. Preventing the weed from reaching maturity and setting seed also reduces future weed population.

Cultural Control

Cultural weed control is the prevention of weeds through proper land management practices. A properly mowed turf that is not stressed by insects, disease, drought or nutrient imbalance is the best defense against weeds.

Within landscape beds, apply two or three inches of mulch in the spring to cover seeds from the previous season. Because Chamberbitter seeds require light to germinate, this is especially effective.

Chemical Control

Pre-emergence Herbicides: Because pre-emergence herbicides prevent seedlings from developing, they are an effective tool against annual weeds, but will not affect established weeds. Timing is critical as it must be applied prior to seed germination.

Herbicides containing atrazine as an active ingredient are labeled for preemergence control of Chamberbitter in centipede grass and in St. Augustine lawns. Be careful not to apply on turf during the transition period from dormancy to active growth.

Herbicides containing isoxaben as an active ingredient are also labeled for preemergence control of Chamberbitter in tall fescue, centipede, St. Augustine, Bermuda and zoysia grass lawns. For home lawn use it is available for purchase in granular form and the granules must be watered in to allow isoxaben to coat the soil surface for weed prevention.

Post-emergence Herbicides: Post-emergence herbicides are most effective when applied to young weeds. For post-emergence control of Chamberbitter in St. Augustine and centipede grasses, herbicides containing atrazine as an active ingredient atrazine is recommended.

Control in Landscape Beds

Post-emergence Herbicides: The choice for controlling existing Chamber-bitter in landscape beds is one of the many products containing glyphosate as an active ingredient; be aware that products containing glyphosate are non-selective herbicides (will kill all green plants where spray is applied).

Always carefully read and follow the directions provided on an herbicide's label. Reference to commercial products or trade names does not imply endorsement by Texas A&M AgriLife Extension or bias against those not mentioned. Information presented here does not supersede the label directions.







Q and A Should I Buy Roses With Hips?



By John Jons MG 2003

Should I buy roses with hips or without? This was an option when I was trying to purchase on-line. Are rose hips a result of the rose trying to reproduce? I'm not sure how it effects additional blooming. Do I purchase with or without hips?

Let's first understand, "What is a rose hip?" The rose hip is the fruit of the rose plant, and it contains the seeds of the rose (actually called achenes). Rose hips form after the flowers of the rose have been pollinated. This is the rose trying to reproduce itself.

Depending on type (species, variety) of rose, the hips come in a variety of shapes from spindly to pear shape, in sizes from around 1/16" of an inch in diameter to over 1" and in colors from green to brick red to blackish red or purple. Some rose plants are even prized for their colorful display of hips. The hips are also a rich source of vitamin C and other beneficial

nutriments. The hips of some rose plants are harvested to make teas, jams, jellies, wines and soups.

How it effects blooming: After the rose plant has produced hips, it tends to slow down and may even stop producing flowers (blooms). This is why rose plant growers "dead-head" their roses — which is the removal of the spent flowers. This stops the rose plant from producing hips and encourages the rose to continually produce more flowers in an attempt to produce hips.

Most potted roses in our area are sold cleanly pruned and early in the year before they have had time to produce flowers and produce hips. So a rose plant with hips may indicate a plant that has not been pruned or has been around for a while. However, it could be a rose plant that is prized for its hips.

So purchasing a rose plant with or without hips should not be a problem.



Picture of rose hips. © J. Jons 2019.





Oasis in the Orchard



By Pat Forke MG 2010

What else does an area full of fruit trees and flowers covering ten berms, three raised beds and four tanks need? How about a shaded area complete with benches and water feature where one can sit and enjoy the surroundings? Take a walk in the Discovery Garden and you will find that oasis. The benches in the shaded area were stained by our current class of Interns. Other improvements were organized by Julie Cartmill and carried out by her ambitious group of orchard volunteers.

The flowers planted in the berms among the varied selection of fruit trees provide two purposes: one is for the flowers to cover areas that could otherwise be covered by weeds and the other is partly aesthetic and partly marketing. The flowers provide a pleasing mixed landscape view to anyone driving down the road beside the Discovery Garden. The numerous flowering plants located at the ends of each berm and in the middle of each berm entice visitors to venture further into the gardens where they can observe this mixed landscape planting. Perhaps this mixed landscape planting will encourage the flower gardeners to mix in some fruit trees or encourage the fruit tree planters to add a few flowers alongside their fruit trees.

There are both mature and young trees in the orchard. These trees are varieties representative of what is available for shoppers at both the spring and fall Galveston County Master Gardener Plant Sales. If a particular tree has to be removed from the orchard, a different variety of the same fruit tree is planted in that space. The ten berms are either 120 feet or 80

feet long and 10 feet wide. A large number of trees can be planted. The fruit from these trees that is not eaten or damaged by birds and rodents is given to local food banks. It is estimated that approximately 40 percent of the fruit is either consumed or damaged by birds and rodents. There are, however, no proactive actions taken to deter the birds or rodents.

Also in the orchard part of the Discovery Garden are three raised beds and four large tanks. The three raised beds provide grafting areas and an area for espaliering. These areas are for experimenting as well as for teaching. The four large tanks provide space for berry planting. They are near a large tree on adjoining property. This tree is home to a pepper vine that invades whatever is planted near the tree. So far, the pepper vine has not invaded the tanks. These beds and tanks are connected to a watering system that also takes care of the berms for the trees and flowers. Mostly this watering system is under manual control.

Just when you think the Master Gardeners cannot be more resourceful, you turn around and there is Briana Etie talking about the new Rain Garden. It seems there is a low spot near the aquaponic greenhouse. There is a large sink near that low spot. If the gray water from the sink is channeled to the low spot, then a French drain is added to route the excess water to another low are, this second low area can then drain to the small gulley which just happens to have a very attractive and practical wooden bridge over it. You now have a wonderful opportunity to learn about and educate others on practical conservation of water, purposely directing excess water and growing plants in an area that is lower than surrounding areas and mostly wet. Come take a walk-through and see what else may be discovered in the Discovery Garden.



The Rain Garden - a before picture



An Oasis in the Orchard - a work in progress



Robert Marshall heading to the berms with new plant



MGs planting new plants in the berms

The Use of Serenade Garden Disease Control for 2019 Tomato Performance Trials



By Don Hogarth MG 2019

What we need to know!

THE TOMATO TRIALS: Each year the new Intern group conducts Spring Tomato Variety Performance Trials. This year is no exception. The 2019 Interns were tasked with maximizing the yield of 12 varieties of tomato transplants, through the utilization of sound gardening practice, includ-

ing the use of disease control techniques. The product called Serenade Gar-

den Disease Control was chosen.

SERENADE GARDEN DISEASE CON-

TROL: Serenade is a trademarked name of a chemical patented by Bayer Chemical Company and is designed to protect plants against the effects of soil and foliar bacterial and fungal diseases.

Applied through the soil Serenade builds disease protection to the transplant. As the plant's roots grow, the beneficial bacteria expand with it. When applied as a foliar spray, Serenade protects tomato plants against common diseases such bacterial leaf blight, bacterial speck, bacterial spot, early blight, late blight, leaf pots and rusts, and powdery mildew.

PERFORMANCE: The active ingredient in Serenade is *Bacillus subtilis* strain QST 713 (1.34%), a beneficial bacterium. The beneficial bacteria in Serenade produce bioactive compounds that have an effect on the organism consuming it. These bioactive compounds provide effects important for healthy, high-yielding plants.

Bacillus subtilis QST 713 induces systemic resistance which primes plants to defend themselves against pathogens as they grow. It destroys fungi on contact, while other bioactive compounds attack non-beneficial bacteria. It has an important biological

chemistry that combats plant stressors like salinity, drought and heat. It is approved for organic gardening and is non-toxic to birds, bees, beneficial insects, fish and wildlife.

MIXING AND APPLICATION: Sere-

nade Garden Disease Control Concentrate, with the directed mixing concentration for tomatoes, can be applied in commonly used pressurized hand-held and hose-end spray-

ers. For tomatoes, mix four fluid ounces (½ cup) of Serenade Garden Disease Control Concentrate per gallon of water.

Spray to ensure thorough coverage of the plant. For best results, treat prior to foliar disease development or at the first sign of foliar disease infection. Repeat at seven-day intervals or as needed. Under conditions of high disease pressure, shorten the spray interval. It has a four-hour re-entry interval. It has a zero-day pre-harvest interval, making it an excellent tool for late-season disease problems, right up to and including the day of harvest. It has no weather or timing restrictions for application.



Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water.



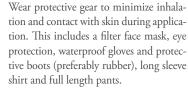




(From Label)

Do not apply directly to water. Do not contaminate water when disposing of equipment wash waters or rinsate.

Don Hogarth Biography: Don is currently an Intern enrolled in the 2019 Galveston County Master Gardener Program. He is a retired engineer with a long term interest in growing tomatoes. He is a volunteer garden operation manager at the Bacliff (Texas) Community Garden/ Lighthouse Food Bank.



PROTECTIVE GEAR DURING MIX-

ING AND APPLICATION (ADDED)

FIRST AID (From Label)
FIRST AID IF INHALED: Move person
to fresh air. If person is not breathing,
call 911 or an ambulance, and then give
artificial respiration, preferably mouth-to
mouth if possible. Call a poison control
center or doctor for further treatment
advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN: Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

ENVIRONEMENTAL HAZARDS

Robot Lawn Mowers



By John Jons MG 2003

Two gardening things I would rather not do are lawn care and weeding. I am always looking for ideas to mitigate or preferably eliminate these two items. On my last trip to Europe, I observed what may be the future of lawn care mitigation.

I was visiting the pristine Royal Horticultural Society's Garden called Harlow Carr in North Yorkshire, England. I was admiring the pool table smooth, immaculately manicured grass lawns, when it occurred to me that I had not

seen anyone mowing the 68 acres of grass lawns. I assumed they mowed the grass at some other time or on some other day. As I progressed through the many different and unique gardens, I noticed a small green beetle looking machine silently, slowly, and purposely roaming autonomously across a small grass lawn. It was a robot lawn mower cutting or maybe a better term would be "grooming" the grass (see picture). I thought, that is a nice gardening machine for anyone with a grass lawn.

In Warsaw, Poland, while visiting the gardens at the Wilanow Palace, I was taking a picture of the palace (see picture 2), when I noticed a robot mower working its way methodically across a very large grass lawn. I waited and observed the mower arrive at the edge of the lawn (see picture 3) and simply turn around and move off on its way "grooming" the rest of the lawn.

After doing research on these mowing robots, I realized that this probably is the future of lawn care. These self-directed mowers are apparently Europe's fastest-growing garden tool. Their popularity is also increasing in Australia and New Zealand. Robot mower sales were, in 2012, 15 times that of traditional mowers. Eleven million units were sold in 2015... mainly to businesses, universities, sports facilities, and other customers with heavy-duty landscaping needs. As of 2018, in Europe, they are now a \$300 million industry. Interestingly, safety vs. automating lawn care was a primary motivator for the introduction of the robot mowers, as almost 250,000 people were injured by lawn mower accidents in the United States in 2010. If you are a gardener who has better things to do than mow your lawn grass, other than hiring someone to mow your grass, a robot mower may be the answer to mitigate your lawn mowing. Apparently, they can "navigate lawns of any complexity – even yards with obstacles and slopes – mow both day and night - even in inclement weather - remain discreet and silent at all times – works safely around pets and children and resists theft with a built-in alarm". Some have rain sensors, are powered by solar light, and you can control them - stop, start, park, adjust, digital joystick and GPS track - with your smartphone!

I wonder if anyone has invented robot weeder?







The Natural Beauty of African Violets



By Elayne Kouzounis MG 1998

You ought to consider growing African violets if you have been searching for a houseplant which will give you flowers throughout the year, which will not outgrow its bounds, and that will grow happily in the same temperature and humidity ranges that you, too, prefer. They are available in a great variety of colors, foliage types, and styles of flowers so that there is always something new to keep your interest and enthusiasm going. African violets are inexpensive and very easy to propagate that in no time at all you can grow

enough new plants to more than satisfy your own needs and those of your friends as well.

The resemblance of their flowers to those of true violets is partially responsible for the popular name "African violets" by which these flowers are known. The "African" part of the name does reflect the continent of their origin. Botanically these plants are called Saintpaulia. In two separate locations of northeast Tanganyika, Africa violets were discovered and collected by a German colonial official and planter—the Baron Walter von Saint Paul—in 1892. Records are unclear as to whether he sent plants or seeds to his father in northern Germany, but plants flowered there in 1893—for the first time outside of their native Africa. The director of the Royal Botanic Garden at Herrenhausen realized that they were a new find in the plant world and named the genus called Saintpaulia in honor of the father and son who discovered and grew them. The species then flowering he named ionantha, meaning "with violet-like flowers." After a few years of its introduction to horticultural circles, the African violet was being grown and offered for sale by several European seed and plant firms. During this period, still before 1900, a sharp-eyed grower noticed that some of the plants produced seed capsules that were long and slender while others had rounded capsules. Not until well into this century was it realized that the Baron von Saint Paul had sent two species to his father. Those with rounded capsules are now recognized as Saintpaulia ionantha, while the long-fruited species was appropriately designated *S. confuse*.

Many people grow African violets for their charming, colorful flowers. You do not have to have a green thumb or know some secret knowledge. Bringing African violets into bloom does involve some understanding of basic and cultural needs. Even under some ideal conditions a plant sometimes will be reluctant to bloom. There are some African violets that bloom almost continually, and there are those that will have fewer flowers but will compensate by having larger flowers than the usual, while others may bloom profusely for a few months and then rest a few months.

It is difficult to know what a plant's blooming habits are until you have grown it for a while. If your plant fails to reward you with flowers after many months of good care, you probably would be happier replacing it with another variety which might be more generous with its blooms.















Ring Spot on African Violet



Botrytis Blight on African Violet



Aphids on African Violet



Mealybugs on African Violet

Freedom of flowering may vary from variety to variety and can also depend upon a plant's maturity. There are a number of cultural guidelines which you should follow in order to promote the best possible performance from a plan — light, temperature and ventilation, watering, pots and potting, and soil.

Like all plants African violets have their share of problems. The best advice is still that an ounce of prevention is worth a pound of cure. Inspect leaves and stems frequently to catch any trouble before it starts. A mild insect infestation is easy to remedy; once pests get a foothold, eliminating them becomes a much more difficult task. The common plant insects that you may have are aphids, mealybug, thrips, blackfly, soil mealybug, and cyclamen mites. You will find many insecticides at your local garden center. Some are formulated to kill specific pests. Other preparations are made for specific plants such as roses or African violets. The poisons are classified — contact insecticides are destroyed by touching the insect; systemic are absorbed into the structure of the plant, killing the pest after it ingests the plant's poisoned cell sap; and stomach poisons are sprayed onto the plant, which kills pests after they ingest the poison.

A few home remedies (non-chemical controls) for some insect pests include hand-picking of insects, washing plants with warm water, or using cotton swabs dipped in alcohol for control of mealybugs or aphids. If insects get a foothold, choose the least-toxic pesticide that will solve your problem. Least-toxic insecticides include botanical insecticides are derived from plant extracts that will control aphids, thrips, and mealybugs. Before you buy a pesticide, read the label to see if it is recommended for the pest and plants you want to treat. ALWAYS CAREFULLY FOLLOW THE DIRECTIONS ON AN INSECTICIDE'S LABEL.

I grow many African violets and never have used anything for insect pest control except a cotton swab dipped in alcohol. I do not have them all together in one place. I space them all around the house mainly because I feel air circulation is vital.

Diseases can be avoided by watching your plants. Only virus infections are beyond your control. Viruses usually have streaked, distorted leaves. There is nothing you can do to save your plant. Crown rot often happens but one of the easiest to prevent. If your healthy plant suddenly starts wilting you have crown rot. Remove the soil and repot. Botrytis blight is a gray mold that turns blooms and buds into mushy, brown tissue. Ring stop appears as yellow rings on the upper leaf surfaces caused by cold water.

Propagating: the simplest method is to root leaves in water. Keep leaf from touching the water. Also, you can divide multiple-crowned plants by separating the rosettes of leaves and planting each separately. Beginners start with the plain leaf varieties.

Flowers are God's thoughts of beauty.

Seeding Galveston and the 100 Kitchen Gardens Project



By Cheryl Watson MG 2018

Master Gardeners – would you like to help mentor deserving beginner kitchen gardeners in growing their own food on Galveston Island? Over the next two years, using local grant monies and volunteers, the Seeding Galveston (SG) urban farm will build about four raised bed gardens a month for selected individuals and families who do not have the resources to build their own garden, who live in food desert areas of our community, who may have medical needs requiring attention to diet, or

who volunteer frequently to help others in these missions. We hope these gardens will enhance community connections and neighborhood security, and teach gardeners and their families important nutrition and gardening skills.

SG is a nonprofit urban farm located at N and 33rd streets, developed by Debbie Berger and John Sessions who together have many years of experience in running and obtaining funding for such sites. This farm has been in operation for about six years. The mission of SG is to use this neighborhood farm as a successful model to teach important methods to produce organic crops and to provide training and income for supported charities. The farm also has chickens that produce eggs, goats that produce milk to make yogurt and cheese, and guinea fowl just for fun. Many volunteers help run the main farm, plus the satellite lot at 19th and Market streets for individuals wanting to rent a garden bed.

We have important Master Gardener mentoring opportunities with the 100 Kitchen Gardens project. MG Cheryl Watson (2018) is the coordinator for this liaison between SG, the MG program, and the County Extension Office in fulfilling joint goals of educating the community in how to grow their own food in a sustainable way. Our inexperienced kitchen gardeners need advice to be successful. MGs can provide this mentorship and build important relationships with these community gardeners. MG mentors will be able to accrue recertification volunteer hours for mentoring these beginning gardeners, recording them in a special projects category of the online volunteer management system.

Some examples of kitchen gardeners that currently need mentors include: a young man with Downs Syndrome and his mother, a pre-school teacher and single mother of two young boys who hopes her sons will grow up with good eating habits while she maintains her own transition to healthy eating; a mother of a son recovering from burn injuries; a group medical student home; a teacher and his 5-year-old daughter who volunteer at SG and want to raise their own healthy food; six neighborhood individuals who rent and will each have a raised bed on a single lot; a local church-supported group with multiple beds that feed homeless clients and will sell some of their produce to support their charity at the Galveston's Own Farmers Market (GOFM) community gardeners table; and a low-income family with children who also wish to sell their excess produce at the GOFM. Some of the larger operations can use more than one mentor so you might team up with other MGs to make this happen. We hope to soon create more of

the vacant lot gardens to support renters who often do not have permission to create raised beds at home. These types of gardens we hope will enhance the security of the neighborhoods by eliminating unused vacant lots and promoting positive neighbor interactions.

For each family or individual selected, SG will deliver: a partially-built 5 feet by 10 feet raised garden bed to be assembled onsite; cardboard for the garden base, a 5-gallon bucket of soil; organic fertilizer, flats of seedlings grown in our greenhouse and/or seeds; tools; a watering can; and buckets of organic mulch. Once the garden is in place, we mentor each family to ensure that they are successful (at least one visit per month and email or phone access for questions).

When a MG picks a gardener(s) to mentor, they can pick up an orientation folder to present to the new gardeners. It contains an explanation of the program, contact information for many SG- and MG-provided programs (e.g. helpline and MG-presented seminars), and individual information sheets for the vegetables they are growing (from the Texas A&M AgriLife Extension Office). Mentors can meet Cheryl at the SG farm stand (where we sell our produce to support the operation of the farm and our educational programs). We are open Wednesday and Saturday mornings from 8 to 11 a.m. If you let me know you are coming, I will meet you there and give you a tour of the farm and tell you about the many educational activities. When we have a few of our mentor-beginning gardener teams operating, I'll set up a website application (Lotsa Helping Hands) so you can communicate with each other about your visits to mentees, and share your experiences, advice, and photos. In keeping with the joint SG and MG missions to educate new gardeners, we will also have several companion activities. We will soon start to sponsor community dinners at the urban farm, where our new gardeners will be chef-taught on how to prepare their homegrown food, and we then will all share the dishes prepared – all MGs are welcome. MG Denny Noh and his crew are organizing presentations called Gardening 101 at the Rosenberg Library in Galveston, aimed at our kitchen gardeners and anyone just getting started. We are currently planning to start these on June 8 at 1 p.m.

Other SG projects that our volunteers operate at the farm serve as examples and training opportunities for the kitchen gardeners, the participating MGs, and members of the community. In these activities we explain gardening skills, the function of stations at the farm, and teach the importance of healthy eating through hands-on gardening.

If you would like to learn more about the SG urban farm, its full range of projects (including composting, working with local high school and middle school students, hosting local 4-H and Scouts, public education fairs), credentials of the farm organizers, or the 100 Kitchen Gardens project, please see our posted information on our web site at https://www.seedinggalveston.com/index.html and Facebook page. Contact us for further information by sending an email to MG Cheryl Watson (cherylswatson@yahoo.com), or to seedinggalveston@yahoo.com. Also, feel free to volunteer to help install gardens or help with other projects, but most importantly, please sug-

gest deserving families, groups, or individuals from Galveston Island who could benefit from a kitchen garden. We hope that those experiencing our program will be inspired to start similar programs in other Galveston County communities.

Support for the 100 Kitchen Gardens project was initiated from a UTMB President's Cabinet grant given to a group of dedicated UTMB students – The Greenies. Support also comes from the Harris and Eliza Kempner Fund, several churches, and individuals. Many community businesses donated supplies. See our web site for a complete list.

















The Oleander-Galveston's Pride

Editor's Note: This is a reprint of Jan's article in the Galveston Monthly



By Jan Brick MG 2001

In 1966 Clarence Pleasants wrote, "On an Island, off the mainland of the State of Texas, is located one of the most delightful cities to be found in America. The city is Galveston, and it contains the most extensive collections of Nerium oleander to be found anywhere in the world. Oleanders are planted everywhere ... along sidewalks and esplanades, in small gardens and large estates. Truly one would have to visit this city of floral beauty to understand why oleanders and

Galveston are synonymous."

Galveston is called "The Oleander City" and particularly during the spring and summer months, our attention is drawn to the oleander and its unique status among the inhabitants and visitors of the city. The International Oleander Society hosts its annual festival here, featuring "the colors of the island." Visitors are invited to view the many varieties



of oleanders found on Galveston Island and given the opportunity to purchase unusual varieties of oleanders as well as to enjoy photo exhibitions and competitions. At that time of year, the plants themselves have shed the winter doldrums and are delighting us with their flashy performance, merrily swaying in the breezes, and a virtual dancing cornucopia of floral abundance.

Historical research indicates that the oleander was mentioned in writings as early as 4000 B.C. and continued to be cited throughout history. In the Bible, it may have been known as the Rose of Jericho. Murals of oleanders are shown in books on and accounts of Ancient Rome. The Greeks believed that the oleander was named for the Greek God Nereus and gardens of oleanders were maintained so the blooms could be used to decorate altars constructed in his honor.

The oleander is considered a native plant in India and Japan but its popularity encompassed a large portion of the globe from North Africa, Israel, Syria and Lebanon to the European nations of France, Spain and England. Also admired by the Dutch, a painting of an oleander became one of Van Gogh's masterpieces.

Information gleaned from a publication of the International Oleander Society, asserts that the first oleanders came to Galveston in 1841. Joseph Osterman, a prominent merchant, brought them aboard his sailing ship to his wife and his sister-in-law, Mrs. Isadore Dyer. Finding these plants easy to cultivate, she shared them with her friends and neighbors. The familiar double-pink variety that she grew has been named for her. Soon these plants were growing throughout the city. It was noted that the oleanders in full bloom made a significant contribution to the overall beauty of the city. Oleanders flourished in these early days and were found capable of withstanding the subtropical weather, alkaline soil, and salt spray. Therefore, it was logical for oleanders to be chosen as one of the predominant plants to be used in the replanting of the city following the 1900 hurricane and grade raising that covered the existing vegetation with sand.

Ladies of the Women's Health Protective Association was charged with the mission to beautify the island and improve the health conditions of the city. They planted oleanders along Broadway, the entrance to the city, and on 25th street, the path to the beachfront. In a few years oleanders made a spectacular display of blooms for citizens and visitors. The name of the organization was later changed to the Women's Civic League, and their planting continued for many years up and down city streets, in yards, around public buildings and schools. Soon the whole city became a garden of oleanders. As early as 1908, an editorial in the Galveston Tribune observed that the oleander was emblematic of Galveston and that people came from all over to see them. In 1910, The Galveston Daily News reported that Galveston was known throughout the world as "The Oleander City" and in 1916, an article named it one of the most beautiful cities in the South.

The oleander is easy to grow and maintain, needing only lots of sun and adequate moisture. Generally it does not require much in the way of fertilization...no muss, no fuss with this plant. It comes in many varieties, a wide range of colors and blooms profusely. Also easy to propagate, especially during the warmer months, roots will grow from cuttings placed in a rooting medium or in plain water. A hardy shrub, the occasional attack of common aphids, mealy-bugs or scale can be easily controlled and should they make an appearance, those pesky galls may be cut off with a sharp knife.

Most frequently asked questions about oleanders involve pruning. The International Oleander Society answers these questions:

WHY PRUNE? The main reason people prune their oleanders is to shape them and force more branching...giving more flower clusters.

WHEN SHOULD I PRUNE? The best time to prune oleanders is around September into early October. Pruning any later will cut off spring growth.

DOES THE FLOWER BLOOM ON OLD WOOD OR NEW WOOD? Flower clusters appear at the tips of new wood.

HOW MUCH CAN I TRIM MY PLANTS? Oleanders are very strong and can take a good amount of pruning. Don't be afraid to cut them back to whatever base height you may want...especially if you feel they have lost control!

There is a legend that Jean Lafitte played a role in the establishment of the oleander on Galveston Island. Having attacked and killed all but one of the voyagers on a Norwegian schooner, Lafitte spared the man who was clinging to a beautiful flowering plant. Lafitte brought the man to the island and made him his gardener. The man's name was Olea Ander and Lafitte named the plant in his honor!

Whatever you may believe about the origins of the oleander on Galveston Island, no one can deny the impact this plant has had on the island, on its history or on its citizens and visitors. "The Oleander", a plant whose name does indeed evoke a vision of lush tropical splendor.

NOTE: All parts of the Oleander are toxic and must not be ingested.

The Mexican Oleander

In recent years, a variety of oleander has become popular among local gardeners. The Mexican oleander is a large shrub or small tree depending on the amount of pruning and shaping done by the gardener. The blooms are usually yellow but there are types with white or orange flowers. The Mexican oleander is native to tropical America, notably Mexico, Cuba, and Columbia. The botanical name of thevetia was adopted in honor of a French monk, Andre Thevet who is credited with its discovery while traveling in South America.

Note that this variety is also poisonous and not to be ingested.



Common Oleander Challenges

Sooty Mold caused by material left by aphids, scale, mealy bugs, whiteflies. (Treat with products containing neem oil to control the pests)

Oleander Aphids that appear in early spring to feed on young growth. (Spray large infestations with Orthene Systemic Insect Control)

Black Scale is brown or black crusty bumps appearing on branches, leaves, twigs. (Spray with Orthene Systemic Insect Control and dormant oil)

Oleander Caterpillar is the larval stage of a purple moth with greenish/black wings. (Apply Orthene Systemic Insect Control or Liquid Sevin)

Bacterial Gall appears as wart-like spongy cankers, leaves may be distorted and yellow. (Prune out and destroy stems below the galls)

Witches Broom are abnormal growths at the end of branch tips that turn brown and die. (Prune and discard affected areas)

Trowels & Tribulations

Trowels & Tribulations is published on the city of El Lago website (www.ellago-tx.com) on the first day of each month of publication. Place your cursor on Our Community and on the drop-down menu you will find Trowels & Tribulations listed under Gardening in El Lago.



By Donna Ward MG 1996

Wow — It's pretty obvious you spent much time, not to mention \$\$\$ perking up your landscape. Your spring flowering shrubs produced an outstanding display, the colorful annuals are an attention grabber, and those trees are looking pretty happy judging from the verdant green color of their leaves. The veggie garden is producing as planned, and you need not do much more than water, pull a weed or two, and harvest these days. So, why are you sitting out on the deck or patio having a cool libation and reveling in your horticultural successes? You did a

good job, and kudos are well deserved, but do you want to pay that nursery or garden center for subsequent landscape specimens when you could easily be doing your own propagation?

With a little effort and a little knowledge, you can increase the horticultural specimens in your landscape by hardly spending any money, except for some potting soil and a few small plastic pots, which you already have stacked somewhere in the backyard. Take a couple of cuttings from that pot of yellow chrysanthemums, and by fall you'll have three pots of yellow chrysanthemums!

Cuttings are grouped into four basic types: softwood, greenwood, semi-hardwood, and hardwood.

Softwood cuttings are taken from new young growth in spring or early summer. Those that do well are chrysanthemums, salvia, impatiens, butterfly bush, hydrangeas, ivies, and many more.

Greenwood cuttings are from plants that have non-woody stems. All annual plants, for example, are herbaceous (fleshy as opposed to woody) and easy to propagate.

Semi-hardwood is a bit more mature (think 'teenager') and are taken from midsummer to fall. You might try camellias, honeysuckle, and azaleas; any of these usually root well from cuttings.

Hardwood cuttings (think 'adult') such as your deciduous (those that lose leaves in fall) shrubs, climbing vines, many berries and trees.

Look for a healthy plant; those with soft and non-woody stems are the easiest to propagate. Select a decent sized plant; one that will not suffer if you take a cutting or two. New tip growth is easier to root than those woody, older stems. First, find a node (that spot or joint on the stem where a leaf is or was attached) and with a sharp knife, razor blade or sharp bypass pruner, make a clean cut just below the node. The node is the point where new roots will form. The cutting doesn't have to be too long. I prefer to cut down at least below the second node from the tip end. Remove all leaves except the top two leaves on the tip. The aim is to concentrate on root production, not sustaining leaves. Too many leaves will drain energy from the attempt to form new roots. If the leaves seem to be too large in proportion to the stem (it's a judgment call) there's no harm in cutting them in half.





Now you're ready to get down to the business of planting. Be sure you have pots with drainage holes; we don't want to plant a bog or swamp garden. Those drainage holes have to be covered to keep the soil in but allow the water to drain out. My preference is a paper coffee filter placed over the drainage holes. Fill the pot with good potting soil purchased from your favorite garden center or nursery. Don't scrimp and dig dirt from the backyard or you'll be sorry. Tamp it down ever so slightly, but don't pack it into something as hard as a brick. Then, get that chopstick you brought home from your last Asian restaurant meal and insert it carefully all the way to the bottom of the pot, being careful not to poke through the coffee filter. If you don't frequent that kind of restaurant, use a pencil. Now, some gardeners will advise you to use a hormone rooting powder, but I never do, preferring to let Mother Nature do what she does best without any help from me. Hormone rooting powder was not even invented when my grandmother was gardening, and she managed to propagate her plants like the experienced gardener that she was. If using a rooting powder will give you more confidence, by all means use it. Insert your cutting(s) into the holes you have created with your chopstick or pencil. Insert the cutting so the leaves on the tip are just above the soil line, preferably all nodes should be below ground. Gently water until water drains from the bottom of the pot. I can't overstress how important it is that soil and stem get 'touchy-feely.' All air pockets surrounding the stem should be forced out by the gravitational flow of water. Stem to soil contact is absolutely necessary for root development. This is also true of seed to soil contact, otherwise the seed coat will not soften and allow germination. Set your 'babies' in a shady spot (and cool if that's possible) and see that their moisture is consistent. Cuttings from those delicious spring tomatoes will be ready to go into your fall garden. If they dry out, the game is lost, and you'll be going back to the garden center.

A few months from now, you'll be patting yourself on the back and accepting congratulations from family and friends when they see how you have increased your landscape and decorative specimens. Don't get discouraged if all of the cuttings don't produce roots. Even the professionals at Mercer Botanical Gardens occasionally experience failures, so why should we amateurs fare differently? Good luck and think positive. Hope is firmly planted in the heart of a gardener.

Plumeria Care Guide



By Loretta Osteen MG 2010

Plumeria are tropical trees that thrive in our Gulf Coast heat and humidity.

History: Plumeria are native to Mexico, Central America and the Caribbean islands. Other names include Frangipani, Lei Flower and Flor de Mayo. In many cultures, Plumeria are considered sacred and can be found planted near temples and cemeteries. In tropical climates, the trees can grow 20 - to - 30 feet tall.

Blooms: To promote blooms, Plumeria require full sun and regular fertilizations. Healthy Plumeria will bloom from early spring through fall.

Fertilizer: Fertilize monthly April through August. Slow release granular fertilizers for Plumeria are available. If you prefer liquid or water soluble, use a fertilizer that is formulated to promote blooms. Soil: Plumeria prefer well-drained soil. Let the soil dry out between waterings. If planting in the ground, a raised bed or mound will help with drainage.

Dormancy and Winter: Plumeria drop their leaves and go dormant as our daylight hours become shorter in winter. During years that we have hard freezes, Plumeria need protection. Since they are dormant, they are easy to store in an inside area where the temperature remains above freezing. They do not require sunlight or water until springtime. If your Plumeria is too large to move, take a large cutting and bring that inside for the winter and plant it in spring.

Propagation: Plumeria are easy to propagate from cuttings and seeds. The best time of year to make a cutting is spring. Ideally, a cutting will be at least 12 inches long. Allow the cutting to dry and callus-over for several days. If there are leaves on the cutting, remove all but the top leaves with clippers or scissors. Plant the cutting in a one-gallon container with 3 - to - 4 inches of well-draining soil. Rooting hormone is optional. Water once and then do not water for six to eight weeks. When new leaves emerge, begin watering once or twice a week. Cuttings will be exact duplicates of the parent tree. Cuttings may take up to two years to bloom. Growing from seeds will provide the opportunity to have new color combinations that are unique. Seedlings typically bloom in three to five years.

Useful Websites:
Galveston County Master Gardeners
https://aggie-horticulture.tamu.edu/galveston/
The Plumeria Society of America, Inc.
https://theplumeriasociety.org



Plumeria Aztec Gold



Plumeria Elsie



Plumeria Mardi Gras



Loretta's Yard

The Discovery Garden Update



By Tom Fountain MG 2008

Rains continue to make things a little messy for workers in the garden on weekly work days. Local weather records indicate that rainfall around the area has been 3 to 4 inches above normal the past couple of months. During this period temperatures also have been slightly above normal. The extended forecast indicates temperatures will continue to be

slightly above normal into summer and rainfall is likely to be above normal.

So what happens in the garden when it rains on our workday as it has a lot the past few months? Well as long as there is no thunder or lighting and it is not raining really hard, some people like Briana and Sue (Fig. 1) will continue on with what they are able to do. Other gardeners like Kay, Sharon, and some others (Fig. 2) headed out to the workshop. They were putting together some garden benches for the orchard rest area. Others were gathering in the greenhouse to help out there (Fig. 3). On one such day Stewart, Barbara, Lisa, Pam, and Mary were busy repotting plants to support our next plant sale.

The garden is always changing and growing with the seasons. Tim and Pam have designed and put together a nice shade area for all of us who need to get out of the sun and take a break in the orchard. Tim and Pam are busy staining the frame (Fig. 4). The recent ground breaking for the Discovery House expansion is going to improve our garden in a very exciting way. I am looking forward to a fantastic summer.

The Aquaponics garden is still very much in the discovery phase. Gene has setup experiments to compare the raft beds and the media beds using tomato plants, eggplants, and strawberries (Fig. 5). Gene is pictured talking with Joseph about this experiment.

There are always a lot of nice things that happen in the garden whether its giving someone a hand or just being nice. The other day, I caught Lisa giving Jim a big hug and thanking him for helping her earlier (Fig. 6).

A few important things to remember in the garden this summer are stay hydrated, take frequent breaks, and wear a hat and sunscreen.













Meet Galveston County Master Gardener Joanne Hardgrove



By Susan Meads-Leahy MG 2014

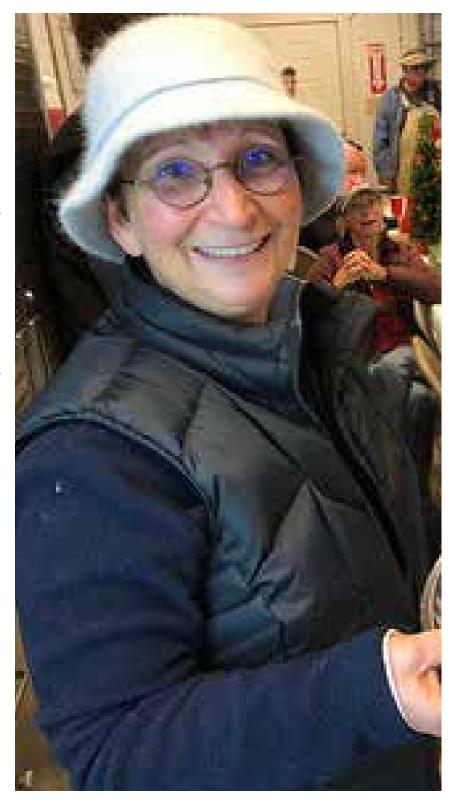
I met Joanne on a blustery day at TopWater Grill in San Leon for lunch. We had a wonderful time getting to know each other and, much like many of my interviewees, she was honored to be selected for an interview but felt she had very little to say about herself. She was very humble and sweet; and as she opened up I learned what an amazing person she is so I can't wait to

share her with you.

Born and raised Catholic, she grew up in the small town of Whippany, New Jersey. When she mentioned that, I told her my husband was from New Jersey and she smiled. You hear the phrase "what a small world it is" and we are both so grateful to have such a wonderful diverse group we call our Texas Master Gardener family. She had also lived in Toms River, New Jersey; Atlanta, Georgia; Naperville, Illinois; and then she and her husband finally settled in Clear Lake. Joanne considers herself to be a rather private and quiet person. She chose the profession of an X-Ray Technologist, specializing in mammography, and retired after 40 years of service. She and her husband Jim were married 37 years prior to his passing away in June 2015. Her son Craig and his family lives in Phoenix, Arizona.

She told me she had always enjoyed nature, hiking, gardening and plants in general. She heard of the Master Gardener Program and applied for the 2016 Intern Class. She was (as most of us are) quite surprised and delighted when she got the letter notifying her that she had been selected and admittedly was quite overwhelmed during the training. As Dr. Johnson tells us all we will "find our niche," Joanne found hers and received an advanced certification as a Propagation Specialist at the TMGA State Conference this past May. Currently, she is the team leader of the herb garden and the butterfly garden at our Discovery Garden in Carbide Park; and serves as our GCMG Assistant Secretary. One of most important qualities of a Master Gardener is that we never stop learning and that is one of her favorite things about being a Master Gardener.

Joanne is an avid volunteer and aside from being involved in Master Gardener opportunities she volunteers at her church, St. Clare of Assisi Catholic Church, where she tends to its garden. In addition to her time spent volunteering, for the last two years her activities have included taking classes for pencil sketching and pen and ink drawing.



Jobs, Family & Genes: it adds up to making GCMG's so Special



By Karoyln Gephart MG 2017

Master Gardeners in Galveston County love all parts of gardening and are always happy to share their love and their interests with others. So many have jobs that work well with gardening, parents and grandparents who instilled the love of horticulture, and a growing passion for seeing and helping things grow.

Stacey Phillips

Stacey Phillips became a Texas Master Gardener for Galveston County in 2017, but her passion for gardening didn't start there—it began in her DNA. When she was a child, she spent many mornings helping her grandmother with her amazing gardens in Austin. Stacey confesses that her grandmother did all of the work, while she usually climbed a tree to have a good vantage point to see what was going on but she did pay attention. They also made frequent trips to the local nurseries where Stacey would point at plants asking, "What's that?" to which her grandmother would respond so that the little girl could log it into her memory bank. Both sets of her grandparents tended to giant vegetable gardens where Phillips loved to snack on tomatoes and cucumbers straight out of the garden.

Her mother is also an incredible gardener; it's no wonder that Stacey has such an affinity towards all things green.







Specializing in perennials and native plants, Stacey loves to share her knowledge on how to have both beautiful and low maintenance gardens that draw in pollinators. She is the owner of a boutique landscape design and installation company, Sunshine Designs. A native Texan, she and her husband Paul with their junior son Jamie live in Friendswood.

Mary Demeny

Master Gardener Mary Demeny's mother was a great gardener also. She introduced the family to broccoli long before it even appeared in the grocer's produce bin. All of her gardening ideas came from the Wisconsin Agriculturist, a publication of which she was an avid reader, according to Mary. Her grandfather taught her how to grow vegetables in the sandy, loamy soil of Flintville, Wisconsin. Flintville is located in the heart of farming country in Northeastern Wisconsin. The town is so small that it remains unincorporated after more than 100 years. "We gardened, harvested and preserved nearly everything we grew as our family was large, nine children in my family. Winter was cold, dark and long," Mary said. "When I was five years old, mother discovered I could pick green beans and I also knew the difference between a weed and a carrot."

Mary and her husband Roger moved their young family to Texas in 1965. They first lived in Webster and later in Clear Lake where their children thought they were getting a swimming pool only to find out their parents planted a garden in the middle of the yard. Mary continued her heritage of large families also. She raised five children and now has 55 members in the immediate family with 14 being great-grandchildren.

Becoming a Master Gardener in Galveston County in 2002, Demeny has enjoyed giving gardening presentations as part of the GCMG Education Speaker's Bureau. She was encouraged to be part of the vegetable planting speakers by GCMGs Herman Auer and Luke Stripling. "It always gives me great joy to see a seed planted in the dark ground come up to produce luscious fruits and vegetables," Mary said.



Growing family and plants have been Mary's life and she continues to provide education and impact others through her speaking. "It always gives me joy to see others trying to do the same," Mary concluded; "and as Bill Rhode always said, 'Our job as gardeners is to recreate the forest floor.'"

Sandra Devall

Sandra Devall enjoyed a successful career in graphic arts and taught creating, designing and using ways to capture and copy materials. She impacted many students at College of the Mainland and sent them on their way in the graphic arts direction. Sandra also used her artistic skills to create, design and encourage plants to grow and gardens to be successful.

Sandra became a Galveston County Master Gardener in 1998. At that time the Extension Office was in Dickinson and Sandra was very active in the plant sales. "My first plant sale took place in 1998 under an umbrella outside the front of the old extension building in Dickinson. Later, I worked in the office for 10 years and kept a record of how often it rained on a plant sale day. For a while it was every few years. After that, we all bought raincoats and rubber boots...plants like rain and I guess plant sales do too," Sandra quipped.

Sandra has watched as the plant sales evolved in their marketing. "Plant sales have created lots of wonderful resources used by MGs and the community. First, there was a list of every type of plant including a description of each. This grew to a full PowerPoint for sale attendees and



that grew to overflowing sales. Those photos grew to 10,000 reference photos. They now are used throughout our educational programs and info sheets, books and educational PowerPoints," Sandra said.

As time allowed her to spend more time with GCMGs, Sandra began working with the Education Speakers' Bureau and shared information on Texas Tough Plants with many groups and garden clubs. "People are grateful that we can help them and we loved helping. I, too, was overwhelmed by what acts of kindness, help, smiles and hugs I have gotten back from our public and from the family that's part of being a Master Gardener...rain or shine," Sandra said.





Libbie's Place



By Barbara Canetti MG 2016

Each Friday a small group of Master Gardeners have a standing date with clients at Libbie's Place. The group meets weekly to plant, weed, harvest and tend to their lovely garden behind the facility on Galveston Island.

The Green Thumb Club has been an ongoing relationship between the Galveston County Master Gardeners and the senior citizens of Libbie's Place since MG Bobbie Ivey began volunteering at the day care facility in 2007. She encouraged the

clients there to develop an interest in container gardening and planted tomatoes and peppers with them. A dozen years later, the club continues to plant, but has expanded it gardens and capacity for fruits, vegetables, flowers and an array of tropical plants in their garden.

The club members participate in a new adventure each week. Sometimes it is a garden-related art project, or planting the fall or summer vegetable gardens, sprucing up the tropical plants, inspecting the butterfly garden or picking the tomatoes, peppers, sweet potatoes or eggplants in the garden and then getting to eat them at lunch the next day.

"Libbie's Place participants look forward to the weekly Green Thumb Club as a special time set apart from their regular activity program, where they connect with nature and each other through creative programs planned by the Master Gardeners. They take great joy in watching their vegetables sprout and grow, watering the plants and harvesting and eating the results of their efforts," said Alice Williams, executive director of Libbie's Place. "For many of our participants, the Green Thumb Club brings back happy memories of an earlier time in their lives when they gardened or lived on a farm with their family. The Green Thumb Club also exposes them to new ways of enjoying plants through their sense of smell, touch and taste and by creating home décor projects related to holiday celebrations."

To help beautify the garden, the group has painted rocks and labeled them to identify the variety of a plant as well as rooted flowers and cuttings and replanted them. Under the guidance of Master Gardeners, the club members fertilize and feed the young plants and water them during the drier months.

Frequently they work on a project with a take-home benefit: bookmarks with pressed flowers and leaves, spice mixtures and an array of succulents. But the best part of the club is the ability to get outside, walk around the paths of plants and flowers and know that they are the ones that help keep that garden growing.

Additionally, in 2012 Bobbie Ivey assembled a team of "faithful" Master Gardeners who meet at the garden once a month, without the club members, to do the heavy lifting, pruning, cutting, weeding and cleaning. The MG team now consists of Kathy Maines, Erhard Goerlitz and Barbara Canetti, with frequent visits from Nancy Greenfield, Hedy Wolpa and John Hall.















easy recipes Seasonal Bites





By Sandra Gervais MG 2011

I had a pleasant surprise when checking out our garden last week....Tomatoes!

Yes they are green but they're getting bigger quickly and will soon be red and ripe and yummy. After a winter of store-bought tomatoes with all the flavor of used tennis balls, we are really looking forward to the taste of ripe homegrown tomatoes.

So that made me start looking at tomato recipes. At the end of the season, when everyone has had enough tomatoes, I'll make marinara sauce to freeze, a breath of summer in the dark days of

winter. But now, contemplating the start of months of sun and flavor,



Pasta Pomodoro

Pasta: When the sauce is almost finished, cook 12 ounces of angel hair pasta in well-salted water only until al dente, so that it still has a bit of chew to it. Drain right before adding to tomato sauce.

Sauce:

1/4 cup olive oil

1/2 cup onion, chopped fine

4 cloves garlic, minced

2 cups tomatoes, diced

2 tablespoons balsamic vinegar

1 can of low sodium chicken broth (10.7 oz.)

2 tablespoons fresh basil, chopped

1/4 cup freshly grated Parmesan for serving

Crushed red pepper to taste

Ground black pepper to taste

Put olive oil in a deep skillet or Dutch oven on high.

Sauté onions and garlic until fragrant and light brown.

Reduce heat to medium and add tomatoes, balsamic vinegar and chicken broth. Simmer about eight minutes.

Stir in basil, then red and black pepper to taste.

Simmer about five minutes more and adjust seasonings.

Add the drained pasta and toss well.

Serve dusted with Parmesan cheese.

Note: I'm thinking of using white wine as part of the chicken broth, using more basil and tomatoes and maybe adding mushrooms while the sauce cooks. This will be a fun recipe to play with.

I'm spending my time looking online and at cookbooks. Some tomato recipes are just tweaks of others. But others just call out to be tried, to see if these new ideas, versions or combinations are great or just so-so.

So the first recipe below is one with a million variations, Pasta Pomodoro. The name says it all - pasta with tomatoes. There are many versions but this is an easy, simple one, good served as a side dish or as a main course with the addition of meat or shrimp or other summer vegetables.

And for a sweet, here's an easy one that Mary Gonzales brought to a monthly meeting. She calls it simply "Ritz Cracker Finger Food." It was a big hit, but no one was sure what was in it. And a lot of us tried to figure it out. We even ran out of pieces to test.



Ritz Cracker Finger Food

8 ounces of dates, finely chopped

1 can of Eagle Brand condensed milk

1 cup pecans, chopped

1 regular size box of Ritz crackers

Put dates and condensed milk in the top of double boiler with softly boiling water in bottom.

Heat on low until dates and condensed milk are soft and melded. Add pecans and stir until all ingredients are mixed well.

Spoon mix onto individual crackers quickly as topping thickens as it cools. (Mary says she tops hers directly while the double boiler is still on the stove.) Cool in single layers.

Note: If you wish to frost them, beat 8 ounces of softened cream cheese with 2 cups of confectioners' sugar and 1 teaspoon of vanilla until smooth. It's easier to apply using an icing bag or a Ziploc bag with a tiny slit in a corner.

Note: Like Mary, I think the icing is too sweet and unnecessary.

State Conference Awards

The Galveston County Master Gardener Association was honored by the Texas State Master Gardener Association at the 2019 State Conference in Victoria, TX, this past weekend by being awarded 1st place for Outstanding Organization in the large association category!

ALSO...big congratulations to Ira Gervais for his 1st place award as Outstanding Individual, to Kaye Corey's Heritage Junior Master Gardeners group "Heritage JMG Kids" for their 1st place award in the youth program category, to the 2018 MG Intern Class Tomato Trial for their 3rd place win in the Project category, and to Robin Collins for the 3rd place win in written education category for the creation of our Aquaponics Brochure "Growing Fish and Plants Together."









GULF COAST GARDENING EDUCATIONAL SEMINARS

Upcoming Events - July 2019

Galveston County Master Gardener Educational Programs for Interested Gardeners

The following 2019 Master Gardener Programs are free to the public.

Location: Galveston County AgriLife Extension Office in Carbide

Park • 4102 - B Main Street (FM 519), La Marque, Texas 77568

GPS location: 29.359705, -95.003591

For course reservations, call 281-309-5065 or email galvcountymgs@gmail.com

http://aggie-horticulture.tamu.edu/galveston/index.html

BEST PRACTICES OF WATERING

e-mail galvcountymgs@gmail.com to pre-register Saturday, July 6, 2019 9:00 - 11:00 a.m.



Galveston County Master Gardener Karolyn Gephart will present a program on Best Practices of Watering. With the Dog Days of Summer upon us, the heat is ramping up and it can be a challenge for homeowners to maintain their landscapes. Watering practices can be as individual as each gardener. Karolyn has looked at many of them and will share her recommendations for keeping the most economical landscape through the summer.



ARRANGING FRESH AND ARTIFICIAL FLOWERS

e-mail galvcountymgs@gmail.com to pre-register Saturday, July 13, 2019 9:00 - 11:00 a.m.

Galveston County Master Gardener Jackie Auer will demonstrate and explain the basic techniques of fresh and artificial flower arranging. She has produced arrangements for the retail market, as well as for individuals.

*** Bring your own vase for hands-on arranging. ***

Meeting Minutes



By Joanne Hardgrove MG 2016

April Master Gardener Monthly Meeting

The Galveston County Master Gardener monthly meeting was held on Tuesday, April 9, 2019, and hosted by Karen and Tom Morris. Members started arriving at 5:30 p.m. to a tranquil and picturesque setting, and enjoyed fellowship, drinks, and an amazing view of the bay.

President Sharon Zaal called the meeting to order at 6:45 p.m. She gave a quick update on projects

and upcoming events at the Discovery Garden.

- 1) The Discovery House expansion is underway; we have contracted with a Windstorm Engineer who is revising plans and will submit to the City of La Marque for permits.
- 2) The 2019 Intern class will be finishing classroom study soon; look for them on Thursdays at the Discovery Garden
- 3) The June meeting will be Recognition and Graduation. Congratulations, Class of 2018.

Our food was blessed by Joanne Hardgrove and all enjoyed a delicious, and plentiful pot luck dinner.

After dinner, members could walk off their meal either by a stroll on the dock to see the sunset, or taking a tour of Karen and Tom's mini orchard, or enjoy a beautiful home tour given by Karen.

A wonderful evening was had by all. Hope to see you next month.









By Briana Etie MG 2017

May Master Gardener Monthly Meeting

On Tuesday, May 14, the GCMGA gathered at the home of Nancy and Darryl Greenfield in Jamaica Cove on Galveston Island. Master Gardeners began arriving at 6:00 p.m. We enjoyed the company and the sites of the location of their beautiful home. Sharon called the meeting to order. She updated us on the progress of the new construction - and the reason Ira was not able to join us this evening, as they were preparing for

the concrete to be poured. Sharon also announced the awards won by our First Place Outstanding Organization, our First Place Outstanding Individual, Ira Gervais, and our other award winning projects. Our guests were introduced. Larry Craft, one of our 2019 Interns, led us in prayer. We enjoyed a great meal, desserts and spirits. Most of us enjoyed the beautiful sunset before returning home. We certainly thank out gracious hosts Nancy and Darryl for their warm hospitality.













MG HOT LINE -Visual differences between Butterflies and Moths



By Briana Etie MG 2017

I was working on an answer for a resident concerning native plants, wondering how to tell the difference between a butterfly and a moth. While sitting in the Volunteer Room, I heard Dr. Johnson's laugh billowing from the front office. As he walked by, I called out to him and asked for his answer. He was gracious to give me answers, So now I must share the knowledge he so graciously shared with me.

One of the easiest visual differences between moths and butterflies is to look at their anten-

nae. A butterfly's antennae is club-shaped with a long shaft and a bulb at the end. A moth's antennae is feathery or saw-edged.

Butterflies tend to fold their wings vertically up over their backs. Moths tend to hold their wings in a tent-like fashion that hides the abdomen. Butterflies are typically larger and have more colorful patterns on their wings. Moths are typically smaller with drab-colored wings. Butterflies are primarily diurnal, flying in the daytime. Moths are generally nocturnal, flying at night.

Cocoons and Chrysalis are protective coverings for the pupa. A moth makes a cocoon, which is wrapped in a silk covering. A butterfly makes a chrysalis, which is hard, smooth and has no silk covering.





SmugMug A Master Gardener View of the World



By Sharon Zaal MG 2015

Why do people like to save photos? Many people save photos to remind themselves of the priceless moments in their past. Taking photos is one of the best ways to capture memories. For Master Gardeners, it is so much more.

For those who are life-long students of the curiosities of nature, a photo can capture that plant or insect you want to know so much more about. For those who teach, photos can be visual tools for transferring knowledge. Photos are often the best way to tell a story. And in the world of Master Gardeners, there are many great stories to tell.

GCMG now has its own hosted repository of photos and videos. We are utilizing SmugMug, which is a paid image sharing, image hosting service, and online video platform. Our Master Naturalist photography friends have utilized SmugMug for several years and recommended it highly. Efforts have been underway to configure our repository, organize a browsing structure, and upload some photos.

In addition to providing an organized browsing structure for finding photos, a key strength of the SmugMug service is in its search capability, which allows photos to be found based on keywords applied at the time of upload. Master Gardeners will be able to search photos by various search criteria such as Date Taken, Individual Names, Event Names, Specimen Names, and more.

Plans are underway to pull together a team of Master Gardeners, aka Smug-Mug Photo Capture team, tasked with reviewing, culling, and uploading photos into SmugMug. For this team, the emphasis will be on eliminating duplicates, selecting quality, not quantity, and pulling together photos that tell a story. Additionally this team will need to be meticulous about applying keywords to facilitate searches. Once this team is up and running, we will be posting more info about how you can submit your photos for possible inclusion in GCMG's SmugMug.

All Master Gardeners now have access to browse and search photos in Smug-Mug. Use the following link in your favorite web browser to access: https://gcmg.smugmug.com/

Sign on to SmugMug today and take a look around. You will find a wonderful Master Gardener view of the world.





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For the **Master Gardener Hotline** contact Ginger Benson by email at galvcountymgs@gmail.com or call the office at 281-309-5065.

Volunteer Opportunities

Tideway is a program of the Transitional Learning Center Dr. Johnson has approved Tideway Transitional Learning Center (644 Central City Blvd., Galveston, Texas 77551) as a location where Master Gardener service hours may be earned. Plans to prepare the gardens at Tideway for spring planting are ready and volunteers are needed. Volunteers can contact Jennifer Pinard at jpinard@tlctideway.org. The focus is on the long-term needs of individuals with an acquired brain injury. The program offers accessible horticultural experiences, through which individuals with a brain injury can improve sensory awareness, motor skills, range of motion, endurance and flexibility as well as regain confidence, and learn new skills. This provides the opportunity for our residents to develop the necessary skills to gain and maintain a productive lifestyle whether it is on site or volunteering in the community. The residents at Tideway are very much "hands on" in building the different garden beds, in fact some

of the residents came up with the designs. And they have chickens!



Tour Guides for Thursday Public Access and Tour of our Discovery Garden

Our Demonstration Garden is open for touring by the general public on each Thursday from 9:00 -11:00 am. MGs are needed to serve as tour guides for our Discovery Garden.

Contact MG Denny Noh at 281.723.2830 or dnoh@aol.com to volunteer.

Volunteers are needed to develop and deliver presentations on various horticulture topics of interest to the public in our surrounding communities and our Master Gardeners. Classes are given at the Extension Office on Tuesday evenings and on Saturday. This is an excellent opportunity to contribute, develop and use skills from life experiences as well as contribute to one of the main GCMG missions of Education. We have experienced GCMG Mentors and Specialist available to guide and support. Please contact if you have any questions and so we can get you scheduled to present a class. Volunteers are also needed to help with the Saturday programs and the Tuesday evening

programs. If you can help, please contact

Denny Noh @ 281-723-2830 or dnoh@aol.com

Nancy Langston Noh @ 832-289-7087 or nancylnoh@aol.com

AgriLife Extension Office Discovery Garden needs volunteers!

The gardens around the AgriLife Extension Office are maintained by Master Gardeners under the team leadership of MG Ginger Benson. This is an opportunity to make a good impression on the many visitors to the AgriLife Extension Office. Come out and have a good time while learning more about ornamentals. Please contact Ginger at 281-309-5065, email galvcountymgs@gmail.com to find out the schedule and join her team.

Volunteer Opportunities

Libbie's Place Adult Day Care has been designated as a Demonstration

Garden for the Master Gardener Association. It is located at 5402

Avenue U in Galveston and is part of Moody Methodist Church outreach ministries http://www.moody.org/libbie-s-place-senior-day. A crew

is needed to maintain and upgrade the garden as needed with your

time spent counting towards MG volunteer hours. MG Pam Windus is

heading up the crew and will determine the day, time and frequency

of the work days. If you are interested, or have any questions, please

contact Pam at 409.771.5620, email <u>DrPGilbert@aol.com</u> to let her know the day/times (AM/PM) that would work best for you. Thank you for

your time and consideration in this great new endeavor for the Master Gardeners.



ADVANCED TRAINING Save These Dates!

October 17-19, 2019, hosted by Tarrant County, in Fort Worth, TX

August 13-15, 2019, hosted by Bexar County, in San Antonio, TX

September 24-26, 2019, hosted by Denton County, in Corinth, TX

September 9-12, 2019, hosted by Williamson County, in Georgetown, TX

Advanced Training Committee Chair Duane Robinson ~ poohdaddy55@sbcglobal.net 936-355-8215



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Save the Dates!

JMG[®] – September 24-26, 2019, hosted by Denton County, in Corinth, TX

Please see the

Texas Master Gardeners Website for detail

By visiting the website you can find up-to-date

information on Specialist Programs that were added in

between editions of the newsletter. <u>txmq.org</u>. You may download the application forms from that website. Note all applications for

the Specialist Training courses must be approved and signed by

Dr. William M. Johnson. Note fees do not include lodging

or food unless specified otherwise.



Here is a great way to support our GCMGA. Amazon will donate 0.5% of our personal purchases to Galveston County Master Gardener Association. All you have to do is: Go to smile.amazon.com - Choose Galveston County Master Gardener Association as your charity. Save smile.amazon.com to your favorites. - Always start from this site to do your Amazon shopping. -You should see your chosen charity in the top bar on - If you have any problems, search smile on Amazon's website

REMEMBER

In order to maintain your status as a certified Texas Master Gardener, each year you must complete a minimum of 6 hours continuing education, as well as 12 service hours. Additionally, those hours must be reported through the online Volunteer Mangement System or other approved means. Contact MG Wayne Elliott at gcmghours@gmail.com for more information.











2019 Master Gardener Recertification Hours

Name of Program	Speaker	MG CEU
MGA Jan. Meeting - The Year Ahead for GCMG	Sharon Zaal, Kevin Lancon	1.00
Growing Blueberries	Dr. David Cohen	1.25
Backyard Citrus - Crystal Beach Fire & Rescue	Robert Marshall	1.75
Kitchen Gardening	Mary Demeny	2.25
Wedge Grafting	Sue Jeffco	1.75
"Texas Tuff" Plants	Marie Leal	2.00
Herbs for the Gulf Coast	Nancy Langston-Noh & Briana Etie	2.00
Growing Great Tomatoes	Ira Gervais	2.25
Spring Plant Sale Overview	Karolyn Gephart	1.25
Growing Peaches in Galveston County	Herman Auer	2.00
Successful Spring Vegetables	Jenni Hudgins	2.00
MG Training Class - Class Orientation	Dr. William M. Johnson	4.00
MG Training Class - Botany	Jayla Fry	3.00
Growing & Using Herbs	Tricia Bradbury	2.50
Planting Fruit Trees	Herman Auer	2.00
MG Training Class - Vegetables	Tom LeRoy	4.00
MGA Feb. Meeting - Spring Plant Sale Overview	Karolyn Gephart	0.75
MG Training Class - Plant Pathology	Dr. David Appel	4.00
Homeowner's Guide to Weed Control	John Jons	1.50
Peach Pruning - hands-on demonstration	Robert Marshall	1.00
Rose Pruning - hands-on demonstration	John Jons	1.25
MG Training Class - Home Fruit & Citrus Production	Herman Auer	4.00
Grape Pruning - hands-on demonstration	David Cooper	1.00

Use this link to see the entire list.

https://aggie-horticulture.tamu.edu/galveston/2019 MG Recertification Educational Credit Hours.pdf

Hurricane Preparations should include the Landscape

Editor's Note: This article is a reprint of Dr. Johnson's Weekly Gardening Column in *The Daily News*



By Dr. William M. Johnson CEA-HORT & MG Program Coordinator

Hurricane season started on June 1. Meteorologists and emergency operation center managers have three words of advice: prepare, prepare,

We all know there are lots of things we need to do well in advance of a hurricane heading in our direction, from having adequate food and water on hand to getting important papers together for evacuation.

You have a family disaster plan for what you would do in case a hurricane strikes. You checked your disaster supply kit and obtained and/or replaced

any items you need.

Our landscapes also require some attention and thought when it comes to preparing for and dealing with the aftermath of the high winds and heavy rains hurricanes bring.

Do not wait for a major storm to form in or enter the Gulf before you carefully check large shade trees on your property to make sure they are in good shape and structurally sound. Trees should be examined periodically for health and potential hazards.

In particular, look for any large dead branches in the trees. These should be removed, especially if they pose a threat to the house.

Also, look for branches hanging over the house near the roof. The high winds of hurricanes can cause trees to bend somewhat and branches to flail around considerably. These branches can cause extensive damage to the roof and should generally be removed.

Look for abnormal or unusual growth on tree trunks or limbs. If you see fungal growths that look like mushrooms — known as conks — on a tree trunk then the trunk likely has heart rot or decay. The presence of this fungus is particularly serious if several conks are present. To determine if the tree is unsafe, you need to know how extensive the decay is. Call a certified arborist immediately if you see conks growing on or around the trunk of a tree.

Cavities and hollows in trunks and branches are typically the result of decay that followed injury. The injury often occurred many years ago. If a tree has a cavity or hollow, have it inspected by an arborist. Hollow trees are not always at risk of falling so each situation must be carefully assessed. A tree cavity is similar to a cavity in your tooth. Without proper treatment, the situation will only get worse.

One-sided or leaning trees should be pruned to balance out the canopy. After the prolonged rain associated with many hurricanes, the soil may be so soft trees can topple over if the weight is not properly distributed. Look at the overall condition of the trees in your landscape. A tree that is sickly or low in vigor and shows significant signs of rotten or decayed

areas in the trunk or termite damage should be cut down if it poses a threat to buildings. If it's a large tree, you should also consider how it might affect neighboring properties.

It is best to have this kind of work done by professional, licensed arborists. Arborists are trained individuals who make a career of caring for the urban forest.

It's a good idea to contact more than one company and get estimates before you have the work done. And do make it a point to be present when the work crew is there, so you can make sure what is done is what you wanted.

Well before a hurricane threatens, if you are the organized sort, make a list of things outside that need to be brought inside and where to put them, and make a list of things that need to be tied down.

Buy the necessary equipment, including anchors. Estimate how long it will take to secure things. You can make these lists part of your family's emergency plan.

Should a hurricane head our way, it's important to secure loose objects in your landscape. Look around your grounds for container plants, hanging baskets, tools, lawn furniture (including porch swings), toys, bicycles, bird feeders, wind chimes, barbecue grills, playhouses and doghouses. These items can become destructive missiles during high winds and should be stored indoors, in garages or sheds or anchored securely in place.

If you have removed the stakes from young trees planted within the

past one to three years, consider re-staking them just before a hurricane to prevent them from blowing over. Make sure the stakes are driven deeply and securely into the ground.

Don't wait for a tree to let you know it is sick or dangerous. Be proactive. Look over your trees. If you see something suspicious, call a certified arborist. A healthy tree is a safe tree.

Now is the time to take care of these tree issues; do not delay.

Dr. William Johnson is a horticulturist with the Galveston County Office of Texas AgriLife Extension Service, The Texas A&M System. Visit his website at aggiehorticulture.tamu.edu/galveston.



Do not wait for a major storm to form in or enter the Gulf before you carefully check large shade trees on your property to make sure they are in good shape and structurally sound. Without proper treatment, the situation will only get worse.

Photos courtesy of Dr. William M. Johnson

2019 GCMGA Monthly Meetings



By Judy Anderson MG 2012

You're Invited **Monthly Backyard Meetings**

The July meeting will be at the Extension Office with Moody Gardens Rainforest Horticulturist, Donita Brannon, a Master Certified Nursery Professional by the Texas Nursery and Landscape Association. She was recently at the American Association of Zoological Horticulture Conference

> in Philadelphia where she attended the Philadelphia Flower Show, the world's largest indoor display and she will share some highlights from the event.

> Because the Rainforest Pyramid also is a zoo, she is active in the Association of Zoological Horticulture, which encourages developing natural habitat exhibits at zoos, botanical gardens, aquariums and zoological parks. Social will begin at 6:00 p.m. with the pot luck beginning at 6:30 p.m. - Donita's presentation will begin at 7:15 p.m.

You may contact Judy at jande10198@aol.com for information.





Galveston County Master Gardeners 2019 Monthly Meetings

July 9, 2019

Donita Brannon The Philadelphia International Flower Show Pot Luck Extension Office

August 13, 2019

To be Announced

September 10, 2019

Backyard Meeting The Galvestonian Carol Jean Mulrain Pot Luck Galveston

October 8, 2019 - Subject to Change

Plant Sale Preview 1:00 p.m. Extension Office Karolyn Gephart

November 12, 2019

Annual Meeting Extension Office Pot Luck

December 10, 2019

Mikey and Allen Isbell Holiday Party Galveston

We Want Your Feedback

We would love to hear from you. Send us your comments or suggestions for future articles, or just let us know how you are using our newsletter. To make sending feedback easy, just click on the button with your response

