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By Camille Goodwin
MG 2008

*"Summertime is
always the best of
what might be"*
Charles Bowden

This issue of our newsletter brings many topical summer articles and educational pieces for you to enjoy. What's a Galveston summer without insects? Learn about several different insects and control methods for the fall webworms (page 4) and a less than brilliant horse fly that visited one of our Discovery Garden hoop houses (page 5). The peculiar Spittle Bug is featured on page 8.

With our Gulf Coast summer heat, humidity and sometimes torrential rains, it takes a special plant to survive much less thrive. The story on page 6 tells us about Texas Superstar



plants; what makes them superstars and offers options that you might like to try in your own landscapes. As in all parts of life, deformities occur. In the horticulture world, plant malformations are known as Fasciation. Read about this fascinating subject on page 10.

Most gardeners know about perlite, but probably don't think about it often. The article on page 9 tells us what it actually is and how it benefits our gardens. Figs are one of my favorite fruits. My own fig tree produces figs, but they never seem to ripen. On the day they do ripen, the birds, squirrels and raccoons decimate the tree! Evidently those figs are not for me, but for you, please read page 12 to understand more about the beautiful fig

tree and several varieties that work in our growing region.

If you have some challenging parts of your lawn or yard, perhaps a groundcover might take care of that problem. Learn about groundcovers and several selections on page 14. Do you like succulents and easy to grow plants? The Desert Rose might be just what you're looking for, page 16.

Along with insects, it's not summer along the Gulf Coast without weeds. Our Weed of the Month article features Mare's Tail. Now is the peak bloom time for Mare's Tail. Find out more about it and control methods on page 18. Our very own peripatetic Master Rosarian, John Jons, recently visited several botanical gardens in New Zealand and shares videos of his travels and wanderings (page 23).

Discover more about 5 of our hardworking Master Gardeners and how they came by their "Green Genes." Jerlee Owens, Don and Joanne Hogarth and Denny and Nancy Noh are featured on page 20. Then enjoy meeting Master Gardener Mary Gonzales. See her inspiring story on page 22. Read about Dr. J's 30 year anniversary celebration on Page 24. Our regular and recurring monthly features have been updated including the Discovery Garden doings, seasonal bites, volunteer opportunities on the bulletin board, and upcoming training events. Dr. Johnson's Last Word, on page 31 tells us about Inviting Butterflies to your Landscape.

Summer should be issued speeding tickets!

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Cover:
Photo courtesy of Dr. William Johnson



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Thanks for your interest!

Q&A ask a master gardener

What is causing this large web draped over my tree?



By Laurel Stine
MG 1996

Q: I have large webs draped over some of the branches of my pecan trees. What is causing this?

A: These webs are produced by Fall Webworms. The Fall Webworm (*Hyphantria cunea* (Drury)) is native to North America and is a common caterpillar pest of trees.

Fall Webworms are not picky eaters. With the exceptions of pines and other conifers, it attacks more than 88 kinds of plants in North America, including many fruit, nut, and ornamental trees and shrubs.

The fall webworm's name is somewhat misleading because the caterpillars can have two to four generations per year and produce tents during late summer and fall.

Their webs are made of a silk protein, somewhat similar to that produced by silkworms. These webs are water resistant and provide protection for the insects. The webs initially start at the tip of branches and can eventually extend all the way down to the trunk of a tree. Extreme infestations may cover the whole tree.

Heavy infestations are rarely fatal on mature trees, but if they occur over several years, they can make trees more susceptible to drought, disease, or other insect pests.

Beneficial insects as well as birds and lizards can reduce fall webworm caterpillar populations in many years, especially if you are able to tear open the webs.

Fall webworms can be managed on smaller trees without insecticides. You can do this by physically removing the webs, caterpillars, or egg masses. You can knock larvae out of low-hanging webs into a box or garbage bag with a stick or broom. You can also prune webs from lower and smaller branches or pull them down with a rake or a pole.

If webs are too numerous or too high in a tree to deal with individually, you can use insecticides to prevent damage.

When treating, first check if caterpillars are still present in the webs. Often, by the time nests are noticed the caterpillars have already left, making treatment unnecessary and ineffective.

Hose-end or commercial high-pressure sprayers are best for reaching upper parts of trees. Webworm larvae stay inside their web so insecticide sprays must penetrate the web to be most effective. For best control, apply insecticides when webs and caterpillars are small.

Remember, you are responsible for the effects of pesticides on your own property, as well as problems caused by drift to other properties.

Insecticides containing *Bacillus thuringiensis* (Bt) or spinosad are effective and will not harm beneficial insects. There are other products available as well. Follow the label directions on whatever products you use.

Apply products in the early morning or evening to concentrate the spray on the tents where the caterpillars congregate.

There is another web producing caterpillar called a Tent Caterpillar, but the closest occurrence of that insect to our area is up by the Mercer Arboretum area.

If you own a Texas Mountain Laurel tree, you may have been visited by another web producing caterpillar, the Genista caterpillar (*Uresiphita reversalis* (Guenée)). Other hosts are crape myrtle and honeysuckle.

Genista caterpillars occur commonly in central Texas landscapes and throughout the Gulf coast. They form loose webbing on the foliage and feed on leaves causing unsightly damage.

Plant health is generally unaffected by feeding unless large numbers of caterpillars cause heavy defoliation. In these cases, plant growth may be slowed, and aesthetic damage may be significant. Control is generally unwarranted, but if you have a heavy infestation in a high-value landscape, pest control or suppression may be needed. Genista caterpillars can be controlled with the same products as those used against Fall Webworms.

Photos and websites used are below (you can tell Featured Creatures had a great website)



Adult



Eggs and newly hatched larvae



Second instar larvae



Fifth instar larva



Cocoon of Fall Webworm

http://entnemdept.ufl.edu/creatures/trees/moths/fall_webworm.htm

The Horse Fly



By Joyce McNeely
MG 2018

The Amazing Horse Fly of Galveston County “Learning to fly...But I ain’t got wings...” This is the Tom Petty song that popped into my head the morning when I saw a HUGE horse fly in the hoop house at the Discovery Garden.

In early June I was entering the hoop house to get some watering done and heard some very loud buzzing over my head. My mind immediately went to, “Oh great, there is a wasp in here. I have to watch out for it (I am not a fan).” As I was looking for what was making

the sound, I saw what I thought sort of looked like a wasp, but not. I looked closer and realized it was an extremely large fly! It was easily over an inch long.

Not only was this fly loudly buzzing, but it was also persistently flirting with a nice sized Orb Spider up in the corner (We call her Charlotte #3, but that’s a story for another time.) My friend Mary hollered a warning, “That is a Horse Fly! And they BITE!” Now I had heard, once upon a time, that horse flies bite and could be quite painful, but I didn’t know much more than that. So I mentioned to Mary, “Maybe we will get lucky and the spider will take care of it.” It seemed to be flirting with disaster and was flying all around that spider web like it was looking for a spider meal. But who would actually end up as the meal?

The Horse Fly species tend to develop in muddy areas, along pond edges, wetlands and streams. Females will lay batches of eggs on plants that lean over water and wet/muddy areas. We have had quite a bit of rain at the garden lately, and with wet comes mud. The larvae will drop into the swampy areas and feed on decomposing organic

matter and even small organisms. Depending on the species, this larval stage can last from one to three years. Shockingly right! That seems like very long time for a fly. One generation per year, for a fly. Amazing!

As adults, female horse flies bite to get a blood meal. They need protein from the blood to help produce the next generation. They use their sharp mouth parts to cut skin or hide of a grazing animal, let the blood pool and drink. Male horse flies are the gentler of the species and are more interested in flowers and are nectar feeders. [I guess they are the hippies of the fly world.] Both are diurnal; active only during daylight hours. These large flies can cause problems with horses, cattle and other grazing animals. Blood loss of livestock can also be an issue if dealing with a seasonal mass of these horse flies, so protecting livestock is important. Any persistent attack can cause a reduction in weight gain and even reduced milk production in cattle. Protection can come in the form of a shaded barn, permethrin-based sprays and mesh screens to enclose a shelter. Now if you are a human trying to prevent bites, using repellents that contain DEET are most effective. Seems both man and beast are not immune to the pain and irritation of a horse fly bite. Ouch!

When I returned to the hoop house about an hour later I found our spider, Charlotte #3, had the irritating horse fly properly wrapped up in her silken web and ready for a future meal. I was amazed and snapped pictures of Mother Nature in action. It really is cool to see all the amazing insects at work in the Discovery Garden, even if they do sometimes make me think of a song and a story.

To my surprise, the fly with wings, that could easily have flown away, did not. She should have used Mr. Petty’s advice. Evidently, coming down is the hardest thing.



Horse Fly



The Spider



The Horse fly and the Spider

Singing the Praises of the Superstar Plants in the Earth-Kind Garden



By Judy Anderson
MG 2012

When the Master Gardener Interns begin their Discovery Garden assignment they rotate through the different areas of the Discovery Garden. As each one visits the Earth-Kind area it is a good time for me to walk with them through the area and take a look at what is happening. Yes, there are always weeds, but I am often surprised by the beautiful plants and their flowers. There is abundant color, scent and texture.

Often the standouts are the Texas Superstars. If you are not familiar with the Texas Superstars, these plants are recognized as great performers around the state. They are grown in field trials at Lubbock, Overton, College Station and San Antonio as part of the Texas A&M AgriLife Research and the Texas A&M AgriLife Extension Service. As part of the trial, the plants are grown with limited soil preparation, with normal water and without any chemicals. Only the plants that grow well in these conditions, in all locations, are even considered for the Superstar status. They also have to meet marketing standards for availability, appearance and transportation. Plants that can meet these additional requirements may be called Texas Superstars.

The Superstar program is a partnership with research, growers and distribution to ensure successful plants reach the consumer. The Texas A&M System, Go Texan and the Texas Nursery and Landscape Association created the Texas Superstar program in the mid 90's and it continues to bring the winners to the public. The program now includes vegetables, trees and specialty plants along with ornamentals. Plants that are recognized as Texas Superstars are unique and better than the rest. If they have a good story or interesting history, that improves their odds, but most of all they should be easy to grow.

Here on the Gulf Coast we need plants that tolerate heat and humidity, can withstand a drought, but also withstand a heavy rain. Being disease resistant is also an important quality. Deer-resistant and attractive to pollinators are traits that will be of value around the state. Other states have their own version of Texas Superstar - Louisiana Select and Oklahoma Proven.

The Texas Department of Agriculture publishes the Texas Superstar brochure; it was last published in 2016. Plants become Superstars through plant breeding, a recognized sport, a new introduction by the industry, rediscovery and through trials. Sometimes people think the Earth-Kind and Texas Superstars are the same thing, but they are very different. Earth-Kind is a plan for gardening, and there are Earth-Kind plants. Texas Superstars are a plant collection. In the Earth-Kind Discovery Garden, there are many Texas Superstars. Most of them have been there for years, or since 2013 when the garden was established.

A favorite is the Princess Caroline Napier Grass. If you want a purple grass in your landscape, check this one out. It is a strong purple leaf with a dark green underside. It grows from 4 to 6 feet in full sun or part shade. It is lovely as an accent plant or a screen. When the sun shines behind it, it becomes spectacular.

Another beauty is the Peppermint Flare Hibiscus. It grows on maple-like, bright green foliage, from 3 to 5 feet tall. This striking plant is a stunner in the landscape,



Alamo Fire



Mystic Spires



Napier Grass

but also can be grown in a container. The pink flower is about ten inches wide with stripes of pink to red color.

The Earth-Kind Garden is a raised bed and it is nice to have plants spilling over the side. One plant that fits this need is the Trailing Lantana. It is a low growing plant of lavender, purple and white flowers that blooms consistently through the summer. It is tolerant of heat, wind and drought.

A plant that will always look great, even with minimal care, is the Mexican Bush Sage. It blooms late into fall and is heat and water tolerant. The purple color is eye-catching and the flowers are beautiful in arrangements. Full sun is a must.

Mystic Spires Blue Salvia is a more compact form of the Indigo Spires and a sure bloomer through the summer. The color is a true blue with growth from 18 to 30 inches. Pruning in the summer will encourage regrowth, but do not over water or fertilize this plant.

The Henry Duelberg is a native plant with masses of blue flowers that can be used in containers; it is ideal in drought tolerant gardens and is beautiful in arrangements. This is a low maintenance, heat tolerant plant that will bloom from spring until fall.

Texas Superstar Blue Cape Plumbago really becomes a star when the Texas heat goes up. It is comfortable in full or part shade with growth up to 4 feet tall and 5 feet wide. Dead heading will encourage re-blooming. This plant is often called “sky flower” because of the sky-blue color of its flowers and it tolerates the humidity.

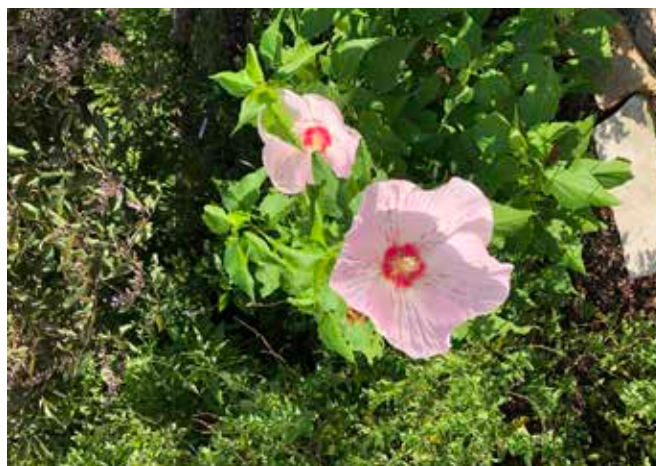
Belinda’s Dream is a hit in any garden. It needs full sun and does well with drip irrigation. It always seems to be blooming and is frequently used with cut flowers. Dead heading will encourage reblooming. This rose grows on bluish-green foliage with a pale pink traditional flower producing a fragrant scent.

In the “Red Hot” section of the Earth-Kind garden you can’t miss the Pride-of-Barbados; this eye-catching tree with red and orange flowers loves the Texas heat, humidity and is even drought tolerant, but must have good drainage. Another great asset for this plant is the airy texture of the foliage. Place it next to traditional plants and it will be a standout.

One of the features in the Earth-Kind Garden is the outline of Texas where we have the Maroon Bluebonnets planted. The goal is to have Maroon Bluebonnets, now called “Alamo Fire,” blooming in the spring throughout the Texas outline. Any other bluebonnets in this area would need to be removed to preserve the Alamo Fire color. Seeds will be planted each fall until we have the Earth-Kind Texas fully blooming with Alamo Fire in the spring.

Traditional Bluebonnets grow in the west end of the Earth-Kind Garden. In this area, they are allowed to reseed naturally. These are the traditional blue spikes with the white tipped bunny tail. It is common along the roadways of Texas. These plants are very hardy, but can be encouraged by a well-balanced fertilizer applied in the fall.

Visit the Discovery Gardens on the Thursday workdays and check out the Earth-Kind Garden collection of Texas Superstars. Better yet, add some Superstars to your own garden.



Peppermint Flare



Belinda's Dream



Plumbago



Earth-Kind Garden

Spittlebugs and Froghoppers



By Hedy Wolpa
MG 2018

It might look like someone passing through your garden decided to spit on one of your prized plants or flowers. Yuck...right? That foamy, white spittle is actually concealing a nymph or young spittlebug, that, when mature, will develop into a more familiar insect, the froghopper.

Entomology experts tell us that the “spittle” itself is harmless to your plants. And while the nymphs and adults do suck juices from your plants, only a large infestation will do serious harm to your garden. The best and fastest way to get rid of spittlebugs is a powerful spray of water. But some gardeners choose to remove all infested vegetation and destroy it so any froghopper eggs that might otherwise overwinter will be eliminated.

The Greenhouse Team in the Discovery Garden showed me the spittlebug situation in the Propagation Bed a couple of weeks ago, and expressed concern that the pest could move into the greenhouse. To help explain their presence and to inform MGs about their life cycle, here's some research and photos.

Spittlebugs/froghoppers, *Philaenus spumarius*, belong to the Family Ceropidae and Order Homoptera, true bugs. The adult froghopper is about .25 to .50 inches long, has an oval frog-like face, and it does “hop” around the garden. Its hind legs are strong and well developed, helping it jump up to 27 inches from plant to plant. It has two pairs of wings and three pairs of legs. The front pair of wings sits tent-like over the body and can resemble a false head to confuse its predators, which are mainly birds, spiders, and frogs. Its mouthparts are designed for stabbing and extracting, or sucking, sap from plant tissue.

The adult froghopper varies in color, depending on the species: most are black, white, or brown colored. Some have colorful orange or yellow mottling on their back; some have two orange-red horizontal stripes, called “two-lines”; and other adult species have no markings. But you'll recognize their characteristic quick hopping movements and the two pair of wings if you see them in your garden.

The life cycle of a spittlebug/froghopper consists of three developmental stages: egg, nymph, and adult insect. Spittlebug eggs are laid in late summer and are left to over-winter on plant debris. The eggs will hatch in early spring and attach themselves to a plant and begin feeding. They are a wingless, green creature at this point and are almost invisible inside the spittle.

Spittle forms when they mix liquid waste products with a mucous secretion, whipping air bubbles with fingerlike appendages located at the tip of the abdomen. It's best described as a mixture of air and an excretion from their alimentary canal. Spittlebug nymphs turn this liquid secretion into bubbles by moving or pumping their bodies. Once the frothy

bubbles have formed, spittlebugs use their hind legs to cover themselves with the froth. The spittle serves multiple purposes:

1. It shields the spittlebugs from predators.
2. It insulates them from temperature extremes.
3. It prevents the spittlebugs from dehydrating.

The nymph is pale yellow-green in color and looks like a miniature wingless version of an adult. It molts several times until it reaches the size of an adult insect. The adult froghopper lives about 23 days, and two generations can cycle in a year. They're typically seen from June through September in the nymph-to-adult stages, and are most noticeable in their immature stage, feeding on host plants and producing masses of that frothy spittle. The nymph develops inside the spittle over about 6-7 weeks, with 4-5 instars.

Nymphs and adults use their piercing-sucking mouth parts to puncture and suck juices from plants leaving stunted, dwarfed, weakened plants. While heavy feeding can lead to distortion of the plant, damage is usually negligible and control with a pesticide is typically not needed. In extreme cases, spittlebugs can reduce plant yields of flowers or fruits. As suggested above, if you should have a severe infestation of spittlebugs, remove and destroy plant debris in the fall and till the soil to reduce egg population.



Spittlebug photo courtesy MG Hedy Wolpa



Froghopper photo courtesy Paula Nelson

What is Perlite?



By Debbie Espinosa
MG Intern 2019

Most of us have seen or used the light, white, fluffy stuff called Perlite. My grandparents and parents always kept bags of it in their vast array of gardening supplies. I remember once being asked by my Mom to open a bag of it while she prepared the soil for planting. As I ripped the bag open with gusto, out came the swirling, floating white particles and I began yelling “it’s snowing.” My Mom was not amused.

So what exactly is perlite, or volcanic popcorn as it is nicknamed, and how is it useful for gardening purposes. Fertile volcanic areas have been settled since biblical times, and humans have been aware of perlite at least since the third century B.C. As a naturally occurring mined mineral, perlite is a nonrenewable resource and the major producers are Greece, United States, Turkey and Japan.

Perlite is a form of glass, specifically, volcanic glass formed from the hydration of Obsidian and like most materials of volcanic origins, its colors run from grey to black. Heating perlite to a range of 1,560-1,650 °F (850-900 °C) causes the mineral to soften and as it does, water that is trapped in the volcanic glass vaporizes and tries to escape. This causes the glass to expand 7-16 times its original volume and the remaining trapped air changes the color from a dark to a brilliant white.

Perlite has a neutral pH level and contains no toxic chemicals. The chemical composition of perlite varies slightly, as most volcanic glass does, and it typically consists of 70-75% silicon dioxide as well as the following chemicals:

- *aluminum oxide* (12-15%)
- *sodium oxide* (3-4%)
- *potassium oxide* (3-5%)
- *iron oxide* (0.5-2%)
- *magnesium oxide* (0.2-0.7%)
- *and calcium oxide* (0.5-1.5%)

Benefits to Your Garden

As I did my final rotation in the Greenhouse at the Discovery Garden, I was watching Mary Gonzales, the team leader for the Greenhouse, as she deftly put the new cuttings into the perlite containers in front of us. We had also removed bigger, established cuttings that had been placed in perlite containers weeks before, into larger containers and I could see where the spindly roots had made their way through the perlite. As I did my research on the benefits of perlite, I found that perlite is a natural filtration system that allows excess water to drain away, while maintaining moisture and catching nutrients. Plants that have better drainage, reduce the risk of rotted roots.

Another benefit of perlite is, it aerates the soil allowing pockets of air to remain which helps with the growth of a strong root system, making it



Perlite



Perlite with New Cuttings

favorable for worms, and other beneficial nematodes and organisms. Regular soil is heavy and compacts over time and because perlite is mineral glass and harder than the soil around it, it will slow down the compaction of your soil thus keeping it light and loose.

There are three grades of perlite that you can buy depending on your gardening project - coarse, medium or fine. Coarse perlite offers the highest air porosity and has the most drainage capacity. It is popular for people that grow succulents, cacti and orchids. Coarse perlite is also used for deeper soil cultivation in raised beds. The coarser perlite is also used in hydroponics, as it keeps plants more open to air, while still having good water-retention properties. The medium grade is used in large container gardening or window boxes. The finer perlite is used for seed starting or root cuttings as the drainage encourages rapid root production. You can scatter fine perlite on your lawn and over time, it will work into the soil, improving drainage.

You may not be able to make a snowman out of perlite, but I’m sure that you will be able to use the “snow” to grow a healthy, happy garden.

Exquisite Random Mutations from the Plant World



By Camille Goodwin
MG 2008

Recently, while reading Next Door, a few comments in the middle of a thread about Exploration Green (the conservation and natural recreation space) being developed in Clear Lake City, had words like: radiation issue, mosquito spray, caterpillar on flower, Frankenstein flower so I was curious to see what everyone was talking about. A neighbor had been walking the area and noticed an odd-looking flower and wondered what it was (see photos). Turns out it was a Black-Eyed Susan (*Rudbeckia hirta*) exhib-

iting a phenomenon known as plant fasciation. Fasciation is rare but not uncommon and does occur in vascular plants where the apical meristem (the growing tip), which normally produces cylindrical tissue concentrated around a single point in predictable and organized patterns, instead becomes elongated perpendicularly to the direction of growth. The growing tissue may appear like several stems have been melted or fused so it looks like a wide flattened and stretched ribbon. Growth can also be fan-shaped, twisted or spiral, crested or elaborately contorted, bent and coiled where numerous growing points may develop to produce a witches' broom effect. Flowers and blooms appear at odd angles to stems and leaves, growing from distorted stems and are smaller and more numerous than normal. This growth pattern is referred to as band fasciation. Fasciation comes from the Latin word fascia which means "a band" or "bundled." Another rarer type known as ring fasciation, has a ring-shaped growing point that produces a hollow shoot. Fasciation may occur in the stem, root, fruit or flower head. Fasciation has been identified in hundreds of different plant species including ferns, woody plants, herbaceous annuals and perennials, and fruits and vegetables. Coniferous and broad-leaved trees and shrubs can bear fasciated branches.

Many factors are possible causes for these striking abnormal growth mutations and can include exposure to frost, genetic, infection by bacteria, viruses or phytoplasmas, feeding by insects or animals, chemicals or mechanical damage. Somatic (body cell) mutations, hormonal imbalance and environmental causes like extreme weather have also been considered contributors to the oddity. While fasciation affects the plant's appearance, it has little to no effect on the health of the plant and usually reverts back to normal during the next growth cycle. The deformity is not communicable and doesn't need to be removed. In most cases this oddity occurs with no obvious cause.

Fasciation is not always considered a problem. The cockscomb celosia (*Celosia argentea* var. *cristata*) is an example of a flower with inherited fasciation and is grown because of its unusual flower heads. Ferns with fasciated tips with names 'monstrosa' and 'cristata' are highly collectable. Many cactus species are cultivated and sold for their fasciation features.



Black Eyed Susan Exploration Green,
photo courtesy Jan Irving



Fasciated Date Palm. Courtesy Kenneth
Setzer, Fairchild Tropical Botanic Garden



Fasciated Cucumber



Foxglove Fasciated



Fasciated Saguaro Cactus



Fasciated Fire Spike. Courtesy Kenneth Setzer, Fairchild Tropical Botanic Garden



Sweet Potato Vine fasciated



Fasciated Texas Bluebonnet

The Mighty Fig Tree



By Elayne Kouzounis
MG 1998

The mighty Fig tree itself is glamorous—wide and spreading. Its huge bright green, deeply lobed leaves spread out like giant hands. Mature Fig plants reach 15 to 25 feet tall and 15 to 20 feet across. Inside the foliage the figs emerge at the nodes where the leaves are joined to the upright branches. Most figs are the size of small plums, in colors that range from pale green or yellow to brown and deepest purple.

Even though our winters are normally mild in comparison to those of other parts of the state, we do receive approximately 400 to 600 hours per year of chilling below 45°F. This may seem like a lot, but actually it is not, especially where fruit trees are concerned. For fruit varieties to grow and produce well, they must be able to tolerate our low number of chilling hours. Besides the chilling requirement, successful varieties must be disease-resistant. Because of our frequent rains and high humidity, we have serious fungus and bacterial problems with many fruit varieties. Selecting the correct disease-resistant varieties and using the proper preventive fungicide sprays will produce the best results. Fig trees should be planted in an area that drains well and that receives at least half a day's FULL sunshine. Most Fig trees will begin to produce fruit after several years. It is advisable to plant your Fig tree in a container that can be protected during the winter or to plant it in the ground in an area with a southern exposure where the tree can be protected if necessary.

Celeste, one of many Fig varieties that perform well in this area, seems to combine the best features of all. The fig, small and blue, is excellent for preserves and also delicious eaten fresh. This variety does not require other trees for pollination. The figs are borne on new wood, and the trees are very cold-hardy.

Alma, a relatively new introduction from Texas A&M University, can produce heavy crops at an early age, and the fruit quality is excellent. When in doubt about which size tree to purchase - Bare-rooted: should be 18 to 24 inches in size. Balled-and-burlapped: 24 to 36 inches. Container: 1, 2, or 5 gallon size.

You should plant the Bare-rooted in late winter and the Balled-and-burlapped in late winter or spring.

For Training and Pruning: Allow young trees to develop as shrubs, with several main trunks arising from the ground. Mature plants will require little, if any, regular pruning. If winter damage should occur, remove the deadwood in early spring, when its extent can be determined.

Large Fig trees require frequent and deep watering. If your leaves wilt during the afternoon heat, or if your fruit is dropping freely, you may not be watering enough. Keep your soil thoroughly moistened, especially as the fruit is forming. Beginning in the early fall you need to start cutting back on water to allow the plant to go dormant. Plants that have slowed their growth for fall suffer less cold-weather injury. You do want to mulch around the plant with grass clippings or compost, both to conserve moisture and to also protect the plant against winter damage to the trunks.

Figs have relatively low fertility needs. In poorer, sandy soils, you only need to feed in the spring with a complete-and-balanced plant food such as 12-12-12, one pound per inch of total trunk diameter. Always water thoroughly after you have fed your plant. Otherwise, do not apply commercial fertilizers to fig plantings.

There is a tiny insect that causes fruit to become "sour" and inedible. This insect invades the fruit JUST as it ripens, through the open "eye" at the end of the fruit. This insect which is called the DRIED FRUIT BEETLE infects the fruit with microorganisms that cause its



Alma



Breba



Celeste

deterioration. This is why you should select a variety with a “closed” eye to avoid this problem.

There is another serious threat to Fig plants. NEMATODES - they are microscopic soil-borne worms. The roots of your plant develop KNOTS where nematodes have fed. This cuts off the water and nutrients to the leaves of your plant. Try to follow a careful watering program so your figs are never in stress. Mulch heavily and avoid stressful high-nitrogen fertilizers that could cause undue demand on the root systems.

When harvest time comes it is important to pick your figs just as they ripen. The fig will not develop further once it's been harvested. Also, as much as possible try to REMOVE all the deteriorated fruit that you can to prevent the spread of disease. DO NOT EAT immature fruit, as its latex sap can irritate your mouth.

The following Fig varieties have “closed eyes” to lessen the chance of the dried fruit beetle invasion.

Alma: This is a medium sized, cream colored fig. Productive and very sweet. Somewhat cold-tender when young.

Celeste: This is a small, dark, high-quality fig that ripens in June. It is vigorous and productive. Well adapted to all Texas fig areas. Delicious preserved and eaten fresh.

Texas Everbearing: This fig has medium-to-large fruit, excellent quality. It ripens in late June and for a continuing period thereafter. The first crop, called BREBA figs, are produced on the past season's growth. These figs are larger and light brown. Later figs, borne on the current season's wood, will be smaller and somewhat darker. This is a vigorous variety.

Figs made their first commercial product appearance with the introduction of FIG NEWTON cookies in 1892.

Another point in their favor is the long season over which the fruits

ripen, often from July until frost on a well-established, older tree that no longer experiences winter dieback.

Lastly, the fruit of the Fig tree is one of the oldest known cultivated fruits and provides an excellent source of dietary fiber, vitamins, and potassium.

Happiness is like jam, you can't spread even a little without getting some on yourself.



Large Fig Tree



Texas Everbearing



Texas Everbearing

“Step on it...A Look at Hardy Ground Covers” The Island Garden

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



By Jan Brick
MG 2001

“Not every plant in the landscape can be the star of the show.” Whatever your main focal points or central specimen choices, there is also the need for a supporting cast of shrubs, annuals and perennials. Small plants can do big work and groundcovers fit well into the secondary role.

A ground cover is any plant that grows over an area of ground; these plants provide protection from erosion of the topsoil as well as facilitating weed suppression. Groundcovers add texture, color and

interest to the garden with minimal maintenance. Ground covers can be used where grass is not wanted or may not grow well such as under trees or across areas in borders.

Evergreen groundcovers fashion a beautiful low care design and selecting those most suitable for our zone (zone 9) is not difficult but one should consider that these choices must be sturdy enough to withstand our hot summer climate. Selections in this category include Beach Morning Glory also called Ipomoea, bayhops or railroad vine that is fast growing and prolific, with sporadic bright pink blooms and is perfect for difficult areas. Other choices are the Pachysandra known as Japanese Spurge that thrives in shade under trees, fast growing spreading into an attractive green blanket, and the Japanese ardisia also called Marlberrry and presents itself as a low growing shrub with glossy leaves and small pink or white flowers and prefers full or part shade.

The use of walkways has become increasingly popular and a living path can be a delightful addition to any landscape. Using stepping stones or spaced brick patterns with low-growing plants between gives a natural appearance. Several mat-forming species of groundcover are hardy enough to tolerate light foot traffic and some varieties release a pleasant fragrance when slightly crushed. For pathway use consider Thyme which is a resilient groundcover for sunny locations with a fresh scent. Use the non-culinary varieties such as red creeping thyme, mother-of-thyme and woolley thyme. They will all form dense mats of attractive foliage. For shady walkways, the Blue Star Creeper is a beautiful selection with its masses of pale blue star-shaped blooms that appear in spring and early summer. It is also tough enough to accept light foot traffic if not allowed to dry out. Corsican Mint grows only about an inch in height in thick mats of aromatic foliage, prefers some sun but afternoon shade and is a delightful option between stepping stones as it exudes its spicy fragrance when lightly trod upon. Keep well-watered between rainfalls. The heat and drought resistant sedums also make ideal groundcovers for sunny locations. Considered “tough as nails” sedum requires little attention or care. Short varieties are best for this situation. Look for ‘Dragon’s Blood,’ ‘Tricolor’ or ‘Blue Spruce’ for pretty flowers that will attract butterflies. Lirope, also known as lily turf is a popular groundcover for the Gulf coast area as a low-maintenance hardy perennial plant that will grow in moist soil in partial shade to full sunlight. Lirope produces spikes of showy lavender purple or white blooms in late summer into fall with green or variegated foliage. There are clumping and creeping varieties that can reach



Beach Morning Glory



Blue Star Creeper



Blue Spruce



Corsican Mint

to two feet in height. Good for garden borders and sloping ground as well as under trees where there may be little to no sunlight. The variety known as wishbone flower, clown flower or blue wings is an annual that does better in part to full shade with moist well-draining soil. The blossoms of this type are trumpet-shaped in shades of purple, pink, white or yellow with contrasting throats and oval light green leaves. The Wishbone will produce vibrant color in the shadiest area of the garden.

Groundcovers are a versatile garden choice and perfect for irregular terrain and an attractive alternative to an expanse of sod waiting to be mowed, fertilized and watered year after year. Why not remove a section of grass and replace it with a low-maintenance focal point that is especially lovely in full bloom? Nearly any low-growing plant or combinations of can be used as groundcover and when planted beneath ornamental shrubs can inhibit the growth of weeds. Remember that native or adapted varieties will be hardier and require the least maintenance. Mixing types of evergreen groundcovers will provide interest in the off season of winter and early spring by delivering an attractive palette of color, texture and height. Pay close attention to descriptions of plant heights as you make your selections. You don't want to shop for a ground-hugger to plant between paving stones and come home with a two-foot spike variety.

Why not consider these low-maintenance landscape solutions for your garden areas; create rich and varied carpets of color for your habitat. Groundcovers that bloom can be stunning as well as functional.

Groundcover Objectives and Solutions

What to plant on a slope?

What to plant under a shade tree with protruding roots?

What to plant in garden paths?

What to plant as a border along a driveway?

Carpets of Color...Flowering Ground Covers

Ajuga...easy care with colorful bronze, chocolate, bright green or variegated foliage and flowers of blue or white, hardy, partial shade, good container plant.

Ajuga 'bugleweed'...evergreen mint family, six inches in height, full sun, average soil, glossy leaves with light blue to white blooms in early summer.

Creeping phlox...bold carpets of pink, blue or white blooms with small evergreen leaves, may grow to six inches in height during full bloom, good over slopes, can tolerate light foot traffic, sun to part shade.

Soapwort... compact form, pink, red or white blooms, use for garden paths and rock gardens.



Ajuga-Bugleweed



Ajuga



Creeping-Phlox



Soapwort



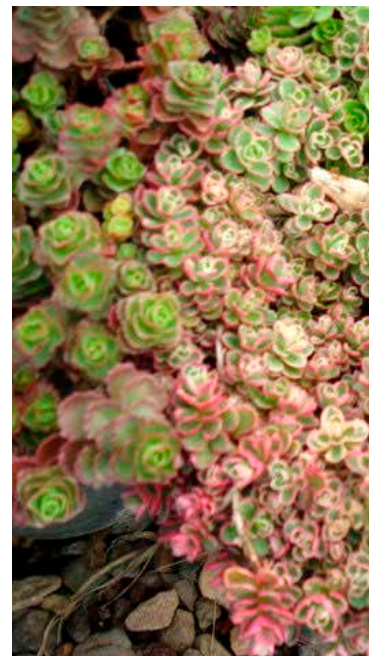
Dragon's Blood



Lirope



Pachysandra



Tricolor

A Rose is a Rose is a Rose



By Donna Ward
MG 1996

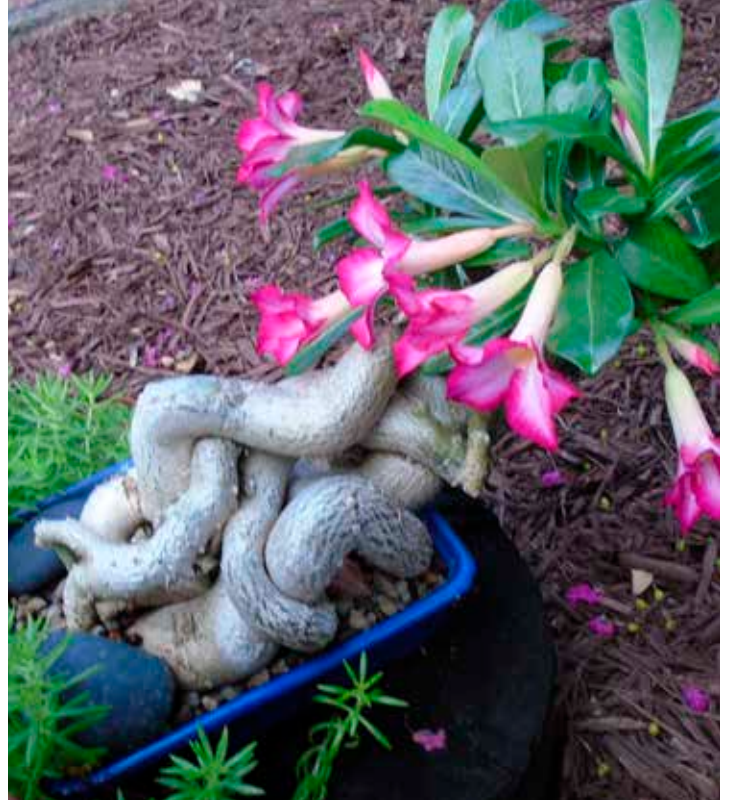
"A rose is a rose is a rose." American author and poetess Gertrude Stein used that phrase in a poem she wrote in 1913. It has been interpreted to mean: "Things are what they are." In today's vernacular we'd probably say - "It is what it is." Shakespeare wrote "A rose by any other name...." but he was referring to Juliet's love, Romeo Montague. I doubt that either of these famous authors had ever heard of an *Adenium obesum* commonly referred to as a desert rose. It's also known by several other names, Sabi star, mock azalea, kudu and impala lily. It's not a rose, and it has no thorns, but instead is a low-water succulent native to Africa and the Arabian Peninsula where it grows so large it is sometimes used as a hedge. But here, gardening hobbyists grow it as a pot plant - it loves our sun and sizzling temperatures.

The native habitats of the desert rose experience long extended dry seasons. Consequently, they store water in their underground roots to allow them to survive lengthy periods of drought. They prefer a well-draining succulent potting mix, with a slightly acidic pH of around 6.0. Fertilize only during spring and summer when they are in active growth and blooming. Unlike most flowering plants that like a high middle number (phosphorous) the desert rose prefers a balanced 13-13-13. They can't survive cold temperatures, so potted, can be moved indoors in colder weather. Its tight clusters of shiny green leaves, and tubular flowers are quite attractive, but its most eye-catching attribute is the swollen basal caudex. Below soil level the roots store water and swell significantly.

You'll know when it is ready to repot, as the soil level rises because the swollen roots are displacing the growing medium. Mine are repotted approximately every three years or so. I lift them gently from their pot and remove all soil from the roots. This is done easily with a jet of water from a garden hose. The exposed swollen roots will be knobby, twisted and quite fascinating in appearance. Spread the lower roots and place it back in the pot with fresh soil but pot it higher, placing the swollen caudex above the soil level. The exposed caudex may have several tiny roots still attached. Some growers leave them be as they will eventually die off, but patience is not one of my virtues, so a small sharp pruning clipper does the job for me.

Most common are the pink and red flowering specimens, but there are other colors available. There are now bicolor flowers, white and a very dark 'black' variety. Flowers are usually about two inches in diameter, and tubular in shape.

It is imperative that the desert rose be potted in a well-draining medium. Root rot is its greatest enemy. My preference is a shallow, tapered clay pot as opposed to straight sides therefore promoting good drainage. Choose a pot only slightly larger than the root dimension. This is also a



way to control the plant's size. I have one plant 20 plus years old, and it has been living in the same pot as long as I've had it. Don't be tempted to place in a much larger pot, as the additional soil will not dry out fast enough and root rot will occur. It's been my experience that they do enjoy being pot-bound.

Cuttings can be easily rooted. Be sure and allow the cutting to callous over for a day or two before planting in a light growing medium such as perlite. Place in a well-lit area but out of the sun until it has formed roots. Then only gradually expose it to full sun.

I would be remiss if I didn't mention some of the problems that come with growing this unique plant. First is the tendency to overwater. Like most succulents they prefer that the soil become somewhat dry before watering. Overwatering will result in root rot in a very short time. Leaf rot can also occur when leaves remain wet over a long period of time. If possible, water at the base only. If a sprinkling method is used, do it in the morning so that the leaves have time to dry during the day. Never sprinkle at night.

Not many pests bother the desert rose. I have on one occasion seen spider mites, but I think this particular plant was in too much shade and showing its displeasure for the lack of sunshine. A soap-based insecticide will take care of the critters.

In the past it was rare to find a desert rose in a nursery, but now they are readily available in nurseries and also the gardening department of some

of the big box stores. They tend to be a bit on the pricy side but bear in mind that they take several years of growth to develop the beautiful basal caudex, not to mention the repotting practices. Once you have your own specimen the care and repotting are up to you. The desert rose will reward you immensely for your attention and nurturing.



Weed of the Month

Mare's Tail



By Alisa Rasmussen
MG 2011

Scientific Name *Conyza canadensis*

Family: Asteraceae (Aster family)

Group: Dicot

Season: Warm season

Other Common Names: Horseweed, Canadian Horseweed, Canadian Fleabane, Coltstail, Butterweed, and Muletail fleabane

Mare's Tail is an herbaceous, annual, broadleaf weed that is native to the U.S. Mare's Tail can establish itself in any disturbed area from ditches to orchards to landscaped areas throughout North and Central America specifically.

Although not listed on the US Federal noxious weed list, it is listed as a noxious weed in Ohio. It is most unwelcome in agricultural settings where it aggressively competes for water and reduces crop yields.

Appearance: Look for the first leaf to be football-shaped on a hairy stalk. Later the simple leaves will have slightly toothed edges and will be alternately attached along the stem in a rosette pattern. Mare's Tail typically grows as a single erect stem bearing whorls of small leaves. It grows erect from 3-10 feet tall on usually a single stalk, branching within the inflorescence.

If mowed, Mare's Tail may grow several basal branches and might be confused with hairy fleabane. Mare's Tail, however, has darker leaves, not gray-green like hairy fleabane. The root system is a short taproot with a secondary fibrous root system that can extend 3 feet into the soil. Leaves are alternate but may appear whorled as they are very crowded along the stem. Leaves are linear, usually toothed, hairy, up to 4 inches long and attached directly to the stem. Leaves become progressively smaller up the stem. Stems are covered with an abundance of stiff hairs and are hollow.

Inflorescence: Bloom time for Mare's Tail in Texas is generally during summer (primarily July, August and September). Flowers are borne a many-branched panicle at the top of the plant and are very small, daisy-like on an urn-shaped base. When mature, the flowers will expand into seed heads looking a lot like dandelion puffs. Fruits are small, about 1/16th of an inch (1.5 mm) long, narrow, elliptical or oblong, slightly hairy, and attached to soft, dirty-white bristles. Each plant can produce up to 200,000 seeds that travel long distances in the wind.

Control methods: Since *Conyza canadensis* is the first broadleaf weed to evolve glyphosate resistance in agriculture, the best way to control it is to pull it out by hand while it is still a young plant, making sure to pull out all the roots and then discard the weed. Since *Conyza canadensis* reproduces by seed, it is best controlled before it produces flowers and seed heads. In landscape beds and other areas, mulching may help reduce Mare's Tail establishment.



Mare's tail

Montezuma Bald Cypress



By Margaret
Canavan
MG 2003

In your travels around town you may have noticed some graceful small and medium-sized trees with a single trunk and bright green fern-like foliage. These are bald cypress, an ancient genus of trees in the Cypress family Cupressaceae, now found only in Mexico and southeastern U.S.

There are two surviving species and we have both on the island. Most of us are familiar with the bald cypress (*Taxodium distichum*) also known as Swamp or Southern Cypress, common from

East Texas to Florida. Recent discoveries have found bald cypress trees along a North Carolina river to be over 2,500 years old.

The other species is the Montezuma bald cypress (*Taxodium mucronatum*), also known as Mexican Cypress. The Galveston Island Tree Conservancy has added many of them along our streets as part of NeighborWoods activities, and they seem to like it here.

The Montezuma is the national tree of Mexico, native as far north as lower Texas. In its native range its striking trunk grows unusually thick toward the base when mature. The most notable example of this is a tree in Oaxaca, Mexico, which has developed a trunk diameter of 35 feet to 40 feet in its many centuries of life.

The Montezuma is mostly evergreen, unlike its deciduous cousin the bald cypress. Montezuma is faster-growing and may reach up to 80 feet in ideal circumstances. Young trees are pyramid shaped with a dense crown, maturing into a spreading and open form with a single straight trunk.

The pale green, needle-like leaves are evergreen in its native range and can be so here in our mild winters. This attractive tree provides delicate, feathery foliage and dappled shade.

Adaptable to a variety of growing

conditions and soils, the tree prefers sun, but can tolerate part shade. Water requirements are low and it's moderately drought tolerant. The tree has high heat tolerance and adapts to challenging urban conditions for successful street-side planting.

Of special interest to home gardeners are the Montezuma's tendency to be relatively maintenance-free, resistant to pests and diseases, and minimal in pruning requirements. The roots don't seem to interfere with sidewalks and curbs, and they're less likely to develop the "knees" of its bald cypress relatives. Leaves, fruit and seeds aren't a litter problem.

This tree also provides habitat for wildlife. It offers cover and nesting sites for birds, harbors insects for their diet, and produces seeds for small mammals.

This hardy and long-lived tree provides an attractive accent to the landscape. With success thus far on the island as an indicator, we need to continue to add the Montezuma bald cypress to our home landscapes where space permits. Take a visit to the 1500 block of Sealy Street to see a beauty planted during the earliest NeighborWoods planting in 2010.

There are several in the 4500 blocks of Avenues N½ and O that were added in 2015. These were planted as very small trees so you can see their impressive growth rate. You just might need one if you have a spot for it.

"Tree Stories" is an ongoing series of articles about island trees, tree care, and tree issues. If you have or know of a special tree on Galveston Island that should be highlighted, please email treesforgalveston@gmail.com. Margaret Canavan is a Galveston resident, a Galveston County Master Gardener, and a member of the Galveston Island Tree Conservancy Board.



A Montezuma bald cypress in the 1500 block of Sealy Street in Galveston.



TMGA 2020

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McLennan County Master Gardener Association
in Waco Texas**

**May 12-14, 2020
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LODGING

- We have contracted with two great hotels for you!
- The host hotel, and it's partner hotel directly across the street, are now accepting reservations.
- Our agenda will have Leadership Training May 11th
- Conference registration opening at 7:00am on May 12th
- Conference will close at 5:00pm on the 14th.
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NOTE

If you wish to stay longer, both hotels will honor the above three days BEFORE and three days AFTER our conference block, however, you must make these reservations by phoning the Reservations Desk directly at the hotel using the phone numbers provided above.

Presentation from August 3rd Director's Meeting may be viewed here.

Genista Caterpillar



By Joanne
Hardgrove
MG 2016

It was a usual Thursday in the Discovery Garden's north end with weeding, cutting bamboo, mulching, more weeding, and finding bugs which call the north end home. We know everything has a purpose, but when you see caterpillars devouring a beautiful plant, you question their purpose.

Our culprit: *Genista caterpillar* (*Uresiphita reversalis*) also known as Sophorn worm moth, or Genista broom moth. The larvae have a brownish-green body and a black head with white dots. It

feeds on flowering plants in the Fabaceae or Leguminosae family. Genista caterpillars are seen in central Texas landscapes and throughout the Gulf Coast. They form loose webbing on the foliage and feed on the leaves of Texas Mountain Laurel and Possumhaw Holly causing unsightly damage to our north end plants.

Moths and butterflies have four distinct life stages. Larvae (caterpillars) emerge from eggs deposited by the adult female and go through several feeding stages. Late in their development, larvae stop feeding and go into the pupal stage. Adults emerge from pupae to start the cycle once again.

The Genista caterpillar spends its winter in the pupal stage and adult male and female moths emerge in early spring. They are active at night when they mate, and females lay overlapping clusters of cream-colored eggs.

Caterpillars are active during the day but may feed at night under moderate temperatures and develop before they pupate. Young caterpillars feed in groups but become solitary as they grow. Pupation occurs inside silk webbing or loosely spun cocoons among the older leaves or in secluded sites around the plants.

Texas Mountain Laurel leaves contain chemicals that protect plants against generalist herbivores. Genista caterpillars are immune to these chemicals and even benefit from them.

Plants and trees should be checked frequently during the spring to detect egg masses. These are not easily found. Look for small batches of eggs in overlapping clusters. Monitoring should be focused on the newest growth because young leaves are preferred by caterpillars. Light infestations on a few plants or small plantings may be controlled by hand removal, using high-pressure water sprays or by pruning infested terminals. Insecticidal soaps (potassium salts of fatty acids) suffocate and cause water imbalance in small caterpillars bathed in the spray, but large caterpillars may be unaffected. Soap sprays have no long-lasting or residual effects once the spray dries on the plant surface. *Bacillus thuringiensis* (Bt) are best used when caterpillars are small (½ inch or less) and are actively feeding on leaves. The active ingredient in Bt products is delta toxin. It acts as a stomach poison specific to caterpillars and must be ingested by the larvae to be effective. It's essential when spraying to spray both the upper and underside of new leaves on which caterpillars feed. Repeated applications may be necessary during periods of new growth.

For larger caterpillars, products containing other active ingredients such as acephate, carbaryl, synergized pyrethrins or synthetic pyrethroids (such as bifenthrin, cypermethrin, and, permethrin), may be more effective.

For best results make foliar spray applications (liquid sprays to leaves) when small larvae first appear. There are a number of insecticide products available for control of caterpillars or lepidopterous larvae on ornamental trees and shrubs.

If you just love insects and can't eliminate Genista caterpillars from your garden. You will be happy to know its purpose in the universe is to supply food within the food chain. Lizards eat them, the brilliant tachinid fly uses Genista caterpillars as a host, laying its eggs on the caterpillars, eating them from the inside out, and wasps also consume Genista caterpillars as food for their young. What a marvelous cycle the insect world demonstrates to us.



5 Master Gardeners Continue the Goal of Education



By Karoyln Gephart
MG 2017

Master Gardeners follow a garden path that many can trace back to childhood and people in their lives who were role models in sharing a love of growing plants. But not many MGs can look back on the history of the Galveston County MG program by being part of it.

One such person can and it's GCMG Jerlee Owens from the Class of 1982. But really what is more correct, Jerlee was an MG BEFORE the title ever was given and the program was in place.

Jerlee Owens

Jerlee was a member of the Horticulture Committee with the goal of educating everyone in gardening. For those in the county communities with land and big yards, the committee provided programs on gardening in the soil. For those with small yards, the committee shared the idea of container gardening. The group had people who loved nut and fruit trees and taught about pecan trees, fruit that grew in the area and when an extension agent arrived who knew about citrus, that too was shared with area citizens. Regional vegetable groups also shared their knowledge.

Jerlee, who is a recipient of a Lifetime Achievement Award for her work, enjoyed giving programs to adults as well as children. She even brought soil, plants and containers to children in the hospital and taught them to how to plant and care for the new little plant that would be placed in the child's window in the hospital room.



Jerlee still has the tag that reads Horticulture Committee that members wore at their presentations. In 1982, the new name was Master Gardener.

Owens was born in Richmond, Texas, but came to Galveston as a child. Her father was a farmer and her mother was a gardener whose love for flowers was evident at their home. "We had no grass. My mother didn't allow that. She planted beautiful flowers. I don't remember a time when we didn't have flowers, especially sunflowers, as well as something edible always growing like sorghum and peanuts. And we had lots of animals, cats, dogs," Jerlee said as she reflected on a happy childhood.

She remembers when Dr. William Johnson arrived as the new Galveston County Extension Agent in 1989. "He immediately bonded with my husband and really everyone he met. He took the program and made it what it is today," Jerlee said. "I have loved watching him and all the new Master Gardeners each year join and become a lifelong member of a great group of people, still working to educate everyone in the county."

Having Jerlee as the MG historian, helps all who join be able to understand the evolution of the program. For her, it continues the joy she gets from gardening and being around others who love it also.

New this year for Jerlee and everyone else to meet and greet are Don and Joanne Hogarth.

Don and Joanne Hogarth

Both are 2019 MG Interns. They both grew up in Canada, moved to the US in 1991 and their family became citizens in July 2001. The two joined the MG program together. It was Joanne who had gardening "roots."

"Many of my relatives were farm folk, dairy and cash crops. My parents (mostly my Mom) always had a garden and we enjoyed fresh produce and wonderful canned preserves and jams," she said. "I was influenced by my mother and have had some wonderful garden mentors over the years. Being a member of a garden club is a wonderful source of information and ideas and a great place to start; I love asking folks for a garden tour and hearing their story."

Her husband on the other hand has a city background with no gardening role models. What





motivated him to the Master Gardener program was not only his wife but a mission to grow a better tasting tomato not offered in the stores.

The two are active in the Greater Clear Lake area where they live. A retired engineer, Don Hogarth helped develop a sustainable garden at Bacliff Community Garden/Bacliff Lighthouse Food Bank. This garden showcases a completely self-contained garden with a rainwater collection system, solar powered irrigation system, a greenhouse bed and a butterfly habitat. The facilities were installed, in part, through an Eagle Scout project and utilizes volunteers from the community to maintain the garden and distribute the produce at the Lighthouse Food Bank.

Joanne has always enjoyed growing flowers and landscaping. Retired from the banking and business sector, she is working on fulfilling the requirements for the GCMG program. "I'm still getting involved and working on my volunteer hours. I'm very interested in pollinator habitats, organic and Earth-Kind gardens, and making improvements to my veggie garden and home plantings," she said.

Another couple who joined the GCMG program together in 2016 is Denny and Nancy Noh.

Denny and Nancy Noh

Before they retired, Denny, who is originally from California, worked in the Human Spaceflight Business Unit for Boeing in Business Development, Human Resources, Accounting and Special Projects. He worked in Texas, California, Alabama, and Florida supporting NASA and military programs such as Apollo, Apollo/Soyuz Test Project, Skylab, Space Shuttle, International Space Station and Air Force Global Positioning System.

Nancy is originally from Alvin and worked as a housewife, nurse and an oil field/refinery worker.

"My father died when I was 10 years old and I was raised in southeast Houston by my mother and her mother (my Nan Naw). My grandmother was the gardener and she taught me the many benefits and wonders of gardening. We spent many long hours in our garden and flower beds with our irises and daylilies," she said. "I loved every second in the garden."

Her husband also has childhood memories of his great aunt who lived in the San Joaquin Valley which is the largest agricultural farming area in the nation. He can also remember parents, grandparents, aunts and great grandparents enjoying gardening.

The Nohs joined the MG program together and work in it together. "Denny and I are co-coordinators for Educational Programs, and I am also a co-coordinator of the Speakers Bureau. Talk about areas of learning," Nancy said. "Since our first day, we have met, worked with, and learned from so many wonderful gardeners. My favorite area in the Discovery Garden is the greenhouse and hoop house where everything begins."

Jerlee Owens, Don and Joanne Hogarth, and Denny and Nancy Noh continue the original mission — to educate others in something they all love, gardening.



Meet Galveston County Master Gardener Mary Gonzales



By Trish McDaniel
MG 2001

It was a steaming day in Santa Fe when I rolled up to the home of Mary Gonzales, MG 2015. After pleasantries with her husband, Joe, Mary released him to haul a truckload of yard trimmings, including an abundance of palm debris - Mary's garden nemesis.

Earlier that week she was treated to a three-day tidy-up by her son, giving her impressive collection of perennials, et al., some welcome elbow room.

History in a Nutshell: Mary was born in Lone Cedar, TX; a tiny town roughly south of Dallas. Now nonexistent, it once hosted a lone schoolhouse, general store and cotton gin.

Mary's father worked for Phillips Oil which would require transfers throughout the years to Odessa, TX; Hobs, NM; ending up in Midland, TX where Mary attended middle and high school.

Mary was living in Texas City and working for the State of Texas as placement supervisor, when a friend tried to hook her up on a blind date. Though vigorously vocal as to the bad merits of this idea, she reluctantly gave in - being Joe wouldn't take no for an answer. Her one condition: said date would be at the pizza parlor within walking distance to her home. After 42 years of marriage, so far so good.

Prior to moving to Santa Fe to be close to the grandkids, Mary and Joe resided in Conroe, where she enjoyed volunteering at Mercer Arboretum. Under the tutelage of horticulturist, Jeffery Heilers, Mary became immersed in the art of transplanting and propagation of annuals and perennials. Mary is still in touch with Jeffery as he occasionally calls her for advice on vegetable gardening.

Encouraged by her friend, Barbara Lopez, owner of Hope Farms Gardens in Cut-n-Shoot, TX, Mary joined the Montgomery County MG program in 2012.

Upon county-hopping to Galveston, Mary has since employed her skills as Greenhouse Supervisor for the MG Demonstration Garden wherein she propagates new growth, valuable knowhow and - as a self-professed hugger - plenteous goodwill.

Mary's love affair with propagation shows in the countless variety of treasures as we serpentine amongst her numerous raised beds.

Two heavily laden Satsuma orange trees marked the beginning of Mary's garden tour. Enjoying the perks of my mission, I see new plant varieties like Fuzzy Leaf Hummingbird, Toothache, Curry Leaf plants and Caroline grass. I recognize an Ember's Wish salvia which I have long confused with Wendy's Wish.

Mary's beloved but common Porter Weed sits before a winding border of spotted African Hosta, a transplant project that is becoming well established.



Mary is pictured with a special flat of Christmas cactus - cuttings from a wedding gift received by Dr. J's mother, of which he requested stewardship of upon her death. When ready, these young offshoots will be gifts to Dr. J's siblings, furthering the reach of a poignant living heirloom.

Several varieties of split leaf philodendron share a bed Mary is using as proofing ground for Shooting Stars, which she hopes will become a pleasing and practical ground cover for this region.

Other delightful finds include a young Buddha Belly tree and Native Hibiscus, which Mary has grown from seed. Bear's Breeches, Acanthus Whitewater add to the list, ending with my favorite, a fledgling potted fig tree Mary started from a cutting. The fig tree originated in Sicily and grows at an Italian restaurant established in Texas City in the 1970's.

Favorite Garden visited: Butchart Gardens, Victoria B.C.

Favorite reads: Mister God, this is Anna, by Fynn; and an old book about West Texas ghost stories. Currently reading Butterfly Gardening for Texas by Geyata Ajilisi.

Favorite Dr. J. Anecdote: Concerning Mary's health constraints, sometimes he may gently inquire as to her wellbeing, at which time she firmly reminds him that, "I do what I want to do. I just do it slower!"

Visiting New Zealand's Rose



By John Jons
MG 2003

When visiting cities overseas I try to visit the local botanical gardens. I enjoy seeing the rose gardens, horticultural displays and learning about the local horticultural practices. I recently visited New Zealand where I had the opportunity to visit three rose gardens in three different botanical gardens, in three different cities.

When I left the US (Houston, Texas) it was spring and the local plants were in the process of growing and flowering. When I arrived in New Zealand (March) it was the fall season and the plants were starting to slow their growth and their bloom season was at its end, but I still found the gardens very impressive. Interestingly at all the gardens it was noted on signs that chemicals were not used to control fungus or insects. The gardeners practiced Integrated Pest Management (IPM).

The first rose garden I visited was the "Reflective Rose Garden" located in the Auckland Botanical Gardens in Auckland, New Zealand. The garden was located on the edge of one of the many open areas in the botanical gardens. This rose garden featured New Zealand specific roses, Species (wild) Roses and Heritage (Old garden) Roses. Within the rose beds and among the rose were planted many annual and perennials that complimented the roses. My video called "A Visit to the Reflective Rose Garden, at the Auckland Botanical Gardens, Auckland, New Zealand" illustrates this garden. <https://youtu.be/0aEXXRrL3eY>

My video called "A Visit to the Auckland Botanical Garden, Auckland, New Zealand" highlights the entire Auckland Botanical Garden. <https://youtu.be/NYHRq5uON98>

The second rose garden I had the opportunity to visit was located in the Wellington Botanical Gardens, in Wellington, New Zealand. The rose garden is called the "Lady Norwood Rose Garden." This rose garden is located on the edge of the botanical gardens surrounded on all sides with beautiful tree covered hills and framed on three sides with a colonnade. My first view of the garden was from high up on one of the tree-covered hills within the gardens. The garden bed layout is spectacular. The garden has 110 rose beds that are laid out in formal geometric design. Each bed features a different rose. Before a rose can be included in the garden they are trialed for three years to determine their suitability for growing "maintenance free" in this garden. The rose garden received an "Award of Excellence" in 2015 from the World Federation of Rose Societies. My Video called "A Visit to the Lady Norwood Rose Garden, at the Wellington Botanical Gardens, Wellington, New Zealand" illustrates what I saw. <https://youtu.be/nwQYaEuiT0c>

The third rose garden I had the opportunity to visit was located in the Queenstown Botanical Gardens located in Queenstown, New Zealand. The rose garden is located on a small hill overlooking the beautiful Lake Wakatipu. The centerpiece of the rose garden is a majestic Horizontal Elm tree that was planted by members of the Queenstown Girl Guides Associa-

tion to commemorate the coronation of King George VI on May 12th, 1937. The individual rose beds are planted in a manicured lawn around the tree. My video "A Visit to the Queenstown Garden's Rose Garden, Queenstown, New Zealand" illustrates this garden. <https://youtu.be/IEAVkSUOqzQ>



Dr. William M. Johnson

30 Year Anniversary



By Barbara Canetti
MG 2016

In 1989 when William Johnson (aka Dr. J) accepted the position as Galveston County Extension Agent, the programs he headed looked far different than they do today. During his 30-year tenure, he has grown the popular Master Gardener program from a mere nine members to over 200 certified Master Gardeners, who volunteer thousands of hours to the community each year.

Dr. J, who holds a doctorate in plant pathology, recently was celebrated for his 30 years of service at a surprise party attended by dozens of volunteers who credit him with the success of the local program.

Since coming to Galveston County, Dr. J has a long list of accomplishments. Besides the training programs and seminars, he has lead teams of experts diagnosing tree and plant problems on the Gulf Coast following hurricanes, floods and freezes. Most notably, he headed the group of 43 Master Gardener volunteers assembled to conduct surveys of tree and vegetation damage following Hurricane Ike. He worked with Texas A&M Forest Service to sample soils, rate 800 types of plants on their ability to withstand storm damage and identify causes of palm tree decline. His work and assessment of dead or dying trees in Galveston proved critical in the obtaining federal funding to replace the 40,000 trees affected by the hurricane on the island.

“I am proud of how the horticulture program and Master Gardener volunteers have responded to local emergencies and disasters, ranging from Hurricane Ike and Hurricane Harvey to the invasion of tawny crazy ants a few summers ago,” he said.

Two years ago Dr. J received the highest system-wide award bestowed by the Board of Regents of The Texas A&M University. The annual Regents Fellow Service Award is given to individuals who have demonstrated significant commitment and contributions to their respective agency by providing exceptional leadership in educational or program delivery, research, extension or service that have resulted in significant impact and lasting benefits to the state of Texas and beyond. It was set up to highlight exemplary agency professionals.

Dr. J was selected for the award as a Regents Fellow from the agency's 573 community-based educators.

His leadership is noticed statewide, evidenced by the recent string of awards given to the Galveston program at the state Master Gardeners convention in Victoria. Dr. J's group took first place for the Junior Master Gardener program (Kaye Corley), Outstanding Individual Master Gardener (Ira Gervais), Outstanding Association – large category (Galveston County Master Gardeners), as well as third place

for the 2018 Intern's tomato trials research and the written brochure concerning the new aquaponics program.

Dr. J's philosophy and motto – Knowledge not shared is knowledge lost – is exemplified in the expansion of outreach programs to local citizens, with more than 75 seminars in 2018 attended by more than 2,000 residents. Johnson also spearheaded opening the Discovery Garden to the public for educational visits, and introducing 275 visitors to the 4.1-acre garden, where more than 3,000 pounds of fresh produce was harvested and donated to local food banks.

“The Discovery Garden is an awesome resource for local gardeners to get a first-hand experience for new concepts in gardening as well as long-proven methods for successful gardening,” said Dr. J.

Under his management, volunteers gave more than 31,000 hours to the program – equal to 15 full time employees (worth \$836,000). He said when the programs he manages moved to its present location at Carbide Park, it was a great opportunity to expand the offerings to the community.

“Because of the relocation, we can offer more educational programs as well as better quality programs,” he said.

Dr. J said the “best part about my job is the people I work with – the volunteers.” He is also the County Office Administrator for the Galveston AgriLife Extension Office which counts about 575 volunteers in Master Naturalist, 4-H and other educational programs. He stresses that the Master Gardener program is a service organization that has spawned very social ties. But education and volunteering are the heart of the program.

“The Galveston County Master Gardener program is a great program because of the great volunteers involved,” he said. “It has always had a mission of being relevant to serving the needs of local gardeners. As long as Master Gardeners stay loyal to that mission, I am totally confident that the program will continue to be successful.”



The Discovery Garden Update



By Tom Fountain
MG 2008

Summer has slipped into the garden and now it's just HOT! Temperatures have become a couple of degrees above normal, and the triple digit heat indexes have prompted several days of excessive heat advisories. A few spotty showers and thunderstorms have not produced much rain, so rainfall totals are an inch or so below normal. Yet our rainfall has been enough to keep us out of drought conditions so far. The extended outlook indicates temperatures will likely continue a little

above normal into fall with rainfall expected to be slightly below normal. That being said, hurricane season will continue through November and could produce a heavy rain event.

During hot weather the take a break bell is ringing each hour on the hour to remind us to stop and drink some water. Gardeners really need to take frequent breaks and be sure to stay hydrated this time of year to avoid heat exhaustion. In Fig. 1, Hedy, Joanne, Mary and Joycelyn, are taking a well-deserved break from weeding in the butterfly and the low water gardens. The hot weather also ended the production of the cooler weather plants. In Fig 2, Jim is clearing out his tomato plants to make to make room for more heat tolerant vegetables. Jim has also been spending a lot of time helping out on the tractor lately.

Despite the warmer temperatures, life continues in the garden. In Fig 3, Judy is explaining a low water use garden to a tour group of children. Tish and Sharon are in the background waiting for the group of happy children.

The greenhouse crew has been growing plants to support our Fall Plant Sale. In Fig 4, Stewart, Lisa, Angie and Merlyn are busy repotting some started plants into 4-inch pots to be hardened off in the hoop house. In Fig.5, Clarence is sanding some of the wagons getting them ready for others to repaint

We recently had a pleasant surprise when Joe came to visit the garden and gave a workshop on replacing bricks. In Fig 6, Joe is demonstrating the way to place bricks in the walkway to Joseph, Keven, Kathy, and Sharon.

Our biggest event that happened in the garden this summer was our surprise celebration of Dr. Johnson's 30 years of service as county agent with Galveston County and the Master Gardener program Fig.7. Dr. Johnson is pictured opening some gifts as Sharon, Terry, John Johns, and others look on.

Come on out to the garden, you can have some fun, and even get your hands dirty. Until we meet again, happy gardening to you and may you have a breeze at your back!



Photos courtesy of MG Tom Fountain





By Sandra Gervais
MG 2011

Mid-summer here in Houston means dangerous heat; wearable humidity and indoor activities to help body and mind avoid boredom. In the “dog days of summer,” not even dogs want to spend much time outdoors. Thankfully most of the tomatoes in the garden are finished, so that’s a lot less time spent outside watering. Now it’s just looking after some of the hardier vegetables like peppers and eggplant. Rosemary and basil are always happy for water but thankfully are undemanding herbs.

Looking around, I thought of an idea a friend in Louisiana sent recently. Of course it involves good food.....that’s one of the main topics of conversation for people from Louisiana, no matter where they are. Since it’s too hot to cook but not to eat, he suggested a po-boy with caprese filling. Understand, a po-boy is more than a sandwich and has mythological standing in New Orleans, where everyone has strong opinions about their favorite bread, favorite filling, and toppings.

easy recipes Seasonal Bites



Though po-boys started in New Orleans, probably to feed poor working men near the port in the 1800s, there are many stories about how it got its name. One fact remains true until today—it must be made with true French bread, crusty outside, cloud-soft inside. Nothing else will do. So here is a simple, hot weather recipe that uses some of that happy basil in the garden. Maybe you’ll be lucky and even find some juicy ripe tomatoes looking for a home.

And for dessert, how about a simple, light “7-Up Sheet Cake” flavored with strawberries? Summer on a plate.



Pasta Pomodoro

New Orleans-style French bread, about 18-24 inches long, light inside, crispy outside. (Do not use supermarket stodgy bread.)
2-3 tablespoons balsamic vinaigrette (bottled or recipe below)
8 ounces fresh mozzarella (cut in 1/2 inch thick slices)
1 generous handful of fresh basil leaves, washed and dried
3 large, ripe tomatoes (cut in 1/2 inch slices)
Salt and pepper to taste
Hot sauce (optional)

Split bread lengthwise and brush both sides well with balsamic vinaigrette. Layer mozzarella on bottom evenly, using pieces to fill and level. Cover cheese with basil leaves, to suit your taste. Top with even layer of tomatoes, using pieces to fill and level. Salt and pepper generously. Place top piece of bread on tomatoes and press down lightly so that everything touches. Cut into thirds or smaller as desired. Wrap well in foil or plastic. Leave po-boy at room temperature for 15-30 minutes for flavors to meld. Serve and offer hot sauce.

Homemade Basil Vinaigrette

Mix or shake together:

- 1/2 cup olive oil
- 1/4 cup red wine vinegar
- 1 tablespoon dried basil
- 2 teaspoons sugar
- 2 large garlic cloves, finely chopped
- 1/2 teaspoon salt
- 1/2 teaspoon pepper

Red pepper flakes can be added to taste if desired.

Let vinaigrette sit for 1 hour or overnight to improve flavor.

Refrigerate leftover Balsamic Vinaigrette for use on salads or vegetables.



7 Up Sheet Cake

Combine well in large bowl. 325°

- 1 16-1/2oz white cake mix
- 1 cup all purpose flour
- 1 cup sugar
- 1/2 teaspoon salt

Add:

- 1 1/4 cup regular 7 Up soft drink
- 1 cup sour cream
- 3 egg whites
- 2 tablespoons vegetable oil
- Juice of 1/2 lemon
- Zest of 1/2 lemon
- 1 teaspoon vanilla

Beat on low speed for about three minutes until just combined. Batter will be lumpy; do not over beat. Pour into 9x13 baking pan coated with non-stick spray.

Bake 40-45 minutes, or until edges are light golden brown and toothpick inserted in center comes out clean. Cool before frosting.

Easy Strawberry Buttercream Frosting

- 1 cup soft butter
- 1 teaspoon vanilla

Meeting Minutes



By Briana Etie
MG 2017

June Master Gardener Monthly Meeting

In June, our association annually celebrates our graduating Interns as they receive their certification and recognize our Master Gardeners with Making a Difference awards. We also have an introduction of our current year's Intern class. We were very fortunate to have the celebration at Mikey and Allen Isabell's home and garden again.

Dr. Johnson opened our meeting, welcoming and introducing our 2019 Galveston County Intern class. Our 2018 Master Gardener Class received their certifications along with Making a Difference awards for their participation in the award-winning tomato trial of 2018. Dr. Johnson recognized Master Gardeners with volunteer hours in categories of 200 -400 hours, 500 – 999 and 1000 +.

Sharon Zaal reminded attendees of our Association's 1st Place Recognition.

We enjoyed visiting with our fellow Master Gardeners and getting to know our new Master Gardener Interns, while enjoying good food and spirits.



July Master Gardener Monthly Meeting

Our monthly association meeting for July occurred on the 9th at the Galveston County Extension Office. We gathered for socializing at 5:30pm. Around 6:00pm Sharon Zaal welcomed everyone we enjoyed our potluck dinner.

Our guest speaker Donita Brannon, Moody Garden Rainforest Horticulturist, shared highlights to her recent trip at the American Association of Zoological Horticulture Conference in Philadelphia where she attended the Philadelphia Flower Show, the largest indoor display. We enjoyed her slides and narrations, everyone's company and good food.



GULF COAST GARDENING EDUCATIONAL SEMINARS

Upcoming Events - August - September 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>

COMPOSTING

galvcountymgs@gmail.com to pre-register

Saturday, August 24, 2019

1:00 p.m. – 3:00 p.m.

Galveston County Master Gardener Jim Gilliam will teach you how to compost, what factors to measure and monitor, and how to use the finished product to your best advantage. This is THE MOST IMPORTANT ADDITION gardeners can provide to improve their garden soils. America recycles about 34% of its daily refuse. The rest goes into sanitary landfills. Approximately 75% of that destined for landfills could be recycled in some way, considering much is yard and kitchen waste. Composting is Nature's way of recycling available materials which can be added to garden soil to improve its physical, chemical, and biological properties. Location of presentation: Galveston County AgriLife Extension Office in Carbide Park, 4102-B Main Street (FM 518), La Marque 77568

BACKYARD CITRUS

galvcountymgs@gmail.com to pre-register

Saturday, August 31, 2019

10:30 a.m. – 12:30 p.m.

Galveston County Master Gardener Robert Marshall's presentation will feature the following topics: variety selection of citrus trees that grow well in this area, overall care including planting, care, maintenance of root stocks, nutrients, disease (citrus canker and citrus greening), problems with insects, control of birds and critters, and freeze protection. Marshall has years of experience in many facets of growing and propagating citrus trees in this area. Many of the citrus trees included in the presentation will be offered for sale as transplants at the Galveston County Master Gardener Fall Plant Sale on October 12, 2019. Location of presentation: Friendswood Public Library, 416 S. Friendswood Drive, Friendswood 77546.

TEXAS TUFF PLANTS FOR THE GULF COAST

galvcountymgs@gmail.com to pre-register

Saturday, August 31, 2019

1:30 p.m. – 3:30 p.m.

Galveston County Master Gardener Marie Leal's presentation will cover plants that grow well in our Gulf Coast area. Discussion topics will include how to choose healthy, hearty plants for your landscape, as well as techniques for planting and caring for them. Location of presentation: Friendswood Public Library, 416 S. Friendswood Drive, Friendswood, 77546.

SEPTEMBER 2019

A PASSION FOR PLUMERIA

galvcountymgs@gmail.com to pre-register

Saturday, September 7, 2019

1:00 p.m. – 3:00 p.m.

Galveston County Master Gardener Loretta Osteen will present this program providing information about the history of Plumeria (also known as Frangipani) and tips for growing them in our area. She will also include information about flower shapes, fragrances and colors, methods of propagation, winter storage, and care for Plumeria that grow in our area. Location of presentation: Galveston County AgriLife Extension Office in Carbide Park, 4102-B Main Street (FM 519), La Marque 77568

KITCHEN GARDENING

galvcountymgs@gmail.com to pre-register

Saturday, September 14, 2019

1:00 p.m. – 3:00 p.m.

Galveston County Master Gardener Mary Demeny will present vegetable gardening in the backyard with an emphasis on gardening on a smaller scale close to the back door, as well as making use of inter-planting vegetables in flower beds and pots. Attendees will benefit from her 60+ years of experience with vegetable gardening. Bring a notebook as she will provide a considerable amount of practical information from her years of experience. Location of presentation: Galveston County AgriLife Extension Office in Carbide Park, 4102-B Main Street (FM 519), La Marque 77568

T-BUD GRAFTING OF CITRUS AND FRUIT TREES

galvcountymgs@gmail.com to pre-register

Saturday, September 21, 2019

9:00 a.m. – 11:00 a.m.

Galveston County Master Gardener Nancy Langston-Noh will present a hands-on workshop on T-bud grafting. This method is used on smaller peach, plum, pear, apple and other trees, as well as roses. +++The hands-on workshop is limited to 20 participants, but others are welcome to observe. You must pre-register to participate.+++ Location of presentation: Galveston County AgriLife Extension Office in Carbide Park, 4102-B Main Street (FM 519), La Marque 77568

TURNING DIRT INTO SOIL – Creating an Ideal Soil

galvcountymgs@gmail.com to pre-register

Saturday, September 21, 2019

1:00 p.m. – 3:00 p.m.

Galveston County Master Gardener Jim Gilliam will explain the difference between dirt and soil, soil structure and characteristics, pH, nutrients, sources and strategies for soil amendment, soil testing, and cultural practices. He will emphasize how to improve your existing soil. Location of presentation: Galveston County AgriLife Extension Office in Carbide Park, 4102-B Main Street (FM 519), La Marque 77568

HERBS FOR THE GULF COAST

galvcountymgs@gmail.com

Saturday, September 28, 2019

to pre-register

9:00 a.m. – 11:00 a.m.

Galveston County Master Gardeners Nancy Langston-Noh and Briana Etie will present this program showcasing herbs that grow well in the Gulf Coast garden. They will also share growing tips, herb uses, and preservation techniques. The audience will be encouraged to share their experiences and participate in the discussion. Location of presentation: Galveston County AgriLife Extension Office in Carbide Park, 4102-B Main Street (FM 519), La Marque 77568

RAINWATER HARVESTING

galvcountymgs@gmail.com to pre-register

Saturday, September 28, 2019

10:30 a.m. – 12:30 p.m.

Don't let that water go down the drain! Learn to collect and store rainwater. Nat Gruesen, Galveston County Master Gardener and Certified Rainwater Harvesting Specialist, will present rainwater harvesting practices, ways to incorporate rainwater collection into your residential landscaping, and methods for making your rainwater barrel. Location of presentation: Friendswood Public Library, 416 S. Friendswood Drive, Friendswood 77546

SAVE THE DATE !!

Galveston County Master Gardener Fall Plant Sale

Saturday, October 12, 2019

8:00 a.m. – 8:50 a.m. – Information presentation about plants for sale

9:00 a.m. – 1:00 p.m. – Plant sale

Choose from thousands of plants adapted to the Texas Gulf Coast growing area. Fruit and citrus trees, bulbs, fall and winter vegetables, perennials, and garden crafts will be available. Volunteer certified Master Gardeners will be present to answer your questions. Customers are urged to bring their own wagons to cart around their chosen plants. No admission fee.

Location: Galveston County Fair Grounds in Jack Brooks Park –
Rodeo Arena (covered arena), Hwy 6 and Jack Brooks Road, Hitchcock TX.

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 Management System or other approved means. Contact MG Wayne Elliott at gcmghours@gmail.com for more information.



2019 Master Gardener Recertification Hours

2019 Master Gardener Recertification Hours

Date	Name of Program	Speaker	MG CEUs
1/8/2019	MGA Jan. Meeting - The Year Ahead for GCMG	Sharon Zaal, Kevin Lancon	1.00
1/12/2019	Growing Blueberries	Dr. David Cohen	1.25
1/12/2019	Backyard Citrus - Crystal Beach Fire & Rescue	Robert Marshall	1.75
1/19/2019	Kitchen Gardening	Mary Demeny	2.25
1/26/2019	Wedge Grafting	Sue Jeffco	1.75
1/26/2019	"Texas Tuff" Plants	Marie Leal	2.00
1/26/2019	Herbs for the Gulf Coast	Nancy Langston-Noh & Briana Etie	2.00
2/2/2019	Growing Great Tomatoes	Ira Gervais	2.25
2/2/2019	Spring Plant Sale Overview	Karolyn Gephart	1.25
2/2/2019	Growing Peaches in Galveston County	Herman Auer	2.00
2/2/2019	Successful Spring Vegetables	Jenni Hudgins	2.00
2/5/2019	MG Training Class - Class Orientation	Dr. William M. Johnson	4.00
2/7/2019	MG Training Class - Botany	Jayla Fry	3.00
2/9/2019	Growing & Using Herbs	Tricia Bradbury	2.50
2/9/2019	Planting Fruit Trees	Herman Auer	2.00
2/12/2019	MG Training Class - Vegetables	Tom LeRoy	4.00
2/12/2019	MGA Feb. Meeting - Spring Plant Sale Overview	Karolyn Gephart	0.75
2/19/2019	MG Training Class - Plant Pathology	Dr. David Appel	4.00
2/19/2019	Homeowner's Guide to Weed Control	John Jons	1.50
2/21/2019	Peach Pruning - hands-on demonstration	Robert Marshall	1.00
2/21/2019	Rose Pruning - hands-on demonstration	John Jons	1.25
2/26/2019	MG Training Class - Home Fruit & Citrus Production	Herman Auer	4.00
2/28/2019	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



bulletin board



Volunteer Opportunities

For the **Master Gardener Hotline** contact Ginger Benson by email at galvcountrymgs@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@tlc-tideway.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!

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 DrPGilbert@aol.com 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!

Entomology -

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

JMG® -

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

Greenhouse Management -

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

Advanced Training Committee Chair

Duane Robinson ~ poohdaddy55@sbcglobal.net
936-355-8215

VOLUNTEERS NEEDED

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 galvcountrymgs@gmail.com to find out the schedule and join her team.

Save the Dates!

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

Please see the

Texas Master Gardeners Website for details.

By visiting the website you can find up-to-date information on Specialist Programs that were added in between editions of the newsletter. txmg.org. 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 Amazon's website. - If you have any problems, search smile on Amazon's website



Invite Butterflies into Your 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

One of my favorite shrubs is known as blue plumbago, which produces a profusion of phlox-like blue flowers almost all year round when winters are mild. Blue plumbago thrives in our hot and humid Texas summers.

If you are a butterfly lover, you'll love blue plumbago to make your outdoors lively and colorful. Over the weekend, I was pleased to see several butterflies (including giant swallowtails) make stops in my landscape to sip nectar from the blue plumbago flowers.

You also can invite butterflies into your landscape if you provide the right conditions and the right plants. If you want butterflies in your yard, there are certain tasks to do and certain tasks not to do.

The process is simple. The rewards are stunning. Go ahead — imagine a garden full of beautiful flowers. Now, add the fluttering movement and brilliant color of butterflies and people will have one of nature's most enchanting combinations.

Not satisfied with the occasional, chance appearance of butterflies, many gardeners are creating butterfly gardens with plants specially chosen to invite these creatures to the landscape.

To plant a butterfly garden properly, you need to have a general understanding of the life cycle of butterflies. They pass through four distinct stages: egg, caterpillar (larvae), chrysalis (pupae) and butterfly (adult). While they may look extremely different at each stage, it is important to understand a caterpillar is not a different creature — it is simply a baby (or teenage) butterfly.

Although some of the butterfly caterpillars, such as Gulf fritillary larva, appear to be heavily armed with spines, none are able to sting. On the other hand, moths are closely related to butterflies and also have a caterpillar stage, but some moth caterpillars do sting.

Butterfly caterpillars feed voraciously on the leaves of plants. Each type of butterfly caterpillar will feed specifically only on certain plants, and the adult female butterfly will lay her eggs only on those plants that will properly nourish her offspring.

For example, Monarch butterfly caterpillars will feed only on milkweed plants (*Asclepias*). Gulf fritillary caterpillars prefer species of passion vines (*Passiflora*). The parsley worm, which grows up to be the Eastern black swallowtail, feeds on parsley, dill and fennel.

Sulfur butterflies lay their eggs on cassias, and the preferred food of long-tailed skipper larvae is bean leaves (as in lima, snap and other beans grown in the vegetable garden). The orange dog caterpillar, which feeds on citrus trees and disguises itself to look like bird droppings, grows up to be the spectacular giant swallowtail butterfly.

These plants, called larval food plants, are planted into a butterfly garden with the hope that butterflies will lay eggs on them, and caterpillars will consume them. This is one of the few situations I can think of where a gardener actually hopes caterpillars will eat a plant.

Needless to say, the use of insecticides should be limited in areas dedicated to butterfly gardens.

But remember that the caterpillars are picky about what plants they will feed on, so they generally will feed only on the larval food plants you provide for them. That means you do not need to be concerned they will attack and damage other types of plants in your landscape.

As for adult butterflies, they feed primarily on nectar from flowers. Many commonly grown garden flowers are attractive to butterflies, and the more kinds of flowers you include in your garden the better your chances of attracting butterflies.

Certain nectar plants seem to be especially irresistible to butterflies. Some of the best are butterfly weed (*Asclepias curassavica*), coneflower (*Echinacea purpurea*), wild ageratum (*Eupatorium coelestinum*), butterfly bush (*Buddleia* species), lantana (*Lantana camara*, *L. montevidensis*), pentas (*Pentas lanceolata*) and salvias (*Salvia* species).

Don't be disappointed at first if you don't see butterflies flocking to your yard in droves. Remember, a butterfly garden is an invitation, not a command performance.

The more plants you put in, and the longer you stick with it, the more likely you are to see butterflies. After a while, spotting a butterfly will be more common. And the first time you find caterpillars on your milkweed, parsley or passion vine, you'll find the excitement makes it all worthwhile. As insects, butterflies are cold-blooded and depend on the warmth of the sun for energy to maintain proper body temperature. Locate your butterfly garden in an area that receives the morning sun and warms up early. This is especially important in spring and fall when nights are cool. (This location also is important because most larval and nectar food plants prefer to grow in a site that gets six to eight hours of direct sun a day.)

Butterfly gardens strive to attract, welcome and nurture these fascinating and lovely insects that add so much to the pleasures of gardening. With their abundance of bright, colorful flowers, these gardens also can contribute to the beauty of the overall landscape.



Butterflies are beautiful adornments for the home landscape. You also can invite butterflies into your landscape if you provide the right conditions and the right plants. Photos courtesy of Dr. William M. Johnson

2019 GCMGA Monthly Meetings



By Judy Anderson
MG 2012

You're Invited - Monthly Backyard Meetings September Backyard Meeting

Mark your calendar for the September Master Gardener Meeting when we bid farewell to summer at the Galvestonian Condos with our host MG, Carol Jean Mulrain, on Galveston's East Beach. She has invited us to enjoy the evening on the patio. Bring your pot luck; leave the chairs at home there are plenty available.



We can hope for a beautiful East End Sunset, great Master Gardener cooking and a fabulous Gulf Coast evening. There is plenty of parking near the building.

Galveston County Master Gardeners 2019 Monthly Meetings

November 12, 2019

Annual Meeting
Extension Office
Pot Luck

December 10, 2019

Mikey and Allen Isbell
Holiday Party
Galveston



October MG Meeting

Don't miss the October Meeting when MG Karolyn Gephart will be presenting the plant sale preview. This will be a great opportunity to hear about the plants included in the Fall Plant Sale. Karolyn will give you all the information you need to decide which plants you want for your garden. If you are working on the sales team, it will give you plenty of plant details to help our customers make informed decisions. Refreshments will be provided. This program will provide Educational Hours for Master Gardeners. It will be an afternoon presentation with more information to come later.

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



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

