The Blooming Bell

June 2020

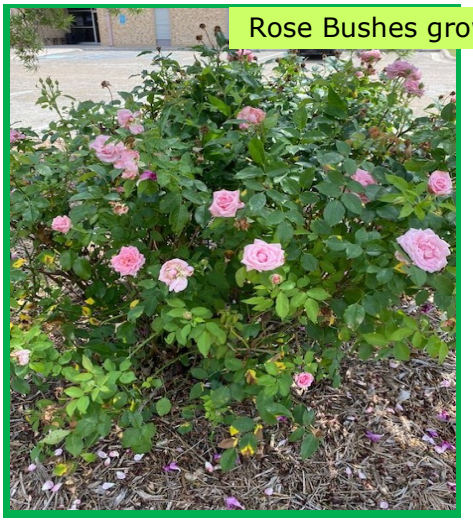
TEXAS MASTER GARDENER
TEXAS A&M AGRILIFE EXTENSION
Bell County

INSIDE THIS EDITION

Flower of the Month
Rose

Growing in front of Bell County AgriLife Extension

Rose Bushes growing in front of Bell County AgriLife Extension offices.



JUNE 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31 May	1 Hurricane Season Starts 	2	3 *Work Day-8 am	4	5	6 D-Day, WWII
7 National Gardening Week June 7-13	8	9	10 General Membership Online Meeting Herb & Spices Day	11 Corn on the Cob Day	12  Red Rose Day	13 Photo by Daisy Klassy
14 Flag Day 	15	16	17 *Work Day-8 am	18	19 Juneteenth	20 Summer Solstice—longest day of the year!
21 Happy Fathers Day!	22	23	24 *Work Day-8 am Board of Directors Meeting via Telecon 9 AM	25	26	27
28	29	30				

*In the event of rain, there will be no Work Day.

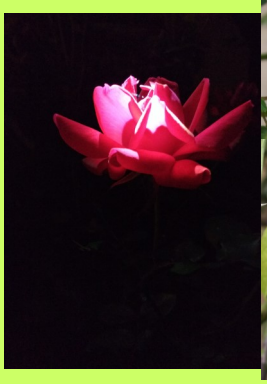
Mark your calendar and we will keep you updated as we learn more!

- Herbal Smoothie Party, August 5

For events planned this month, please see "What's Coming Up!", page 30.

To help prevent the spread of COVID-19, please continue to practice social distancing, wear a mask, and as much as possible STAY AT HOME! We will see you all soon.

Remember to record volunteer service hours and education hours each month.



Rose Photos by Daisy Klassy

President's Corner

Glenn Melton

I hope everyone is staying safe, healthy, and patient. Another month of this pandemic has come and gone, and it looks like some restrictions may have been relaxed. I have not been able to speak with Lyle concerning updates from the Commissioner's Court meeting on May 20th so I will try to get with him after the Memorial Day holiday. I will send out an email via VMS detailing everything he briefs me on as soon as possible.

Hopefully, everyone has been taking advantage of all the educational opportunities offered by Jayla and others of the TAMU staff. These webinars are highly informative and usually only take about an hour of your time to earn these much needed educational requirements. Several members have also shared online websites that offer educational hours, and I would like to thank them for their assistance. As everyone probably knows by now, we will hold our first online monthly General Membership meeting on June 10th. You will receive an invitation via email with a link to click on and join the meeting. Members may participate in this meeting by computer or phone. If you are participating using your computer, please ensure you "mute" yourself and do not speak unless asked. And, if you elect to call in do not speak unless called upon. This will be a highly informative meeting and will bring everyone up to date on current business and Bell County and AgriLife Coronavirus restrictions. These same procedures apply should members log on and monitor the monthly Board of Directors meetings. And again, those participating in the BOD monthly meetings may claim one service hour.

Last month I mentioned that obtaining service hours presents a bigger challenge than meeting the educational hour requirement. That is still true however, members participating in our online General Membership meetings are authorized to claim one hour of service. As we continue to refine these online meetings, we will include educational as well as service hours that members may claim to maintain certification. Please continue to check your email periodically to stay abreast of recent developments.

Now I would like to take this opportunity to thank Paul and his volunteers for cleaning up and resurfacing the Learning Center floor. This project enabled members to earn at least six service hours and made the floor much more presentable. Also, just recently, the Board of Directors approved the purchase of a new Irrigation Control Box that will be installed inside the Learning Center.

As we continue to conduct business online, I encourage everyone to participate. An informed membership is important in so many ways and it is my sincere desire that everyone has all the resources and knowledge necessary to remain an integral part of our organization. If anyone needs help logging in for the Board of Director's meeting or the General Membership meeting please contact me, and we will go over the procedures together.

Bottom line: we want everyone to stay connected! Thanks.

Glenn

Newsletter article from Wizzie Brown
Extension Program Specialist- IPM
Texas AgriLife Extension Service

Asian Giant Hornets

What headline can draw people away from their thoughts dwelling on the current state of the world and Coronavirus? That would be MURDER HORNETS! I cannot think of a more sensationalized headline, so kudos to whomever came up with that attention grabber. This headline is popping up everywhere from social media outlets, television, newspapers, and others. Quite frankly, it makes me cringe each time I see it. Asian giant hornets (AGH) are *Vespa mandarinia* NOT "murder" hornets. If you want to use a common name instead of the scientific name, then call them by the CORRECT common name of Asian giant hornet.

Asian giant hornets are large, around 2 inches in length, with an orangish head, brown antennae (the base of the antennae are yellow-orange), brown to black eyes and ocelli (simple eyes located between the compound eyes). The thorax is dark brown with greyish wings and the abdomen has alternating bands of brownish-black and yellow-orange.

Asian giant hornets are capable of inflicting a painful sting. Please note that while the sting can lead to death in some cases, it is not what typically happens. People are also capable of receiving painful stings from insects already here in Texas such as honey bees, paper wasps, yellowjackets, or even fire ants and some can die from being stung. Death by insect sting usually depends upon the number of stings and how your body chemistry reacts to the venom injected by the insect. Asian giant hornets are capable of killing other insects, including pollinators, but they are not doing this to be vicious or killing for sport. The hornets use insects they kill as food for their larvae....just like other wasps that we have here in Texas.

We do not currently have Asian giant hornets in Texas. If you think you have these wasps, then please send samples or images to me for identification as we are identifying any items of concern for our clientele.

Some insects that may be confused with AGH to the untrained eye:

Paper wasps (pictured here) are reddish brown in color & sometimes have yellow markings on their bodies and are ½-1 inches in length. Paper wasps make a paper-like nest out of chewed wood fiber that has open cells and hangs from a single stalk.

Yellowjackets are yellow & black in color and are ½ in length. Bald-faced hornets are a type of yellowjacket. These wasps also make a paper-like nest, but it is enclosed with a single opening.

Newsletter article from Wizzie Brown
Extension Program Specialist- IPM
Texas AgriLife Extension Service

Asian Giant Hornets

Cicada killer wasps have a reddish head and thorax with an abdomen that alternates with yellow and black markings. These wasps reach 1 ½ inches in length. Cicada killers burrow into the ground, so you may see holes left behind from their digging.

FACTS about Asian giant hornets in North America

1. A colony was found late last year (September 2019) in Nanaimo, British Columbia on Vancouver Island. The colony was located and destroyed.
2. A sighting and dead specimen was found in Washington state in December 2019 in Blaine, WA. This was the first reported sighting of the Asian giant hornet in the U.S.
3. It is currently unknown how the hornets entered the U.S. and genetic testing leads to the conclusion that the hornets found in BC & WA are two separate introductions.
4. Agencies are currently monitoring & trapping with lures to discover any queens or workers. They are talking about attaching radio tracking devices to captured wasps to track them back to their nest.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600. Check out my blog at www.urban-ipm.blogspot.com

This work is supported by Crops Protection and Pest Management Competitive Grants Program [grant no. 2017-70006-27188 /project accession no. 1013905] from the USDA National Institute of Food and Agriculture.

Wayne's Page

The Rest of the Story…..

By Wayne Schirner

Forgive me for using the byline from radio commentator Paul Harvey, but it seemed particularly appropriate for this month's article.

Have you ever seen a post or article about something and thought "based on what I was taught, that makes sense to me?" Then when you try it, it fails so you figure you did something wrong. I recently saw several articles about "how to grow 100 pounds of potatoes in a tower." We were taught that after planting potatoes you should mound soil up around them after the green growth got above 4-6" tall, and then again after another 4-6" of growth. I'm not sure we were taught that this could be done indefinitely, but that certainly was the implication from the articles even though this one only made a 33" tall tower.

http://craftthyme.com/build-potato-boxes/

When I investigated this link, I found testimonials all over the place. Some gardeners reported only getting a few small potatoes at the bottom of their tower while others gushed about all of the potatoes they got from their tower. Why the difference? That's the rest of the story.

I came across several articles that discussed potatoes in terms of determinate and indeterminate varieties. Since potatoes are in the same family as tomatoes, I could see where that might make sense. I searched for .edu sites that used this terminology, and only found one reference from a PowerPoint presentation for potato growers in North Dakota from NDSU. Since North Dakota is the 6th leading commercial producer of potatoes in America, I figured they might know what they were talking about. There was one slide that used this terminology. That slide said that determinate plants stop producing new growth after tuber initiation, but indeterminate plants continue producing new growth indefinitely. Now we're getting somewhere. I could see where if you planted a determinate variety in a potato tower, tubers would only grow at a single level and if you kept mounding soil up around the green growth, all you really would be doing is reducing the amount of leaves available for photosynthesis and the carbohydrate production that is necessary to store in the tubers. However, planting an indeterminate variety might get you many more potatoes.

So, which varieties of potatoes are determinate, and which are indeterminate? It turns out that the terminology we have always used is better. Potatoes are traditionally grouped into early, mid, and late season varieties. The early season varieties are the ones with maturity dates less than 70 days and the late season varieties are those with a maturity dates greater than 90 days. The varieties with maturity dates less than 70 days are the determinate varieties and the varieties with the maturity dates greater than 90 days are the indeterminate varieties. The mid-season potatoes with maturity dates between 70 and 90 days can fall into either category. Using the term determinate might be appropriate since the potato plant will grow to a certain height. Then, as tubers start to form, it doesn't grow any taller. Just like determinate tomatoes. You only need to mound enough soil around these varieties to keep developing tubers from exposure to sunlight.

Wayne's Page

The Rest of the Story…..

By Wayne Schirner

On the other hand, while indeterminate potato plants might grow indefinitely, they won't keep producing potatoes all along the stem like indeterminate tomatoes do. They will generally send out stolons for tuber formation at 3 levels +/- one. That means you might have 2-4 levels of tuber production. If you mound up soil around the growing plant, it doesn't make sense to do this after an average of 3 iterations of every 4-6", so you still don't need a tower more than 12 -18" in height. Again, after 3 iterations, and even though the plant might keep growing, continued mounding of soil will only reduce the amount of leaves for photosynthesis.

Here are two out of several articles that caught my eye:

https://laidbackgardener.blog/2020/04/05/determinate-and-indeterminate-potatoes/?fbclid=IwAR2PzR_l5djDpHBQgLchDedYMVoRI3jormNt38BQNit0cOZS8ZIshREv8so

and

https://www.gardeningdream.com/the-ultimate-list-of-determinate-and-indeterminate-potatoes/

Here's one last link that discusses the myth of potato towers:

https://www.gardenmyths.com/potato-towers-high-yields/

Now you might ask, why is Wayne talking about potatoes in June. I thought we planted those in February. That's correct, but we can also plant in August for a fall crop. Now to find some seed potatoes this time of year. Hope you learned something from this. I certainly did.

BCMGA Help Desk
Handling Challenging/Involved AAMG Questions

Article by Kathy Love

All kinds of calls and emails come into our Help Desk. Many are routine but some are challenging and require time and somewhat careful handling.

A recent call was from a citizen asking if it could be determined whether her tree was poisoned. After a lengthy initial call and through a dozen subsequent calls, texts, photos, etc. the call, initially received April 29th, was concluded May 6th.

The caller related that she had a dispute with a neighbor over removal of his tree in September of 2018 and it did not end well. We should ALWAYS be careful to avoid unnecessary involvement in a situation like this while still attempting to be helpful and informative, since it is, after all, a legitimate horticultural question.

I started on-line seeking research-based information about tree poisoning. The first article I found was a similar question sent to the Cooperative Extension's Ask an Expert (AAE) website. In that case, a citizen's cedar trees had died and he suspected poisoning by a neighbor who had previously asked him to top them because they blocked a Mountain view.

This was helpful on the question of starting an investigation but did not address the question of how to test for poisoning, so next I searched for how to test for poisoning or herbicide damage and found another AAE article on that topic asking about possible poisoning of a maple tree and an Oregon State Extension article that both seemed to answer the testing question.

AAE's first recommendation was to confirm the exact species of the trees in order to investigate any potential natural reasons the trees could have died such as disease, insects, soil drainage, soil compaction, etc. The testing articles seemed to be uniform, both advised testing is possible to determine if a tree has been poisoned but live tissue is needed as well as a list of suspected poisons. The AAE article said the process could be expensive and the Oregon State article said some commercial labs might do it at no cost but perhaps that is unique to Oregon.

In our next call I gave this information and asked follow-up questions from these articles. Unfortunately, our caller was not sure what species her tree was but she later texted she had an arborist look at the tree and he thought it was a lace bark elm so we went with that. Next I asked if she had any idea what might have been the suspected poison and she explained that when her neighbor had his live tree cut down over concern of large limbs over his house, she thought he might have applied poison to the ground stump that maybe got to her tree by root entanglement or seepage through the soil. However, she no longer speaks with him, so had no idea if he did so or what he might have used.

I asked what the arborist thought had killed the tree and he blamed root girdling though he did nothing to prove it such as digging down to find a girdling root. She did not like that finding or his price for removal so she had a tree trimming "guy" give her a bid and he told her it looked like trees he had seen poisoned in West Texas so apparently that is how we arrived at the poisoning suspicion along with neighbor issues. (This is about as short a summary as I can put together on this one!)

At this point, I did not believe any information I found would be sufficient to satisfy our caller so my advice, if you find yourself in a call like this, is to pass it off to our pros. In this case our Texas Forestry Service Woodland Ecologist Karl Flocke and Brad Hamel, our Urban Forester.

BCMGA Help Desk
Handling Challenging/Involved AAMG Questions

Article by Kathy Love

The responses I received from Karl and Brad were in line with the two AAE posts, e.g. probably hard to determine if poisoned without live tissue and identification of the suspected herbicide and neither knew of any lab that would do this testing. They had a few follow-up questions which I conveyed and got answered but the answers did not change their opinions.

I advised our caller that we cannot perform home/site visits at this time or I might have tried to check out the root girdling problem offered by the arborist. However, I was advised by Karl that Forestry Service personnel are making site/home visits with no face-to-face contact. I shared that information but had to add Karl's caveat that such visits are being scheduled weeks out which concerned him, Brad and I as the tree is large, quite dead looking (lots of bark sluffing off) and very near the house so potential personal injury and/or property damage concerns were also shared with our caller.

Our citizen accepted that the poison testing seemed out of reach at this point and was very appreciative of the time spent by all involved. She asked for replacement tree recommendations which of course I provided. If you need to make tree recommendations, keep in mind using the Texas Forestry Service website http://texastreeid.tamu.edu/content/listOfTreesindex.aspx.

I do have a final text out asking if the tree has been removed but as of this writing, I have not heard back.

BCMGA Help Desk
"Do's" when Researching a Horticulture Question

Article by Teri Marceau

Kathy put in a lot of time and research helping the citizen with the dead tree, wouldn't you say? That particular call is not a common question received through the help desk. Many questions are in regard to plant identification, weeds, and seasonal issues common to most home gardeners.

Spring means getting outside and tending to your lawn. This annual ritual comes with many questions and concerns. How we handle these questions in the office is the same way you should handle them when a neighbor asks you about his or her horticulture concerns. First, we do a GOOGLE or BING search. We sometimes pass questions off to fellow Master Gardeners who have been certified in specific areas, such as turf grass or vegetable gardening, or like in Kathy's article these concerns get sent to the experts.

We are looking for articles written by extension offices or university-based research. I want to impress upon you that we always end our search description with either the word "extension" or "edu". This helps get us to the types of information we want to pass on to our citizens.

For example, we had a question regarding Bermuda grass and pH levels in soil. We may have typed into the search engine "growing Bermuda grass in central Texas extension" which will give you results from places like Texas A&M (which is our go to). But we don't just rely on one source, even if it is from TAMU. We always want to confirm, or as President Ronald Reagan used to say, "trust but verify".

In the case of the Bermuda grass and soil pH, we emailed three different articles, one from TAMU, Extension through Utah State and Iowa State University Extension and Outreach. Kathy wrote this citizen a nice email explaining what she was sending and how she thought it best served the questions at hand.

Another incredibly common question is, "what is wrong with my tree?". For every lawn question we get 2-3 regarding trees. We love our trees here in Texas and for good reason, the Texas live oak are magnificent. Nonetheless, there are plenty of other trees with their own set of issues. Unfortunately, correctly determining a tree problem often requires a site visit, which as you know we are not doing at this time, so we do our best through photographs and verbal descriptions. So, what do we do if we are not able to identify the problem? We refer our citizens to a certified arborist who will come and diagnose their tree properly. Certified arborists are listed in the International Society of Arboriculture Texas Chapter, https://isatexas.com/. There is also the Texas Forestry Service website for more help with trees.

Finally, "can you identify this plant?" is the most common question we get, especially on Facebook. What do you do when someone asks you to identify a plant? I have neighbors ask me all the time. My go to is to simply take a photo with my phone and use Google Lens to help me. Google Lens always takes you to Wikipedia, which I do not trust, so I verify by following the research steps above. Once I have confirmed the identification, I am confident that I can pass on the information. Identifying plants is a great way to learn about your immediate horticulture surroundings.

In the next edition of The Blooming Bell, Kathy and I will discuss how to input your research and contacts correctly into VMS. In the meantime, don't be shy in using the internet to help find resolutions to your horticulture concerns.

What's Been Happening...

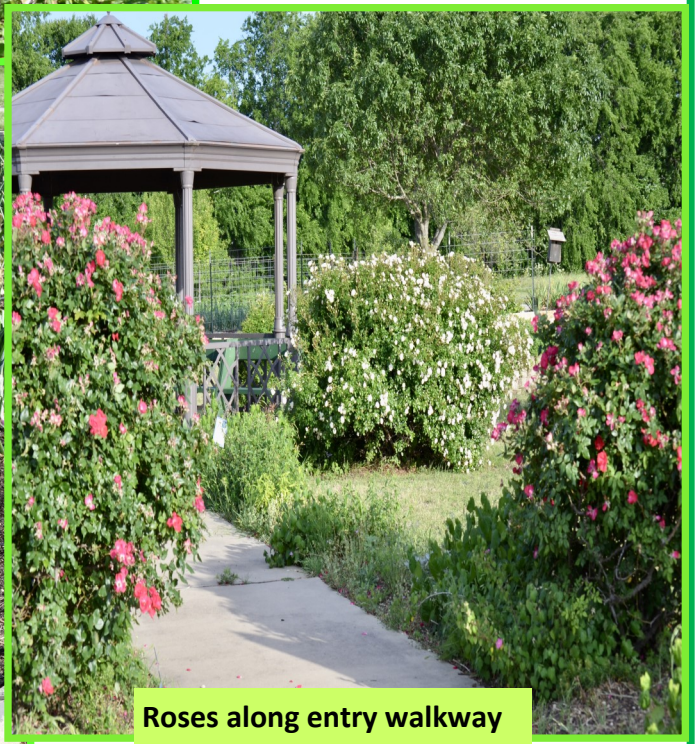
Work Day at Killeen Municipal Court Community Garden
May 2, 2020

Photos by Randy Brown 1 of 3

Below, BCMG President, Glenn Melton, checking on compliance with Social Distancing.

Celebrity Tomatoes

Paul Carter checking red onions



Roses along entry walkway

What's Been Happening...

Work Day at Killeen Municipal Court Community Garden
May 2, 2020

Photos by Randy Brown 2 of 3


Larry Moehnke cleaning & dressing peppers


Blackberries


Potatoes


Cactus Blooming


Sandra Blankenship


Greg's Blue Mist

What's Been Happening...

Work Day at Killeen Municipal Court Community Garden
May 2, 2020

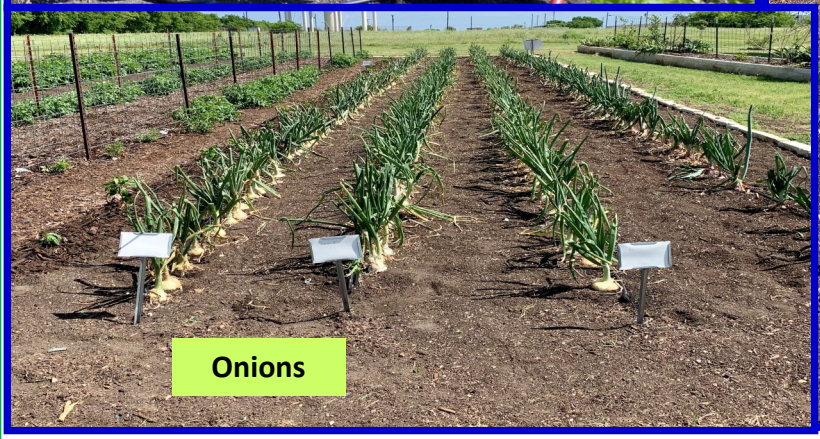
Photos by Randy Brown

Mural on Association's storage shed

Bob Gordon & Edie Campbell cleaning squash rows

Melinda Arriola's demo bed of Three Sisters corn.

Zucchini squash rows in ground
3 weeks from seed



Onions

What's Been Happening...

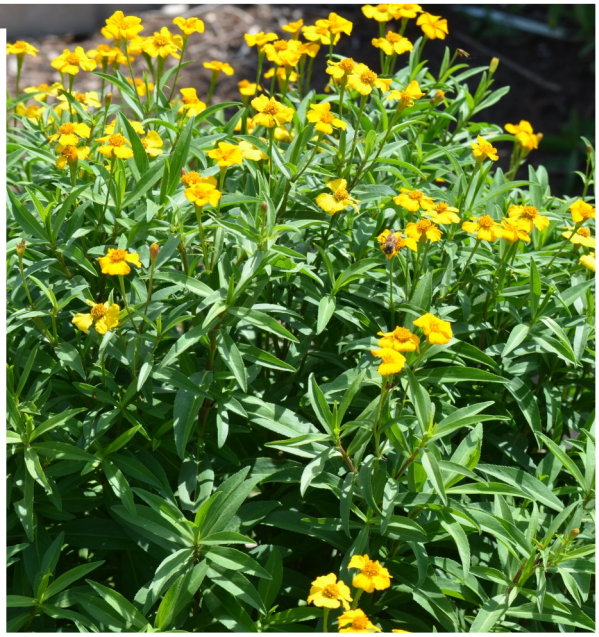
A Walk Around Killeen Municipal Court Community Garden
May 13, 2020

Photos by Randy Brown 1 of 2

What's Been Happening...

A Walk Around Killeen Municipal Court Community Garden
May 13, 2020

Photos by Randy Brown 2 of 2



What's Been Happening...

Killeen Municipal Court Community Garden
Thursday, May 21, 2020

332 pounds of produce were delivered to the Domestic Violence and Homeless Shelters in Killeen. Two wheelbarrows of onions and yellow squash did not make it into the photos. They were already bagged and loaded. *Edie Campbell*

Photos and text by Edie Campbell

What's Been Happening...

Killeen Municipal Court Community Garden
Late Breaking Harvest May 26, 2020

Photo and report submitted by Randy Brown.

45 lbs squash

What's Been Happening...

Montessori School of Temple

Article and photos by Marjorie Gillmeister

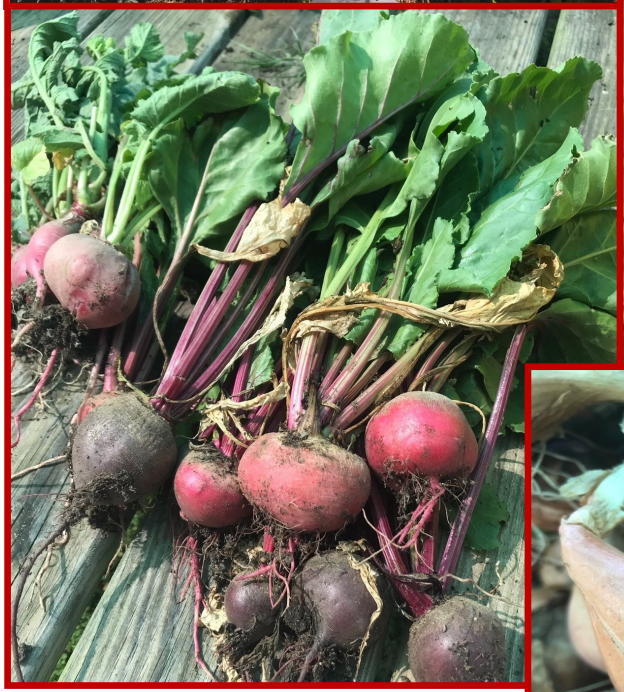
Marjorie Gillmeister offered guidance to the students through virtual lessons using FaceTime. Planting summer plants tomatoes, okra and herbs. Another lesson on how to propagate mint from a stem cutting. Mint harvest from PTK Temple College Community Garden was shared with the 12 students, ages 6-9 years old. Students learned parts of a stem, propagated their own mint stem in a plastic water bottle, and created art using chlorophyll from mint leaves to color onto a mint leaf image. After coloring the art, the students could smell the mint on the paper as if it were a scratch and sniff sticker.

What's Been Happening...

Temple College Phi Theta Kappa Community Garden

Article and photos by Marjorie Gillmeister

As we approach our one year anniversary in June, the garden continues to thrive in many ways; a beautiful green space for students to garden and learn each day, and a continued harvest for those working the garden at this time while the school pantry is closed. For the month of May, students harvested 19 lbs., 0.76 oz of lettuces, spinach, radishes, beets and herbs. Marjorie Gillmeister has given virtual guidance and lessons to students through FaceTime. Students planted summer crops such as tomatoes and peppers they started from seed in eggshells back in January. Shallot bulbs the students planted back in December reaped a bountiful harvest of 8 lbs. Students learned how to harvest, store and cure the onions.



What's Been Happening...

Temple College Phi Theta Kappa Community Garden

Article and photos by Marjorie Gillmeister

Flowers the students direct seeded (including poppies, alyssum, and snap dragons) in December are blooming and happily bringing harmony to the garden. Fennel bulbs have flowered and are a host plant for the swallowtail caterpillar. What a beautiful site to see!

The Locklin Home Garden Est. 1959

Article and photo by Teri Marceau

Spring has been in its full glory this year. Flowers blooming everywhere you turn. Some are annuals, some are perennials, and some are a legacy. I stumbled upon a little house in downtown Belton where the blooms captured my eye and my heart. My first encounter was on a warm sunny spring day on my way to church. I think I drove around the block several times just in amazement of the beauty the yard beheld; with each pass-by I became giddier with excitement at the depth of the flowers. The gardener in me had to talk to the owner of the property. So, I timidly walked up to the door and in spite of the "No Solicitor" sign I knocked on the windowpane. No answer. You can imagine my disappointment. I could not stop thinking about how I needed to talk to the owner. I wanted to know what their inspiration was. Finally, I decided to write a letter as the Communication Director of BCMGA. I hoped that would work. Well … to my delight, IT DID!

I received a call from a friend of the Master Gardeners and co-owner, Ann Locklin. Ann serves our community as part of the CHIPS along with Master Gardener Don Wyatt. Ann and her brother James moved into 724 Surghnor St. in 1959 with their parents and siblings. Today, Ann and James are the last of the siblings to own the home. It is James who maintains the house and the grounds. James spent many years working in nurseries. I found him to be a wealth of information. I had the pleasure to meet with James last month. He shared with me some history of the property after I had a lovely conversation over the phone with his sister Ann.

According to James, prior to the Locklin's purchase of the property, there was a Pentecostal church located on the land. James was not sure when the church was built or when it was torn down as the house was built in 1917, however, he continues to find artifacts from the church building as he works the ground. Mr. and Mrs. Locklin were avid gardeners and began gardening as soon as they moved in. Mr. Locklin raised fighting chickens back in the day when it was legal. James said his father had chicken pens set up all over their backyard, planting the family vegetable garden amongst the chicken coops. Mrs. Locklin loved flowers of all kinds but her all-time favorites were larkspur. According to the siblings, it was about 50 years ago that their mother planted her first larkspur seed pack. She let them go to seed and the next year she had another patch of larkspur. She did that for years. Approximately 30 years ago Ann bought her mother some red corn poppies. Ann loved the vibrant red color with the black centers, and her mother quickly fell in love with them also.

The Locklin Home Garden Est. 1959

Article and photos by Teri Marceau

Corn poppies

Larkspur & corn poppies

Larkspur & Poppies in full bloom

Mrs. Locklin did the same with the poppies as she did with the larkspur, letting them go to seed and germinate wherever the wind blew them. As the years passed, the flowers started to propagate all over the yard, taking over the turf grass. Currently James follows in his mother's footsteps with his love for everything gardening. He continues to let the flowers go to seed and grow where they may. Many of their neighbors come to the small flower fields every spring to have family photos taken. Mrs. Locklin always had two rules; one, do not walk on the flowers and two, do not pick the flowers. Therefore, to accommodate the neighbor's love of the flowers, James cuts pathways creating walkways and perfect scenery for photographs.

Larkspur and poppies aren't the only plants you can find in the Locklin home gardens. Mrs. Locklin always longed for a lilac bush in her yard, but as you know central Texas is not the perfect climate for lilacs. That did not stop her from planting one in the middle of her back yard. The tall lilac bush will bloom only for a very short time between the last cold snap and the first hot days of our Texas springs.

Lilac Bush

She loved roses as well. Ann purchased a Matabulus rose, which has three different colored blooms, and planted it next to the lilac bush. You can find this tricolored variety in many of the parks around Fredericksburg, TX. It had not bloomed at the time of my visit, but I can imagine the beauty it displays when it does bloom. In front of the house you are welcomed by an oleander bush as tall as the roof with the most amazing pink flowers. Far in the back along the fence line you can find purple lilies and a garlic patch that, according to James, is as old as the larkspur. James transplants garlic from the patch to the vegetable garden yearly.

Purple Lilies

Garlic patch

The Locklin Home Garden Est. 1959

Article and photos by Teri Marceau

Speaking of the vegetable garden, the soil may confuse us MGs because it looks and smells like the black lands found in the eastern part of our county. But don't be fooled, you are still west of I-35 here on Sughnor Street. James says the soil is deep and rich from all the years his father raised the fighting chickens. He has a nice little veggie patch where he grows different varieties of tomatoes, peppers, beans, and peas along with the heirloom garlic. He doesn't use fertilizers or pesticides. James can often be found out back in the shop, propagating plants to give away or to plant somewhere new in the yard. When I was there, he had recently propagated some Texas hardy hibiscus.

Vegetable Garden

Beans

If you would like to know more about the Locklin home garden, swing by on a spring morning or afternoon. James would love to talk everything gardening and give you a tour. You may even walk away with some of those well-loved larkspur and poppy seeds Mrs. Locklin loved so much. I am honored to have met both James and Ann. They are our kindred gardening family. I can hardly wait for next spring to watch the garden unfold its beauty.

flowers next to house

Larkspur

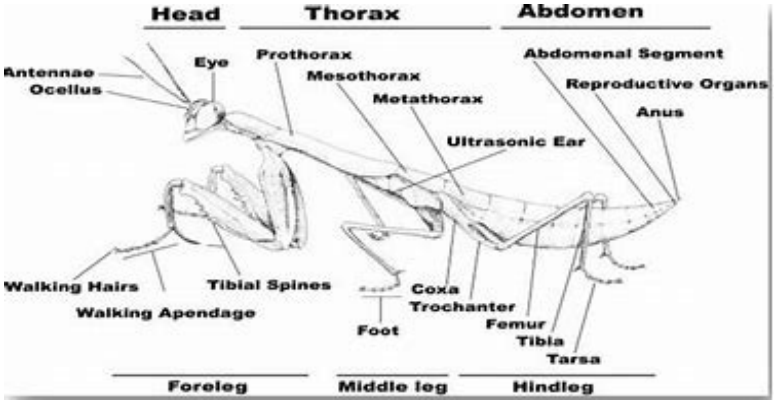
Praying Mantis

By Sylvia Maedgen

Photo of Baby Nymph by Sylvia Maedgen

Mantises are an order of insects that contains over 2,400 species in about 430 genera in 15 families. The largest family is the Mantidae. Mantises are distributed worldwide in temperate and tropical habitats. They have triangular heads with bulging eyes supported on flexible necks. Their elongated bodies may or may not have wings, but all Mantodea have forelegs that are greatly enlarged and adapted for catching and gripping prey; their upright posture, while remaining stationary with forearms folded, has led to the common name **praying mantis**. The word *mantis* comes from the Greek *mantikos*, for soothsayer or prophet.

They are somewhat cute to look at, but this is no angelic insect as it "stalks its prey", but is considered a friend to humans and a beneficial insect. However, mantids don't discriminate between good bugs and bad bugs when looking for meals. What is interesting is that it can rotate its head almost 180 degrees to each side (more than most insects) giving it a distinct advantage in locating prey. This insect is often confused with stick insects. The mantis can be green, yellowish or brown in color, with the wings of males being brownish with paler mottling and purplish at the base. Female wings are shorter than the abdomen, brown, purple and yellowish orange in color and forelegs have banded tibiae. They may reach 2-3 inches in length. Mantids, termites, and cockroaches – are believed to descend from a common ancestor. In fact, some entomologists group these insects in a superorder (Dictyoptera), due to their close evolutionary relationships.



Higher classification: Dictyoptera

Scientific name: Mantodea

Genus/Species: Stagmomantus sp. (the Carolina mantis, Stagmomantus Carolina, is common in Texas)

Biological rank: Order · Family

Anatomy

Mantises have large, triangular heads with a beak-like snout and mandibles. They have two bulbous compound eyes, three small simple eyes, and a pair of antennae. The articulation of the neck is also remarkably flexible. The mantis thorax consists of a prothorax, a mesothorax, and a metathorax. In all species apart from the genus *Mantoida*, the prothorax, which bears the head and forelegs, is much longer than the other two thoracic segments. The prothorax is also flexibly articulated, allowing for a wide range of movements of the head and fore limbs while the remainder of the body remains more or less immobile.

Praying Mantis

By Sylvia Maedgen

The Mantises catch their prey with their raptorial forelegs that are spiked. In most insect legs, including the posterior four legs of a mantis, the coxa and trochanter combine as an inconspicuous base of the leg. Some mantis have two sets of wings and some have no wings. In the outer wings, or tegmina, they are usually narrow and leathery and help camouflage and shield the hind wings.

Vision

Mantises have stereo vision. A small area at the front of their eye called the fovea has greater visual acuity than the rest of the eye, and can produce the high resolution necessary to examine potential prey. Their peripheral vision perceives motion, and then it rapidly moves the head to focus on the object. The mantises are primarily diurnal, active during the day. However, some species fly at night and then are attracted to artificial lights. Some mantises that fly at night are predominately males looking for less-mobile females by detecting their pheromones. Some mantises also have an auditory thoracic organ that helps them avoid bats by detecting their echolocation calls. Not all mantises have an ear, and those that don't are typically flightless, so they don't have to flee flying predators like bats.

Diet and Predation

Mantises are generalist predators of arthropods and the majority are ambush predators that only feed upon live prey within their reach either waiting for prey to approach, or stalking their prey with slow, stealthy movements. Larger mantises sometimes eat smaller individuals of their own species as well as small vertebrates such as lizards, frogs, small birds and fishes, as well as mites, aphids, moths, bees, beetles and horseflies. The fore gut of some species extends the whole length of the insect and can be used to store prey for later digestion.

Antipredator adaptations

Mantises are preyed on by vertebrates and invertebrates. Some hunting wasps paralyze some species of mantis to feed their young. Generally, mantises protect themselves by camouflage, most species being cryptically colored to resemble foliage or other backgrounds. Some mantises resemble flowers convincingly enough to attract prey that come to collect pollen and nectar.

Praying Mantis

By Sylvia Maedgen

When threatened, many mantis species will stand tall and spread their forelegs with their wings fanning out wide, making them appear to be larger and more threatening, and some species enhancing this effect with bright colors and patterns on their hind wings and inner surfaces of their front legs. If they feel endangered, they may strike with their forelegs and attempt to pinch or bite. Some species may produce a hissing sound by expelling air from the abdominal spiracles.

Mantises show rocking behavior making rhythmic repetitive side-to-side movements to suggest vegetation moving in the wind.

Reproduction and life history

The mating season in temperate climates typically takes place in autumn, while in tropical areas, mating can occur at any time of the year. To mate following courtship, the male usually leaps onto the female's back, clasping her thorax and wing bases with his forelegs. He then arches his abdomen to deposit and store sperm in a special chamber near the tip of the female's abdomen. The female lays between 10 and 400 eggs, depending on the species. Eggs are typically deposited in a froth mass-produced by glands in the abdomen. This froth hardens, creating a protective capsule, which together with the egg mass is called an ootheca. Depending on the species, the ootheca can be attached to a flat surface, wrapped around a plant, or even deposited in the ground. The offspring will develop over the winter. Despite the versatility and durability of the eggs, they are often preyed on, especially by several species of parasitoid wasps.

Mantises go through three life stages: egg, nymph, and adult. For smaller species, the eggs may hatch in 3–4 weeks as opposed to 4–6 weeks for larger species. The nymphs may be colored differently from the adult, and the early stages are often mimics of ants. A mantis nymph grows bigger as it molts its exoskeleton. Molting can happen five to 10 times before the adult stage is reached, depending on the species. After the final molt, most species have wings, though some species remain wingless or brachypterous ("short-winged"), particularly in the female sex. The lifespan of a mantis depends on the species; smaller ones may live 4–8 weeks, while larger species may live 4–6 months.

Sexual cannibalism

Sexual cannibalism is common among most predatory species of mantises in captivity. It has sometimes been observed in natural populations, where about a quarter of male-female encounters result in the male being eaten by the female. Around 90% of the predatory species of mantises exhibit sexual cannibalism. The female may begin feeding by biting off the male's head (as they do with regular prey), and if mating has begun, the male's movements may become even more vigorous in its delivery of sperm. The act of dismounting after copulation is dangerous for males, for at this time, females most frequently cannibalize their mates. An increase in mounting duration appears to indicate that males wait for an opportune time to dismount a hungry female, who would be likely to cannibalize her mate.

References:

- Wikipedia
- Simon & Schuster's Guide to Insects, Dr. Ross H. Arnett, Jr., and Dr. Richard L. Jacques, Jr.
- Brown, William D. and Katherine L. Barry. "Sexual Cannibalism Increases Male Material Investment in Offspring: Quantifying Terminal Reproductive Effort in a Praying Mantis." *Proceedings of the Royal Society B: Biological Sciences*, vol. 283, no. 1833, 2016, doi:10.1098/rspb.2016.0656
- Texas A&M University - https://texasinsects.tamu.edu/praying-mantis/ - Literature: Helfer 1972; Henn and Weinzeri 1990; Metcalf et al. 1962; Westcott 1973

Sharing is Caring... ☺ ☺

Garden Visitor

Text & photos submitted by Crystal Fisher

5/22/2020: "This was the 2nd day that I saw a Roadrunner in my yard. Just checking it out. Walking around all over the new beds. Fortunately, the dogs were inside."

Crystal

5/23/2020: Back again!

Sharing is Caring…🙂🙂

Cactus Flowers

Photos and text by Sylvia Maedgen

"Tommy and I traveled to the deer lease in South Texas in April during turkey hunting season. The cactus were starting to bloom."

An Idea for Camouflaging Utility Boxes

Photo forwarded to and submitted by Glenn Melton.

Sharing is Caring...🙂🙂

My Miracle Cure for Poison Ivy

Article by Crystal Fisher

I stumbled upon "My Miracle Cure for Poison Ivy" by accident after getting into it in the yard. The Pharmacist at HEB told me to use soap to clean the area to remove the Urushiol. She didn't tell me to use a washcloth, I just did. Afterwards, upon getting out of the shower, I figured 'What the heck' and did NOT put anything else on it. Since I was right outside in the yard, coming back inside to apply the meds would have been easy. Cortisone ointment and Calamine Lotion… our old fashioned remedies.

It was miserably hot that day and I perspired heavily. Yet, when I came in for the day and was preparing for bed, I had to pause 'cause NOT once through the day was there any itching. And, there hasn't been any itching since that time. I'm stunned and surprised because I'm HIGHLY allergic to Poison Ivy. Dawn… who would have ever guessed. I used 3x strength 'cause it was handy.

I just knew if I looked hard enough that I'd find something… somewhere... discussing the same thing that I learned. Watch the video below.

How to never have a serious poison ivy rash again - YouTube

Master Gardener Don Latham and Wife Carolyn of D&C Farms

Text & photos submitted by Juan Anaya

"Staying safe and still taking care of business. They have too many loyal customers who are more than happy to drive out to their house."

What's Coming Up!

"Watering Pots"

Baylor Scott & White McLane Children's Hospital Healing Garden

1901 HK Dodgen Loop, Temple TX 76504

Project Coordinators: Linda Farmer (254) 913-0043 linda_frmr@yahoo.com

Nestor Centeno (254) 771-1330 ncenteno0416@gmail.com

Volunteers are needed to water BCMGA planted pots at the Children's Hospital Healing Garden. This is not needed daily, however the calendar indicates every day in order to allow as much flexibility to members as possible. Before watering, please check the pots to be sure water is needed to avoid over watering.

The hours for this event are set at 8:00 a.m. - 5:00 p.m. but summer hours can start as early as 7:00 a.m. or daylight. You will need to present your photo ID at the lobby desk to gain access to the garden.

If you are a new volunteer, contact Linda Farmer or Nestor Centeno and they will arrange for an experienced volunteer to meet you and show you around. You can also spend time deadheading garden plants as well as the potted plants and doing any clean-up you identify as needed.

If you note a serious concern, e.g. dead, dying or damaged plants, pots, etc., please notify Linda or Nestor ASAP.

Maintain Social Distancing! Check with project coordinator for pre-approval.

Grounds Workdays

AgriLife Extension Center

Project Coordinators: Karen Colwick (254) 913-4459
Paul Carter (254) 247-4855

Wednesday 6/3, 6/17, and 6/24 are workdays. Volunteers must maintain a minimum distance of 6 feet from each other during this time of social distancing. Please contact either Karen or Paul if you have any questions. Please contact Karen or Paul to volunteer. Please do not show up to work without letting them know in advance.

Thank you for helping to maintain the grounds!

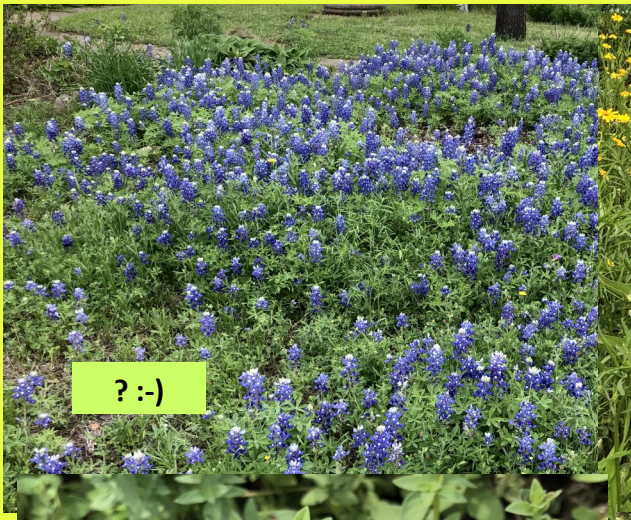
Seed Savers

Please continue to collect and clean seeds and be prepared to bring them in to the office once restrictions are relaxed.

What's Growin'?

Wildflowers!

Photos of wildflowers taken by Terrie Hahn in her yard.



What's Growin'?

In Gail's Garden

Photos and text by Gail Pierce

As gardeners we are always experimenting. As all of us have, I have been plagued with squash vine bore. I heard of and am experimenting with putting Vicks VapoRub or vaseline on the stems. We'll see if it works or not. *Gail*

Onion anyone?
All onions now harvested.

Zinnias with tomatoes

Cucumber blossoms

Lemon Squash

What's Growin'?

In Dave Slaughter's Garden

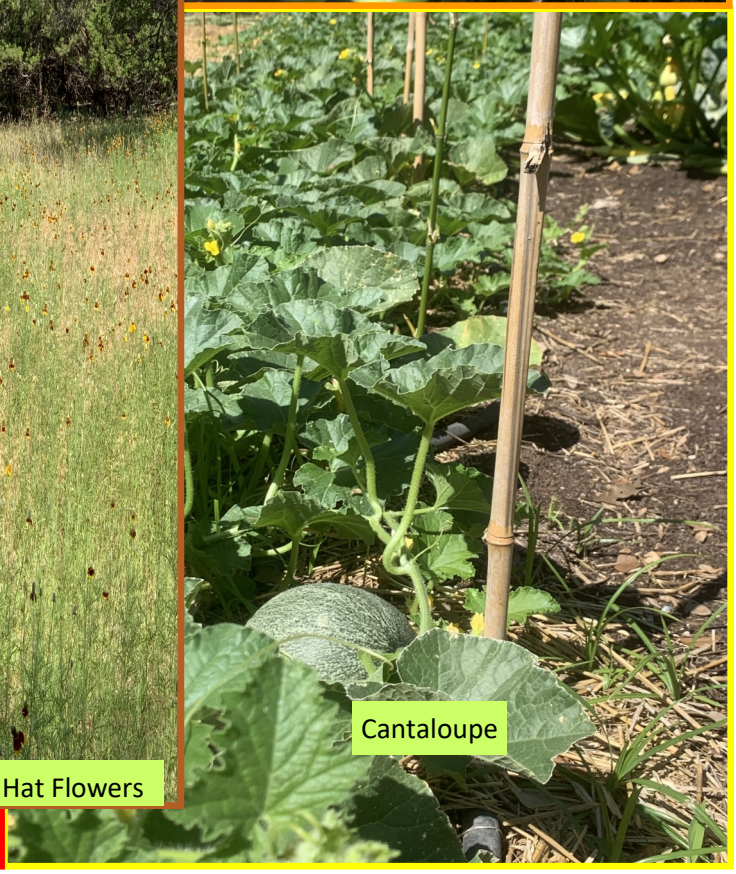
Photos by Dave Slaughter

Buckeye Butterfly

Tomato Garden

Pineapple Guava

Mexican Hat Flowers



Cantaloupe

What's Growin'?

Demo Gardens

Photos by Virginia Bargas

Karen Colwick

Planted in Karen's beds are tomatoes, peppers, marigolds, and green beans.

"Plastic wrap recommended by Mr. Porter in Stephenville who created the Porter tomato. Protects young plants from wind, insects and provides a green house type effect. Cage is fastened to t-post. I remove the plastic in May when weather has warmed and it has been successful over the years. My plants usually are ahead of those not protected by several weeks."

Karen

Marjorie Gillmeister and Wolfgang

"Wolfgang and I planted chocolate cherry tomatoes, dwarf sunflowers, borage, cosmos, nasturtiums zinnias, mint, parsley, basil, and red burgundy okra.

The cedar trellis is to support our vining tomatoes.

Wolfgang decided what to plant for us and we used mushroom compost." *Marjorie*

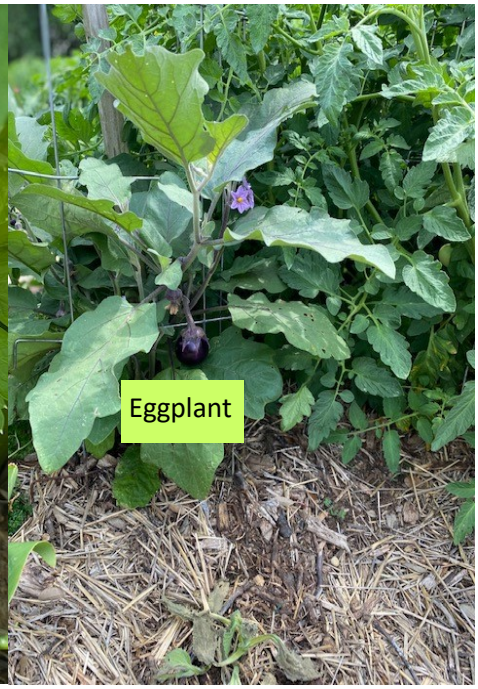
What's Growin'?

Demo Gardens

Photos by Virginia Bargas

Sal Alcasey

"Eggplant, celery, tomatoes, onions, canna flowers and calendula are all in this bed." *Sal*



What's Growin'?

In Sylvia's Garden
After the Storm on May 27, 2020

Photos and text by Sylvia Maedgen

"The metal frame around our tomatoes fell over just after we had placed the netting over it to protect my tomatoes from the birds. I didn't have the heart to take a picture of that. All the tomato cages fell over. Most of the plants were beaten by the hail and I lost a lot of foliage and some veggies. Now I will have to patch the netting in several places. The hail and high winds were crazy. This was the first time in 25 years that we had water coming in under our back door. I'm just glad we were home when it happened and not out on the lake fishing."

Sylvia

Announcements...

June General Meeting

When: June 10, 2020

Where: **Via Online Meeting**

New to GoToMeeting? Get the app now and be ready when your first meeting starts. https://global.gotomeeting.com/install/251125589

Time: Business meeting at 10:00 AM

Presenters: Lyle Zoeller
Janice Smith, MD

Board of Directors Meeting

The Board of Directors Meeting will be held on **Wednesday, June 24 at 9 a.m. via teleconference.** Members are welcome to join the call using the directions sent via email by Glenn Melton on 5/26/2020.

Please submit your agenda items to Sylvia Maedgen, Recording Secretary, by **Friday, June 19.**

Grounds Work Days

Karen Colwick and Paul Carter

The work day schedule:

June 3, 2020 8:00 a.m.
June 17, 2020 8:00 a.m.
June 24, 2020 8:00 a.m.

In the event of rain, there will be no work day.

Communications

While restrictions are in place, please send photos of your garden with a note about your photos to TeriMMarceau@gmail.com or to Bell.mg@agnet.tamu.edu and Teri will post them on Facebook.

****

If you know of someone in our organization who is ill, scheduled to have surgery, or has lost a loved one (including fur babies) please email Teri Marceau at bell.mg@agnet.tamu.edu, or our correspondence secretary, Debbi Harris, at dcharris99@yahoo.com.

An appropriate card will be sent.

Refreshment Committee General Membership Meeting

A minimum of 7 volunteers are needed for each meeting. Future meetings are on hold until further notice.

To volunteer for future meetings, please add your name to the calendar in VMS. You may also contact Virginia Bargas by phone at (512) 961-2680, or by email at bargasv@hot.rr.com.

Upcoming Events

Advanced Training

Sep 24-26	Rainwater Harvesting	Fort Worth
Oct 15-17	Greenhouse Management	Fort Worth
Ongoing	Earth-Kind® On-Line Master Gardener Training modules	https://aggie - Horticulture.tamu.edu/earthkind/training/

Extension Events

There are no upcoming Bell County Extension events at this time.
Stay tuned!

Directors		
Communications	Teri Marceau	2020-2021
Facilities	Paul Carter & Karen Colwick	2019-2020
Membership	Sherry Oermann	2020-2021
KMCCG	Edie Campbell	2019-2020
Outreach	Christy Reese & Carol Morisset	2019-2020
New Class	Gary Slanga	2019-2020
Projects	Barbara Ishikawa & Stacye Parry	2019-2020
Youth	Janice Smith	2020-2021

Executive Board		
President	Glenn Melton	2019-2020
1st Vice President	Jan Upchurch	2020-2021
2nd Vice President	Bill Walker	2019-2020
Recording Secretary	Sylvia Maedgen	2020
Treasurer	Barbara Ishikawa	2020-2021

AgriLife Agent Lyle Zoeller

Contributing Writers and Photographers

Glenn Melton
Wizzie Brown
Wayne Schirner
Virginia Bargas
Randy Brown
Sylvia Maedgen
Marjorie Gillmeister
Juan Anaya
Edie Campbell
Kathy Love
Dave Slaughter
Teri Marceau
Crystal Fisher
Karen Colwick
Sal Alcasey
Gail Pierce
Daisy Klassy
Terrie Hahn

Editor: Virginia Bargas

Please submit articles of less than 500 words as Word documents. Photos should be sent separately in a folder through a link using OneDrive, Dropbox, Google Photos, or in a zipped file. **Photos must be in the JPEG format**. Do not text your photos. (If texting is preferred, please let me know in advance.) Email your documents and pictures to Virginia at **bargasv@hot.rr.com**.

Please do not send PDF documents.

BCMGA Webmaster: Rachel Glass - glass.rachel@gmail.com

Please send your updates for the BCMG website to Rachel.

Check out BCMGA Facebook page! Go to

https://www.facebook.com/BCMGA

Texas Master Gardener website

https://txmg.org

Bell County Master Gardener website

https://txmg.org/bell/

Texas Master Gardener Volunteer Management System

https://texas.volunteersystem.org/UniversalLogin.cfm?logout=1

TEXAS A&M AGRILIFE EXTENSION

1605 N. Main St.
Belton, Texas 76513
(254) 933-5305

A publication of the Bell County Master Gardener Association sponsored by Texas AgriLife Extension of Texas A & M University