

The Blooming Bell



June 2019

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The above MG members took the AgriLife Extension Service secretaries, Scarlot and Janice, out to lunch on May 29th. We really appreciate all they do for us, especially those last minute things we need done!

Photo by Sylvia Maedgen



The picture above was taken last week (mid-May) traveling just south of Hamilton, TX. There was a stretch of 15 miles "showing its color". I just pulled off the road and stood in amazement of the beauty. In some cases, this color expanded several hundred yards into pasture land to either side of the road.

Photo by Bill Walker

June 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4 Healthy Living Class -VA Hospital, 11 am	5 Work Day-8 am * Herb Study-Silver Herb Gardens & Belladonna-9:30 am, Social-9 am Burger Wed.-11 am	6 National Gardening Exercise Day	7	8
	National Garden Week					
9	10 National Herbs & Spices Day	11	12 Work Day-8 am* General Mtg-10 am, Social-9:30 am, Expo	13 National Weed Your Garden Day	14 Flag Day	15
16 Father's Day	17	18	19 Work Day-8 am*	20 Gardening Series- Preserving Your Harvest, 6:30 pm	21 Summer Sol- stice	22 Resilience "Lazy Days of Summer"-10 am-12 pm Resilience Expo "Lazy Days of Sum- mer"-12 pm-2 pm, Ft. Hood
23	24	25 Deadline for July Blooming Bell sub- missions	26 Work Day-8 am* BOD Mtg-9 am	27 National Sunglasses Day	28	29
30	* In the event of rain, there will be No Workday.					

Upcoming events:

- ♦ Herb Study-Last Class-Topic ???, July 3, Belton, 9 am
- ♦ Gardening Series-Pest/Diseases in the Garden, July 18, Belton, 6:30 pm

Mark your calendar:

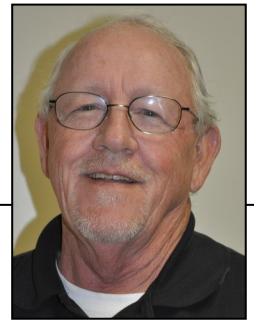
- ♦ Independence Day, July 4
- ♦ Fall Plant Sale, Oct. 18-19, Expo Center Assembly Hall
- ♦ Annual Meeting/Christmas Party, Dec. 10, Expo Special Events Room



Remember to record volunteer service hours and education hours separately each month. You may include your travel time to meetings and work projects as service hours. You can input your hours on the MG office computer on Wednesdays.

The President's Corner

Glenn Melton



Congratulations to the BCMGA New Class of 2019, who all graduated on the 15th of May. The New Class Committee did a great job of putting the ceremony together and a good time was had by all. Now it is time to help these new graduates learn the ropes and get them fully engaged in all the Master Gardener activities. We will start with a review and critique of this class on the 29th of May. We will discuss, among other things: duties and responsibilities, service and education hour requirements, dues, and attendance at monthly meetings. Hopefully this review will generate suggestions for revision and improvement of our curriculum to better serve the needs of future interns.

As you all know we have been working to upgrade the Learning Center over the past few months and recently have included the Greenhouse in this project. We are making significant progress and should have all bids in by next month. Hopefully we can get started with these improvements soon and will be able to fully utilize these facilities during the latter half of the summer. Our goal is to make both facilities conducive to learning and expand our ability to reach out to the community. Paul Carter has been working hard on this project and we owe him our thanks and support as he continues to see this through. We'll keep you posted.

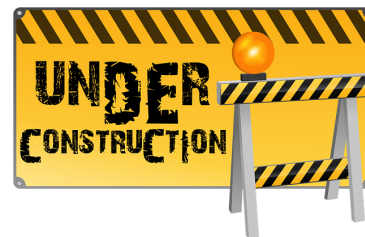
Let's take a moment to discuss various officer positions that must be filled at the end of this year. Now is the time to show that volunteer spirit for which we are all well known. Terms of service for the 1st Vice President, Treasurer, Communications, Membership, Facilities, and Youth Programs all expire this year. If you are interested in any of these positions, I encourage you to apply. If you know someone who may be interested, please have them contact the Nominating committee, or any of us, and we will certainly provide them with any guidance or assistance they may need.

Again, I want to thank you all for everything you do for our organization. I hope to see you all at the next monthly meeting on June 12th at the Expo Center.

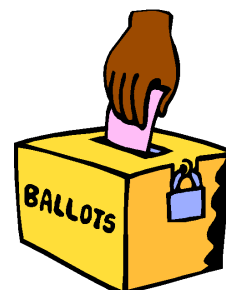
COMING SOON



Learning Center Building and Greenhouse Upgrades



Board of Directors and Officer Elections



Wizzie's Wonderful World of Insects

Oleander Aphids

**Wizzie Brown,
Travis County AgriLife Extension
Entomologist**

Oleander aphids are also known as milkweed aphids and in Central Texas can often be seen on tropical milkweed. The wingless adult and nymph aphids are bright yellow in color with black appendages while winged adults are black and yellow with dark wings.

The females of the oleander aphid are parthenogenetic and viviparous which means that they do not require to mate before producing offspring and that they give birth to live young instead of laying eggs. Both adult and nymphs cluster together along stems and on the underside of the foliage while they feed. Winged aphids are produced when there is overcrowding on the plant or if the plant is in decline. The winged aphids allow a new population to move to different host plants.



Oleander aphids have piercing-sucking mouthparts which they use to suck up phloem from the host plant. Aphids are honeydew- producers and excrete a sticky, sweet substance that can lead to secondary problems such as sooty mold, ants protecting aphids from predators and parasites, or stickiness on areas or objects under or surrounding infested plants.

Non-chemical methods to reduce populations of oleander aphids include pruning off heavily infested parts of the plant or removing aphids with a strong stream of water. Various biological control methods that occur naturally can be observed if you know what to look for. Both ladybug and hover fly larvae feed on aphids. There are also small, parasitic

wasps that lay their eggs inside of aphids. When the wasp larva hatches from the egg, it consumes the aphid from the inside. Aphids that have been parasitized appear as puffed up, dark colored aphids, called aphid mummies. When looking at pesticide options, you can try insecticidal soaps or horticultural oils.



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.

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EXTENSION

What's Been Happening...

May General Meeting

Photos by Randy Brown

Sylvia Maedgen

The May general membership meeting was held at the Expo Center, Special Events room. Gail Koontz presented a devotional program on Financial Peace for Master Gardeners. 2018 Search for Excellence Awards received at the Texas Master Gardener's State Conference were presented to the members that coordinated those projects. Crystal Fisher received her Distinguished Service Award for 100+ Volunteer Hours. Thanks to our Mother's Day Brunch Refreshment Crew: Jo Carlson, Pam Dragoo, Glenn Melton, Stacye Parry, and Jane Van Praag for the wonderful spread of food.



What's Been Happening...

Central Texas Olive Ranch Tour

Photos by Randy Brown and Sylvia Maedgen

Sylvia Maedgen

On May 23, several MG's carpooled to the Central Texas Olive Ranch in Walburg. We learned quite a bit about olives, tasted several EVOO blends like basil, lemon, jalapeno, chipotle, and garlic. Several of us bought some EVOO and a few small olive trees. We worked up an appetite and headed for lunch at Dale's which was really good!



What's Been Happening...

Master Gardener Intern Graduation 2019

Sylvia Maedgen

Photos by Randy Brown

Graduation Day - May 15th - it finally arrived! Congratulations to our recent graduates. We look forward to you helping our organization grow.



What's Been Happening...

Master Gardener Intern Graduation 2019

Photos by Randy Brown



What's Been Happening...

Herb Study Class

Photos by Elaine McSpedon

Vivian Rush

The topic for our meeting on May 1st was on "tropical herbs" and the herbs included Ginger and Rungia Kiossil (mushroom plant). In addition, we added other members of the Zingiberaceae family: turmeric, galangal, and cardamom.



Bright Arboretum - Waco

Randy Brown

Photo by Randy Brown



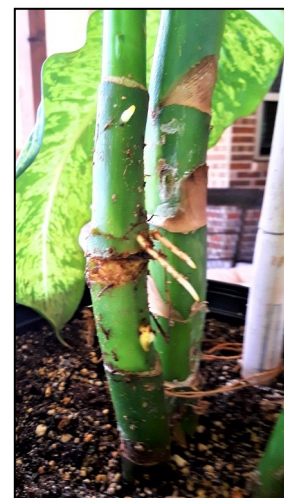
Kathleen Brown, Gail Koontz and Laura Bridges attended the Clinic May 30, 2019, at the Bright Arboretum, Waco. Areas covered were Rose Rosette, Large Patch in Turf Grass, Vineyard Diseases, Cotton Rot and Oak Wilt.

Dieffenbachia Air Layering

Glenn Melton

Photo by Glenn Melton

I showed the intern class how to air layer a dumb cane plant (dieffenbachia) on April 17, 2019. This shows root growth after 32 days.



Body of Christ Community Clinic - Belton

Stacye Parry

Photo by Stacye Parry

The Body of Christ Community Clinic in Belton received assistance with the design and installation of plants for the raised beds in front of the clinic. Elaine McSpedon helps a volunteer from the Body of Christ Community Clinic with planting the flower beds. The Clinic is located on Holland Road next to Helping Hands. Thanks to Elaine McSpedon, Kerin Grimes, and Stacye Parry for working on this project.



What's Been Happening...

Farm and Field Day at Blackland Research Center

Teri Marceau

Photo by Teri Marceau

On Wednesday May 29th, USDA/Texas A&M Blackland Research & AgriLife Extension Center held their annual Farm and Field Day and for the first time they opened it up to the public, drawing a healthy attendance. As a graduate of the 2019 Texas Master Gardener – Bell County class I have been looking forward to this day since I first heard of it. I am a passionate vermicomposter, which means I love to compost with worms. My infatuation with “red wigglers” leads to a slight preoccupation with healthy soil and water retention which all makes for healthy food and crops. Considering this passion of mine, it makes sense that I have been intrigued by ideas like micro farming, market farming, sustainable farming, and now beneficial cover crops as well as the benefits of native grasses. All these terms lead to local growers selling locally. Simply put, these practices can and will return the farm market to our local communities thereby fitting and knitting our neighbors more tightly together much like the days of old, yet with improved habits.

After registration, we were welcomed by Dr. Doug Smith, ARS-GSWRL Research Leader, Zoe Rascoe, Texas A&M AgriLife Research – Blackland, Assistant to the Resident Director and City of Temple’s Mayor, Tim Davis. Once the opening introductions were completed, we could choose from indoor or outdoor lectures a.k.a. Field Tours. I took advantage of being outside, selfishly the topics were right up my alley.

First up was Jim Kiniry who spoke on Eastern Gamma Grass, a Texas native grass. Unfortunately, it has been over grazed mainly because it is very tasty to grazing livestock, and grows only in pockets of flood areas, along watershed areas and the like. Eastern Gamma Grass is beneficial for hay, for soil and moisture retention and grows in areas that naturally tend to pool or remain wet due to its rice like struc-

ture. However, it can take 2-3 years to establish but once you have it, you have it. Next up was the lecture on Switchgrass given by Matt Carey who talked about the research they are doing in the rainout shelter and the many benefits of growing switchgrass, which include, the use for production of biofuel and soil retentions due their root base being longer than the leaves of the grass which can grow up to 6-8 feet in height (think of an iceberg). Emi Kimura spoke next about the pitfalls of overgrazing and how high the crown of grass leaves should be retained to prevent overgrazing. The damage to the grasses caused by bad grazing practices is detrimental to a farmer’s budget because the fields will need to be re-seeded. Basically said, rotating your grazing paddocks will help prevent from overgrazing and overspending.



What's Been Happening...

Farm and Field Day at Blackland Research Center - con't.

Teri Marceau

Photos by Teri Marceau

The Fourth topic was the Benefits of Cover Crops by Dr. Rick Haney. I was excited to hear from Dr. Haney on this subject. They are in their third year of a cover crop research-based experiment. From what I understood, they have several fields they are working; one is a conventional tilled plot, one is conventionally tilled with a cover crop and one is a no till with cover crop. They use a mixture of grasses with some cow peas and native flowers as their cover crops. Thus far both the conventionally tilled plot with cover crop and no till plot with cover crop are retaining more water and microbials. Dr. Haney said that the soil in the no till plot with cover crop was the healthiest. He showed us samples of the soil; each shovel full got richer in color from the conventionally tilled to no till with a cover crop. The upside is the potential for increased revenue of about \$30 an acre for the plots with the cover crops verses the traditional practice of conventional tilling alone. Another upside to the non-traditional or "Old World" practices, if you will, is a higher yield and healthier crop for market. The downside is it takes patience and a possible loss of income at start up, especially if converting from traditional farming to no till with cover crop, because it may take up to three years to see positive results in your soil and produce.

The last lecture that I attended covered the planting of Alternative crops that can withstand our extreme Texas temperatures along with the periods of rain and bouts of drought, given by Hal Collins. There were three types of crops he spoke on. One was Buckwheat Production, noting that it smelled good and attracted pollinators. He said honey from buckwheat tasted like buckwheat pancakes. Another alternative crop that grows well here in Central Texas is Safflower. Nothing but good stuff in this crop, it is naturally gluten free, the pollinators love the pretty yellow and

orange flowers but for some reason squirrels as well as the grackles and starlings don't like the seed. The last alternative Hal taught on was Teff Grass which is a tasty foraging grass or hay for livestock along with grain production. Unfortunately, the seeds are super small and require a planting depth of 1/8"; leaving it vulnerable to wind and water erosion of the seed eliminating good germination.



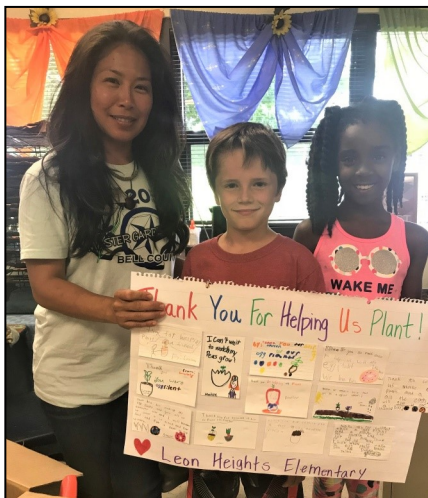
What's Been Happening...

Leon Heights Elementary, Belton, May 7th

Photos by Marjorie Gillmeister

Marjorie Gillmeister

We were invited to give a lesson on eggshell gardening to 252 students. Special thank you to Laura Bridges, Suzanne Boyer, and Kathy Harte for your enthusiasm and willingness to educate the students on where certain vegetables come from while students planted seeds. It was a fun day filled with laughter and we even had two sergeants from Calvary Chapter on Fort Hood Volunteer with us. Thank you to all my Master Gardener friends for supporting our youth that day!



What's Been Happening...

Volunteer Appreciation Lunch at Meridith Dunbar Early Childhood Academy, Temple - May 15th

Marjorie Gillmeister

Photos by Marjorie Gillmeister

The school held a special luncheon for volunteers. The floral vegetable bouquets were centerpieces from the four year olds gardens edible kale to flowers and herbs they harvested. Master Gardeners received "Volunteer of The Year" and Marjorie Gillmeister with Counselor Dennette Gardener spoke about The Research Award for the school. The butterfly garden and edible garden is in full bloom thanks to all the rain it received.



Meridith Dunbar Early Childhood Academy, 2019 Research Award Ceremony, Temple - May 20th

Gail Koontz and Marjorie Gillmeister

Photos by Marjorie Gillmeister and Gail Koontz

Dennette Gardner, Meridith Dunbar Early Childhood Education Academy Counselor, scheduled a celebration party for the two classes who participated in the research project for which we all won second place at this year's state conference in Victoria. I had the honor of accepting the award at the conference and was invited to the party on Monday, May 20. Marjorie Gillmeister, Kelby Kosel and Janice Smith were the Master Gardeners involved in monitoring the project.

Pictured to the right are the two classes with their teachers, Marjorie, and Kelby.

Kelby Kosel and Marjorie Gillmeister presented The Research Award from The Texas Master Gardener Association to our future master gardeners in our county. The 36 four year olds were so excited and we celebrated with cupcakes, smiles, and hugs as they are ready for summer break.



What's Been Happening...

Career Day at Clarke Elementary, Fort Hood - May 17th

Marjorie Gillmeister

Photos by Marjorie Gillmeister

Eggciting day spent as we worked with 219 pre-k and 1st grade students. Students planted cantaloupe, zucchini, and bean seeds to take home in eggshells. Thank you Laura Bridges for presenting to the students and showing up as a butterfly which brought many smiles to their faces! So grateful for all our master gardeners that day working together harmoniously! This was our last big school event for the year till the end of August when fall semester starts.



What's Been Happening...

Salado Montessori Pollinator Garden

Susan Terry

Photos by Susan Terry

Keep Salado Beautiful, Salado Montessori, and Community partners have been busy cultivating the new Pollinator Native Garden at the School. We had a rough start with a hard freeze the day after planting, and all this spring rain, but we have established the foundation for a beautiful butterfly garden, and in a year or two it will be lush and beautiful! The grasslands around the school provided quite a wildflower show this spring and the butterflies have found the new garden and are establishing themselves.

A parent education day encouraged families to build home butterfly gardens and materials were provided to help them learn more about pollinators.

This is the 11th Pocket Garden for Salado and will be added to our self-guided tour brochure and our website keepsaladobeautiful.com



Advanced Training First Detector Class - Georgetown

Pat Johnson

Photo by Pat Johnson

This photo was taken at the Advanced Training First Detector class in Georgetown on May 20-21. We learned about Oak Wilt, Emerald Ash Borer, Pierce's Disease, and Crape Myrtle Bark Scale.

L-R—Pat Johnson, Dr. Kevin Ong, Christy Reese, Hannah Ayala (Extension Assistant), and Carol Morisset.



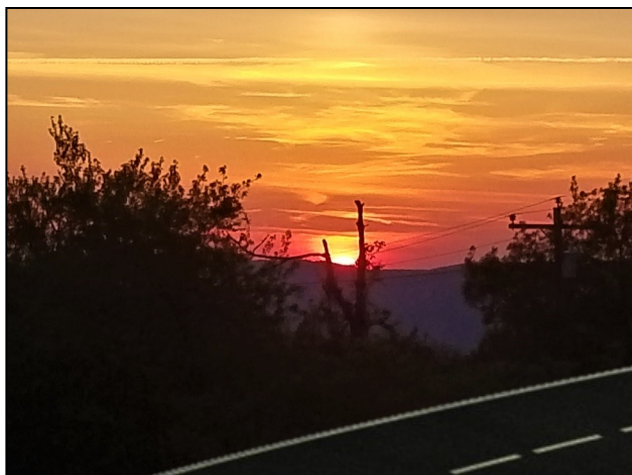
On the Road Again

4-State Motorcycle Trip

Sylvia Maedgen

Photos by Sylvia Maedgen

In May, my husband and I traveled with 7 other friends on our motorcycles through Oklahoma, Arkansas, Mississippi, and Louisiana pegging approximately 1,300 miles. In the pictures below, a beautiful sunset at the mountain top of Queen Wilhelmina Lodge near Mena, AR; making a rest stop along the Natchez Trace Parkway before arriving in Natchez, MS (we only rode the last 40 miles of the 440 mile parkway that only allows cars, motorcycles, and bikes, and not to exceed the 50-55 mph speed limit, and with no gas stations on the road, just beautiful trees and scenery and rest stops); and poppies along the banks of the Mississippi River in Natchez, MS.



What's Happening In Your Yard?

Armand Hufault

Photo by Armand Hufault

You know that you have a Texas Native Habitat when Momma Deer has her baby in your yard!!!!



Bill Walker

Photo by Bill Walker

Lots of native Lemon Beebalm, *Monarda citriodora* in full bloom around the farm.



Salado Butterfly Gardens

Susan Terry

Photos by Susan Terry

Here are two photos from our yard. Butterfly gardens are in rare form thanks to all of the spring rains. Expect beautiful Turks cap and milkweed in the back, and already have skull cap and salvia in the front. Blue mist is coming up in both areas. Fun year for gardening 😊.



Weeds are like the obstacles in life, When we pull them out, the path becomes much clearer.

- Sylvia Maedgen

Tidbits of Info...

Starting Milkweed Seeds

Crystal Fisher

The Native Plant Society of Texas, Tonkawa Chapter meets the 4th Thursday of each month above the downtown Temple Library beginning at 6:15 pm. Since Master Gardeners can get an hour of educational credit, you might find it worthwhile to attend.

This past meeting on May 23rd, the guest speaker was Randy Johnson, past Horticultural Manager at the Dallas Zoo, Director of Horticulture at Texas Discovery Gardens in Fair Park, serves on the Board of Directors at Lakeland Community Garden in Dallas and the current President of the Dallas Chapter of NPSOT. All, on top of this degree in Wildlife and Fisheries Sciences from Texas A&M.

To say that his talk focused on "Native Milkweeds in Central Texas" is an understatement. His focal point of his talk highlighted the three milkweed varieties that are indigenous to our area and the importance of planting locally grown seed:

- Antelope horns, *Asclepias asperula*
Thinner, drier soils.
- Green milkweed, *Asclepias viridis*
Deeper soils, can take more moisture than *asperula* and heavier clay.
- Zizotes milkweed, *Asclepias oenotheroides*
Thinner, drier soils, like *asperula* just not as common as the other two

The most important part to remember is that NOW is the time to watch your pods as they start to break open and broadcast their seeds. Collect them for starting next year. As you consider stratifying them in the refrigerator, make sure the seed starting soil is barely moist to the point of squeezing out any remaining drops of water prior to putting your seeds in and getting them thoroughly coated.

"The seed requires 30 days in your fridge, time it so that when you pull them that all danger of frost has passed. Generally, that's April 1... so put your seeds in on March 1, remove and plant immediately. You should see seedlings in a week or less." Randy Johnson

In planning ahead for next year, I'll be collecting all the Green Milkweed seeds that are next to my curb and starting them. The intent is to drive a few backroads with the seeds on the verge of sprouting and placing them carefully on their future home - I'm already planning to do this prior to a rain that could help to get them watered in. From listening to Randy, I'll be making notes of where they were placed so I can check back on them in the early Summer to make sure they made it. You are more than welcomed to join me on any of those short trips around our area.

Is a Home-made Weed Killer Using Vinegar Better Than Glyphosate?

Wayne Schirner

I have recently received questions about using vinegar (acetic acid) mixed with other ingredients as an herbicide. I have heard statements that "they don't want to use chemicals" or "I want to use something natural." Some report using just vinegar, while other recipes called for mixing vinegar with salt, and one even mixed vinegar with Epsom salts and Dawn detergent. Let's look at the available evidence.

Before going down that rabbit trail, I think it is important to remember that as Master Gardeners, we can only recommend things that are approved by

the Texas A&M AgriLife Extension Service. More on that after this article, but one thing we don't do is recommend home-made remedies for anything. That still doesn't preclude your using it in your own garden, so I still think it is important to investigate the evidence. I also want you to be able to intelligently respond to questions about its use.

If you look on the internet, you will find all kinds of claims about vinegar and its safety, effectiveness, and "naturalness." What is natural about vinegar, salt, and dish soap in the garden or landscape?

Tidbits of Info...

Is a Home-made Weed Killer Using Vinegar Better Than Glyphosate? - cont'd.

Wayne Schirner

Some even promote it as an "alternative to chemical weed killers." Do any of you think that there are no chemicals in these concoctions, especially the ones made with petroleum based dish "soaps"? Most recipes will be some combination of vinegar, salt, and dish soap. Questions on the use of this home-made weed killer seem to be rising because of concerns about the safest commercial herbicide currently available – glyphosate. Recent court cases, where the evidence of safety was either not allowed to be introduced or significantly limited, have complicated this issue. In order to judge the claims about vinegar, it is useful to compare it to glyphosate concerning effectiveness, safety, and cost.

First, let's look at effectiveness. It is important to recognize that vinegar comes in different strengths. The most common vinegar sold in grocery stores is either a 5% solution for cooking or a 7% solution for pickling. Horticultural vinegar is typically a 20% solution, and I've even seen a 30% solution used for industrial cleaning. With 20% acetic acid, horticultural vinegar is dangerous enough that users are advised to wear long sleeves, gloves and goggles to protect themselves from burns and splashes. Vinegar strengths of 8% or less are exempt from registration by the EPA as a pesticide. Most of the common recipes don't specify which strength to use, leading many to use the common 5% or 7% solutions. The vinegar/salt/dish soap mix is a contact herbicide that works by drying out the leaves of the plant. It only damages the green parts it contacts. The rest of the plant, and especially the roots are unaffected. Like glyphosate, the mix is nonselective and doesn't distinguish between good plants and bad plants. This mix does not easily kill larger weeds with established roots but can have an effect on seedlings, especially those within 2 weeks of germination. Although results on bigger weeds look good at first when leaves show damage, perennial weeds and big weeds will likely bounce back. Glyphosate will take those weeds out, because it's a systemic product that, unlike the vinegar/salt/dish soap mix, will kill the root of the weed. It is easy to find serial before and after photos on the internet that illustrate the use of a vinegar-based weed killer versus glyphosate. By two weeks, the weeds sprayed with the vinegar mix all show significant regrowth, and at 4 weeks there is little visible effect. There is some early damage to the leaves, but it clearly did not kill the plant. Glyphosate is definitely more effective as a weed killer.

Next, let's look at toxicity. The most frequently

used measure of toxicity is the LD50. That is the milligram (mg) of material per kilogram (kg) of body weight of the test organism that is lethal to 50% of the tested population. This testing is obviously not done on humans, so the results may not be completely comparable to humans, but it's all we have. **Low LD50 numbers mean a higher toxicity.** In rats, the oral dose LD50 for acetic acid is 3350 mg/kg, for salt is 3,000 mg/kg, and for glyphosate it is 5,600 mg/kg. In rabbits, the dermal dose (skin exposure) LD50 for acetic acid is 1,060 mg/kg and for salt is > 10,000 mg/kg. For glyphosate it is > 2,000 mg/kg. Since we don't normally ingest glyphosate, the dermal studies are probably more relevant. In any case, from this data we can see that with respect to LD50, acetic acid is more toxic than either glyphosate or salt. To estimate the actual risk of these products, we also need to consider the use rate, or the amount of toxic substance being applied. Even highly toxic substances can be used safely if the dose is sufficiently low, and seemingly safe chemicals can be problematic if the dose is too high. One gallon of 5% vinegar contains 0.439 pounds of acetic acid, which is equal to 199,127 mg. A typical glyphosate only herbicide (41% active ingredient) contains 0.0289 pounds of glyphosate acid per fluid ounce. At the higher labeled rate of 2.5 fluid ounces per gallon of water, there would be 0.07 pounds of glyphosate acid per gallon of mixed product, or 31,751 mg. Glyphosate, the less toxic chemical, is typically applied at a rate 6 times lower than the lowest strength vinegar. In terms of the oral LD50 in rats, one gallon of 5% vinegar will kill 59 average sized rats while one gallon of the highest recommended dose of glyphosate will only kill 6 rats, making the vinegar mix nearly 10 times more lethal.

Finally, let's look at cost. A study by the U. Mass Transportation Center showed that glyphosate cost approximately \$20/mile to control weeds along roadways. Alternative herbicides, one of which was acetic acid, varied in cost from \$360 to \$2400 per mile. Even if the acetic acid was the low value, that is still 18 times more expensive to use versus glyphosate. The cost of using alternative herbicides is significantly increased by the number of applications required to be effective. At a local big box store, one gallon of 41% glyphosate concentrate is now up to \$80. The labeled instructions recommend either 1.5 fluid ounces or 2.5 fluid ounces per gallon of water. The lower dose will give 83 gallons of mixture while the higher dose will give 50 gallons of mixture. That is \$0.96 per gallon or \$1.60 per gallon depending on the dose

Tidbits of Info...

Is a Home-made Weed Killer Using Vinegar Better Than Glyphosate? - cont'd.

Wayne Schirner

used. The cheapest price I can find for 5% vinegar is \$2 per gallon. That's just the vinegar portion of the usual recipes. Adding in the salt and liquid dish soap only increases the cost. Even without considering that a vinegar-based mix will probably need to be used multiple times to actually kill the weeds, it is easy to see that the vinegar-based mix is more expensive than glyphosate.

There you have it. You should now have enough information to evaluate the effectiveness, safety, and cost of using a homemade vinegar-based herbicide versus glyphosate. If you want more information on glyphosate the following references may be useful:

- 1) Glyphosate technical fact sheet: <http://npic.orst.edu/factsheets/glyphogen.html>
- 2) April 2019 EPA proposed interim decision on glyphosate: <https://www.epa.gov/ingredients-used-pesticide-products/glyphosate>

Remember that our mission is to help educate the citizens of Bell County and Texas on research based horticultural information. I hope this article helps you in that endeavor.

Primary references used:

- 1) University of Maryland Extension, Vinegar: An Alternative to Glyphosate? Updated 2017: <https://extension.umd.edu/sites/extension.umd.edu/files/docs/programs/ipmnet/Vinegar-AnAlternativeToGlyphosate-UMD-Smith-Fiola-and-Gill.pdf>
- 2) Editor's DIY: Homemade Weed Killer: <https://fafdl.org/gmobbb/salt-vinegar-and-glyphosate>

Follow-on to the above article:

In preparation for the article on using vinegar as a weed killer, I wanted to make sure I got the official policy on the recommendation of pesticides correct. The below information is from the Texas Master Gardener Management Guide. We were taught this as interns in the class on pesticide use taught by Lyle, so at least I know the recent graduates have been given this information. The information below applies to more than just pesticides, even though that is in the title of this section.

"Pesticide Recommendations by Master Gardeners

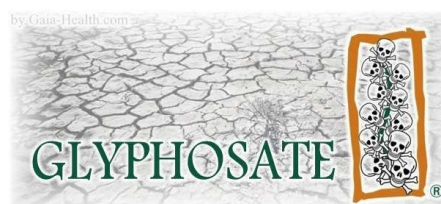
When making recommendations which include the use of pesticides, Texas Master Gardeners must follow the current recommendations found in the

various publications available from Texas A&M AgriLife Extension Service. Use of other pesticide recommendations, chemical or "organic," is not approved. When making pesticide recommendations, if more than one product is listed as satisfactory, each product should be recommended. Cultural problems and soil additives which are not specifically covered by Extension recommendations and publications should be recommended only after consultation with County Extension Agents or Specialists. Questions concerning commercial production of crops and pest management on such crops are to be referred to the local county Extension personnel."

We cannot make specific brand name recommendations without listing all approved brands of a particular pesticide, which is why it is best to simply recommend the generic chemical names of pesticides rather than any brand names. Also, if there is more than one approved treatment for a particular pest, all options should be given. Remember to always read and follow the directions on the label. Pesticides not approved in one of the Extension Service publications must be approved by our CEA. This is more restrictive than I remember, which is why I thought it was important to share with everyone.



VS.



Announcements...

Herb Study - Silver Herb Gardens and Belladonna

Vivian Rush

Please join the Herb Study on Wednesday, June 5, 2019 from 9:30 am to 11 am for a study of Silver Herb Gardens and Belladonna. This includes Artemisia, Germander, Lambs Ear and Santolina. The taste and tell will begin at 9 am.



The last Herb Study will be on July 3, 2019. This will be a special meeting, to take place at Nature's Grocers in Temple. It will be 9-11 AM in the meeting room there. We will have a presentation from the nutritionist there, Helena Linzy, on the following essential oils: Lavender, Tea Tree, Eucalyptus, Peppermint, Cinnamon, Peppermint, Rosemary, Lemon, Sweet Orange, and Chamomile. She will discuss how they are made, how to use them, what to use them for, etc. The first half hour will be social time, as before. She will then give a half hour presentation, and then we can have our discussions. Please bring refreshments/foods for a nice "graduation party."



Gardening in Central Texas - Preserving Your Harvest

Carol Morisset

Sylvia Maedgen will present on June 20th at the Bell County AgriLife Extension Classroom in Belton from 6:30 pm to 8 pm 'Preserving Your Harvest'. Sylvia is a 2016 Master Gardener graduate who has been very active in all aspects of our organization: Plant sale chairman, editor of our monthly newsletter, serving on multiple committees, and presently on the board serving as communications director. This class will include how to preserve your foods from the garden using both pressure cookers and hot water method. She will also discuss what you can freeze and which method works the best for your fruits and vegetables. Sylvia has a large garden and has extensive experience in preserving both fruits and vegetables.



Seminars are free of charge but a \$5 donation is accepted. Class size will be limited to 45. Register at bellspeakers76513@gmail.com or if a BCMG online in the Volunteer Management System. We will provide a drawing for prizes and snacks.

Learn, Grow, Eat, Go!

Jackie McLaughlin, AgriLife Extension Service

The AgriLife Extension Service is working with Boys and Girls of Central Texas and they are interested in several of our programs. One being the LGEG with them at their Nolanville site starting on June 13th. The time will be from 4 pm to 4:45 pm. We would be happy to have one of the MG's join us. Andrea Haubner will be the key instructor. You may contact Andrea at - Andrea.Haubner@ag.tamu.edu or by phone at 254-933-5305, ext. 5311.

Also, they will be having some activities at Parrie Haynes Ranch such as LGEG and Walk Across Texas. If any of the MG's would like to work with us at that location, please contact Jackie at - Jackie.McLaughlin@ag.tamu.edu or by phone at 254-933-5305.



Announcements...

June General Meeting

Kathy Love

The monthly general membership meeting is on June 12th. The meeting location has changed. We will meet at the Expo Center, Special Events room, located at 301 West Loop 121 in Belton. This is the same room as our annual meeting and Christmas Party at the end of the year. Our meeting times will no longer change in the summer months.

The June General Meeting program will be presented by Gary Slanga on the topic of budding and grafting.

Our refreshments will be hosted by Dorothy Thomas, Kathleen Lester, Virginia Bargas, Beverly Chenoweth, Susan Terry, Joann Zieschang, and Wayne Zieschang. Come at 9:30 for our social and enjoy the treats. The program will begin at 10:00 a.m. to be followed immediately thereafter by our business meeting.

Board of Director's Meeting

The June Board of Director's Meeting will be held on Wednesday, June 26th at 9 a.m. in the class/meeting room of the AgriLife Building. Please submit your agenda items to Janice Smith, Recording Secretary by Wednesday, June 19th.

Grounds Workdays

Johnny Jones and Tom Rennels

Here is the workday schedule for June.

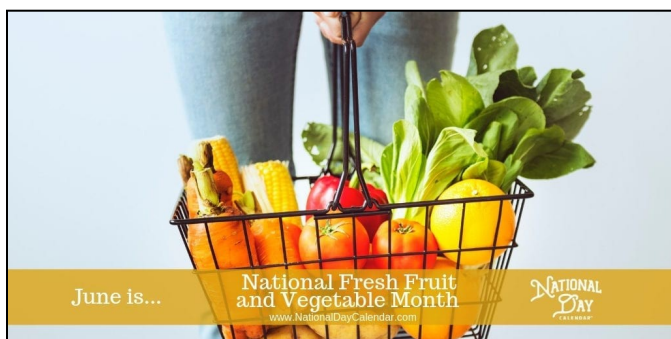
June 5, 2019 8:00 a.m. Workday

June 12, 2019 8:00 a.m. Workday

June 19, 2019 8:00 a.m. Workday

June 26, 2019 8:00 a.m. Workday

In the event of rain, there will be No Workday.



Refreshments

Jane Van Praag

We need a few more volunteers to sign-up for refreshments for the monthly general meetings for July-November. You can sign-up in VMS, or at the monthly meetings on the sign-up sheets.

First person to sign-up for a month is the lead and selects the theme, unless you assign someone else to lead the group. Volunteers are allowed to earn service hours for food preparation for 1-3 hours.

Upcoming Events

Upcoming Advanced Training

Jun. 12-14 Tree Care Advanced Training
Kerrville - Cost \$185
Deadline to register - May 24

Aug. 13-15 Vegetables Advanced Training
San Antonio - Cost \$?
Deadline to register - ?

Sep. 9-12 Entomology Advanced Training
Georgetown - Cost \$225
Deadline to register online - July 31
<https://agrifliferregister.tamu.edu/organizationListings/52>

Sep. 24-26 Junior Master Gardener Training
Corinth - Cost \$?
Deadline to register - ?

Oct. 17-19 Greenhouse Management Advanced Training
Fort Worth - Cost \$225
Deadline to register - Oct. 7

Ongoing	Earth-Kind On-Line Master Gardener Training modules Go to - https://aggie-horticulture.tamu.edu/earthkind/training/
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Upcoming Extension Events

Learn, Grow, Eat, Go!
Classes in Nolanville on Thursdays
4 pm to 4:45 pm
June through August
Contact Andrea.Haubner@ag.tamu.edu or by
phone at 254-933-5305, ext. 5311

Upcoming Events

Bell County Master Gardener Association Elections are coming this Fall. Several positions will be available for election. See the next page for a description of duties for those positions. Also, some committee leader positions may also be available.

Tonkawa Chapter of the Native Plant Society of Texas

Rebecca Burrow

Monthly meeting is on June 27th at 6:15 on the 3rd floor of the Temple Public Library.

Master Gardeners and Naturalists are invited and receive one hour of education.



Upcoming Events

Upcoming Elections

Bell County Master Gardener Association elections will be conducted this Fall. The positions that will be available include the following with a list of the major duties of each position. All positions must attend monthly Board meetings. Terms are for two years.

Officers -

- 1st Vice President
- Treasurer

Board of Directors -

- Communications Director
- Facilities Co-Directors
- Membership Director
- Youth Director

1st Vice President (Programs) -

- Shall perform the duties of the President in the absence of the President
- Shall present the monthly program with advance notice to the general membership
- Will be the liaison between the BOD and the chairperson/s of the following, but not limited to, committees:
 - ◇ Tour/s Committee
 - ◇ Refreshment Committee

Treasurer -

- Act as Chief Financial Officer of the Corporation and Chairman of the Finance Committee.
- In January, meet with representative at Extraco Bank and establish new signature card (President, 1st Vice President, 2nd Vice President, Recording Secretary, Treasurer). In the absence of the Treasurer, the President and 1st Vice President are authorized to sign checks.
- President and Treasurer have authority to approve expenditures not in the budget up to \$300 without prior BOD approval.
- Receive all dues and monies for the Corporation. Keep an exact accounting of income, bank deposits, disbursements and other financial matters.
- At beginning of each month, reconcile with bank statement. Establish authorization and passwords for online banking and to receive monthly bank statements.
- Pay all bills on receipt of a written statement in a timely manner. Provide reimbursement to members on receipt of appropriate request form and backup documents.
- Assist New Class Coordinator to insure timely payment of all speakers for the current Intern Training Class.
- Provide monthly financial report to the Board of Directors.
- Proposed annual budget developed by Finance Committee shall be presented to BOD in September. With any corrections or changes, it shall be presented to BOD in October for approval and to general membership in November for approval.
- The annual approved budget and a profit and loss statement for the calendar year shall be provided for inclusion in the Chartering Documents that are given to the Extension Agent. The December bank statement shall be reconciled prior to providing the profit and loss statement.
- Present financial records for annual audit by the Audit Committee appointed by the BOD. The final audit report will also be provided for inclusion in the Chartering Documents.
- Prepare all required reports and payments for various state and federal agencies on a timely basis but always prior to the deadline: State sales tax report, IRS Form 990 for the Corporation non-profit status, upon request of Membership Director pay Texas Master Gardener Association annual dues.
- Elected for 2-year term. Officially assumes duties on January 1. May be elected to BOD position after waiting one year. However, Executive Officers may serve more than one consecutive term under special circumstances as determined by the BOD.

Upcoming Events

Upcoming Elections - cont'd.

Communications Director -

- Will be the liaison between the BOD and the chairperson/s of the following, but not limited to, committees:
 - ◇ Newsletter
 - ◇ Webmaster
 - ◇ Correspondence
- Will be responsible for reporting committee activities at BOD meetings

Facilities Director -

- Will be the liaison between the BOD and the chairperson/s of the following, but not limited to, committees
 - ◇ Landscape & Grounds Committee
 - ◇ Laboratory and Learning Center Committee
 - ◇ Greenhouse Committee
- Will be responsible for reporting committee activities at BOD meetings

Membership Director -

- Ensures that each member meets membership requirements, including education, volunteer hours and dues
- Shall maintain the member roster
- Shall send out membership dues reminders
- Shall keep track of dues paid
- Shall keep the membership list current using the member database
- Shall ensure members have current background checks and any other required forms

Youth Director -

- Will be the liaison between the BOD and the Youth committee
- Will be responsible for reporting Youth committee activities at BOD meetings

Committee Leader position available -

Blooming Bell Editor -

- Prepare monthly newsletter by getting information from members, officers and board members
- Upload monthly newsletter to VMS and BCMG web site
- Report to Communications Director information about newsletter
- Send out reminders to members about newsletter deadlines
- Provide pictures to webmaster

WHY?

I turned the soil.....an act of *hope*.
I planted the seed.....an act of *faith*.
I carried the water.....an act of *sustenance*.
I pulled the weeds.....an act of *maintenance*.
I reaped the rewards.....an act of *thankfulness*.
I shared the fruits of my labors.....an act of *love*.
I am a gardener.....because I *believe*.



- Sandra E. McBride

Officers

President	Glenn Melton	2019-20
First Vice President	Kathy Love	2018-19
Second Vice President	Bill Walker	2019-20
Recording Secretary	Janice Smith	2019-20
Treasurer	Gail Koontz	2018-19

Board of Directors

Communications	Sylvia Maedgen	2019
Facilities	Paul Carter & Karen Colwick	2019
KMCCG	Edie Campbell	2019-20
Membership	Gail Christian	2018-19
New Class	Gary Slanga	2019-20
Outreach	Christy Reese & Carol Morisset	2019-20
Projects	Barbara Ishikawa & Stacye Parry	2019-20
Youth	Marjorie Gillmeister	2018-19

AgriLife Agent **Lyle Zoeller**

Contributing Writers and Photographers:

Randy Brown	Gail Koontz	Stacye Parry
Wizzie Brown	Kathy Love	Tom Rennels
Rebecca Burrow	Sylvia Maedgen	Vivian Rush
Crystal Fisher	Teri Marceau	Wayne Schirner
Marjorie Gillmeister	Jackie McLaughlin	Susan Terry
Armand Hufault	Elaine McSpedon	Jane Van Praag
Pat Johnson	Glenn Melton	Bill Walker
Johnny Jones	Carol Morisset	

Editor: Sylvia Maedgen

Please submit articles of less than 500 words for the Blooming Bell as Word documents. Photos should be sent separately in a folder through a link using OneDrive or Dropbox or in a zipped file. **Photos must be in the JPG format.** Also, do not text your photos. Email your documents and pictures to Sylvia Maedgen at:

txbikerchic7@gmail.com

Please do not send PDF documents.

BCMG Webmaster

Rachel Glass - glass.rachel@gmail.com

Please send your updates for the BCMG web site to Rachel.

**CHECK OUT BCMGA FACEBOOK
PAGE! GO TO**

<https://www.facebook.com/BCMGA>

Bell County Master Gardener web site:

<https://txmg.org/bell/>

Texas Master Gardener Voluntary Management System

[https://texas.volunteersystem.org/
UniversalLogin.cfm?logout=1](https://texas.volunteersystem.org/UniversalLogin.cfm?logout=1)



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