Melodee Eischen: Phenology Study

I think I will stay with the term SUSTAINABLE. I was excited when Shaniqua Davis, our AgriLife Agent for Wood County told me that we had been approved to do a phenology study. So, what is Phenology and what does this have to do with sustainability? Well, let me tell you.

First let’s start with a definition or two (maybe more). According to Webster, phenology is the relationship between a periodic biological phenomenon and climate conditions. According to my online search it says: the study of cyclic and seasonal natural phenomena, especially in relation to climate and plant and animal life. Wikipedia states phenology as: the study of periodic plant and animal life cycle events and how these are influenced by seasonal and interannual variations in climate, as well as habitat factors. Online Merriam Webster states phenology as: 1. a branch of science dealing with relations between climate and periodic biological phenomena (such as bird migration or plant flower); and

2. periodic biological phenomena that are correlated with climatic conditions.

Of course, I’ve saved the best for last. The USA National Phenology Network states that phenology is nature’s calendar. Phenology is a key component of life on earth. Many birds time their nesting so that eggs hatch when insects are available to feed nestlings. Also, when they track flowers blooming, we can get a head start on allergy care. They also track migration of animals, which if you think about it, is finding out what plants are available for them to eat during the migration.

So why is this applicable for gardeners? In looking at the data collected by the National Phenology Network, it helps us know the schedule of plant and insect development so we can determine the best time to use fertilizer and/or deal with insect infestations. Phenology influences the abundance and distribution of organisms, ecosystem services and food webs. They also take into account the amount of precipitation and changes in temperature. Gardeners can use this information in our gardening ventures.

I think that we will learn a lot and have a lot of fun when we begin our own phenology study. We are currently in the process of defining what we are going to track as we begin our study in Wood County.

Linda Timmons commented while she was giving her lecture to our intern class that she’s read an ancestral relatives diary. And in this diary were comments regarding what grew, how much rain and activities of animals and harvests. I’m sure that there was much more of a personal nature covered but, when you think about our ancestors and how they coped with weather changes, animal migrations and availability of food, keeping track of these things was essential for them. All of this information was essential for their survival, for their sustainability.

Of course, because they survived, we are here.
2019 Wood County Master Gardeners

Officers – Directors

Melodee Eishen, President .......... 903 571-2322 ..... meishen@airmail.net
Joyce Tullis, Vice-President .......... 903 569-6675 ..... joyce.tullis@gmail.com
Phil Young, Secretary .............. 903 456-0050 ..... philyoung@peoplescom.net
Wanda Mischefsky, Treasurer ...... 713 299-4134 ..... wmischefsky@me.com
Gayle Mullinax, Director .......... 806 683-8647 ..... gcullinax@att.net
Peggy Rogers, Director .......... 214 794-2853 ..... peggyrogers21@gmail.com
Keith Mullinax, Alt Director ...... 903 613-0331 ..... k_mullinax@att.net
Marty DaSilva, Alt Director ...... 614 732-7445 ..... martydasilva@gmail.com

Wood County Extension Agent

Shaniqua Davis ........................................ 903 763-2924 .......................... shaniqua.davis@ag.tamu.edu

Project Chairs

Junior Master Gardener
Mineola Nature Preserve
Wood County Arboretum
Hawkins City Park

Linda Avant................................. 903 245-5567 .............. linavant@peoplescom.net
Linda Timmons .................................. 903 569-3443 ............. lintmms@aol.com
Lin Grado ......................................... 903 967-2788 .............. lingrado@gmail.com
Ann Reynolds............................... 903 769-2398 .............. ann@etex.net

2019 Responsibilities

2019 Spring Conference
Emails
Facebook
Intern Class
Newsletter
Sunshine
Volunteer Management System
Website

Melodee Eishen........................... 903 571-2322 .............. meishen@airmail.net
Peggy Rogers ......................... 214 794-2853 .............. peggyrogers21@gmail.com
Robin Sanchez .......................... 717 645-8778 .............. ranchez@hotmail.com
Linda Bradley .......................... 817 909-6919 .............. lkBradley58@yahoo.com
Bobbie McGee ...................... 402 926-8215 .............. MGNewsletter@hotmail.com
Elaine Porter ............................. 903 569-6675 .............. porterpeltus@gmail.com
Peggy Rogers .......................... 214 794-2853 .............. peggyrogers21@gmail.com
Keith Zimmerman .................. 979 299-804 7 .............. keithzim@yahoo.com
### Meet Our 2019 Master Gardener Interns

*Photos by Marti DeSilva*

<table>
<thead>
<tr>
<th>Intern</th>
<th>Location</th>
<th>Experience and Hobbies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nancy Boles</td>
<td>Yantis</td>
<td>She likes to plant her own flowers and shrubs. Learned from her mother, grandmother and master gardener friend. She has lived in the area for two years. Loves crafting, sewing, cooking, camping and fishing. Joined the WCMG class to learn how to grow different items and to identify them and how to prepare the soil and other useful tips to care for her garden.</td>
</tr>
<tr>
<td>Jean Croucher</td>
<td>Alba</td>
<td>Jeans’ gardening experience includes home lawn care and gardening flower beds. She has lived in the area for two years. She worked in the I.T. business for over 40 years. She wants to become a master gardener to improve her home and community.</td>
</tr>
<tr>
<td>Donna Davis</td>
<td>Yantis</td>
<td>She has worked with her grandparents growing and canning fruits and vegetables. Has lived in the area for 19 months. She loves crafts, reading, research, sewing and yard work. Donna learned about the Master Gardener program from another master gardener. She wants to enrich her skills with plants and help beautify her community. She wants to learn the full spectrum of horticultural.</td>
</tr>
<tr>
<td>Elaine Hall</td>
<td>Holly Lake Ranch</td>
<td>She said she has no training but lots of years with her own garden. Elaine has lived in Wood County for over 18 years. She is involved in the HBB Church, especially teaching the class for the four year old youngsters. Elaine’s hobbies include sewing, furniture refinishing and decorating. She said she has known about the Master Gardeners program for years, and wants to become more proficient in gardening and to learn how to garden correctly.</td>
</tr>
<tr>
<td>Bobbie Harris</td>
<td>Emory</td>
<td>She has been learning about vegetables gardening by trial and error method for two years and has lived in her community for 12 years. She has retired from selling Longaberger Baskets for 25 years. Bobbie loves decorating, antiquing, quilting, cattle business and her dogs. She learned about WCMG from the Emory Garden Club. Wants to learn more about gardening, flowering plants, bulbs, composting and grasses.</td>
</tr>
<tr>
<td>Sandy Hayden</td>
<td>Mineola</td>
<td>Her garden experience includes mowing, weeding, planting, and reading “Dr. Google.” She has been in Wood County for about 20 years. She is involved in the Hainesville Community Club, reading, rug hooking, yoga and grandchildren. Sandy found out about the WCMG internship from other master gardeners. According to Sandy she wants to increase her plant knowledge and experience with her gardening.</td>
</tr>
<tr>
<td>Name</td>
<td>Location</td>
<td>Years of Experience/Community</td>
</tr>
<tr>
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</tr>
<tr>
<td>Janet Judkins</td>
<td>Yantis</td>
<td>About seven months</td>
</tr>
<tr>
<td>Steve Judkins</td>
<td>Yantis</td>
<td>About seven months</td>
</tr>
<tr>
<td>Debbie Latham</td>
<td>Yantis</td>
<td>November 2018</td>
</tr>
<tr>
<td>Beverly Ray</td>
<td>Emory</td>
<td>16 months</td>
</tr>
<tr>
<td>Victoria Settle</td>
<td>Yantis</td>
<td>Over 20 years</td>
</tr>
<tr>
<td>Jacque Simmons</td>
<td>Holly Lake Ranch</td>
<td>About six years</td>
</tr>
<tr>
<td>Name</td>
<td>Location</td>
<td>Experience and Interests</td>
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<tr>
<td>--------------------</td>
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</tr>
<tr>
<td>Angela Thompson</td>
<td>Mineola</td>
<td>Gardening experience includes vegetable, flower and greenhouse gardening. Angela has lived in this county for 54 years. Her hobbies and interests include Northside Church, Fannie Marchman Garden Club and DAR. She is a registered nurse and loves to crochet, sewing and canning. She joined the program to improve her gardening knowledge.</td>
</tr>
<tr>
<td>Judy Tubbs</td>
<td>Holly Lake Ranch</td>
<td>Judy’s gardening experience includes her home landscaping, flower and vegetable growing. She has lived in her community for three years. She is involved in Holly Lake Ranch gardeners, quilting and reading. She found out about the gardening program from other master gardeners.</td>
</tr>
<tr>
<td>Mike Whisenant</td>
<td>Mineola</td>
<td>According to Mike, he is a self-taught landscaper. He has lived in Mineola about eight months. Mike is involved with the Texas Baptist Men’s Disaster Relief (chain saw team), Mini-train in Mineola and FBC Mineola. He learned about WCMG educational program “from the good folks at the arboretum.” He wants to know more about native plants.</td>
</tr>
<tr>
<td>Suzanne Whitsell</td>
<td>Winnsboro</td>
<td>She claims to be the family gardener and wants to know more about plants. Suzanne has lived in her community for seven months but owned her property for over four years. She volunteers at the Winnsboro Center for the Arts and loves dogs, music, reading, ancestry, cooking, photography and art. She wants to become a Master Gardener to learn more about plants especially about shade plants and kitchen gardening.</td>
</tr>
<tr>
<td>Mary Williams</td>
<td>Yantis</td>
<td>Mary has 40 years of gardening experience for flowers and shrubs. She has lived in the area for five years. Her hobbies include fishing and golfing. She found out about the master garden class from the Quitman Garden Club. She wants to be a Master Gardener to increase her knowledge and experience.</td>
</tr>
</tbody>
</table>
So many gardeners I visit with are not only tired of the wet weather and wet soil but are getting anxious that the wet ground is keeping them from getting their spring gardens into shape.

I’ve been joking with folks around here that we should start growing rice. I also wonder if we could use a flat bottom Jon boat with an outboard Evinrude to till up the muddy ground without getting stuck.

All humor aside, this wet ground is going to slow gardens down and getting that tiller into your wet, soggy soil sets up a garden for long term problems.

Soil is supposed to have “structure”. Have you ever taken a shovel full of good soil and noticed how it crumbles? Good soil has that structure. Without getting too technical, optimum soil structure allows water to percolate thru, roots to thrive, and earthworms to tunnel in.

We turn under the soil, or “till” it, for a number of good reasons. Tilling controls weeds and prepares a seed bed. That beautiful, freshly tilled ground is made ready for planting and has eliminated competition.

Tilling also manages crop residues and can help reduce insect and disease pressure. Residues from previous growth can be incorporated into the soil, adding organic matter. Burying the older vegetation that can harbor insect and disease will help the new plants get a head start and stay healthy.

But tilling your soil only works when it is at the correct amount of moisture. If the ground is worked while wet, we will most certainly increase soil compaction and decrease its ability to absorb moisture.

You may have heard or read about “plow pans”. In large scale food production, the heavy machinery and over-worked soil can create a compacted layer of soil just below the disked or plowed zone. That pan can create a barrier to water movement, root development, and nutrient distribution. The professional farmers are keenly aware of this and take great pains to avoid or remedy this condition.

Following the lead of commercial growers, home gardeners need to understand the soils they are relying upon. Tilling the ground too often, even when the soil is at the proper moisture, can interfere with macro-organisms, such as earthworms that need time to do their good work.

If you’ve been saying, “But what about no-till? You can’t forget about that option!” Indeed, it is another very good option. No-till implies that you disturb as little of the ground as possible when you plant. And if you have a site that you can do this, you’ll avoid the potential problems I’ve listed above.

One way to use no-till in a home garden is to use a very thick layer of mulch and plant in open (un-mulched) areas to ensure a good crop. I do this all the time in my beds. I only dig up the area needed for planting and heavily mulch all around the seeds or plants.

I know of several raised bed gardeners that simply cannot till their beds but rely upon excellent compost to top-dress their garden beds and plant within. At the local elementary schools where we teach gardening to kids, we use a landscape mix (available by the yard from local nurseries).

This mix is a blend of compost, sand and finely ground pine bark. It is an excellent soil medium. If you use it, you’ll find you don’t need any gardening tools to work the soil.

Best of luck with your garden. Work the soil when it dries out. We’ll look at these days differently during our next drought!

Shaniqua Davis is the County Extension Agent for agriculture and natural resources for Wood County. Her email address is Shaniqua.davis@ag.tamu.edu

The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife.
Lin Grado: Daffodils: The Heralds of Spring

We call them by many names – daffodils, jonquils, sweeties, campernelles, paperwhites – but they’re all narcissus. To me they’ll always be daffodils, as I grew up hearing lines from William Wordsworth’s iconic poem, *I wandered lonely as a cloud that floats on high o’er vales and hills*, *When all at once I saw a crowd, a host, of golden daffodils;*

I know there’s more to the poem, but that’s all my mom would recite when she saw her daffodils blooming in her garden each spring. One of my happiest discoveries on moving to Texas from Florida was that I could once again enjoy these spring bulbs.

Driving down one of the FM roads in Wood County, I stopped to see a field of jonquils on the roadside, all happy and bright and sunny. Smelling like juicy fruit gum, these beauties provide a better show for the senses than bluebonnets (please don’t make me move out of state for saying that). This year’s show has started quite early, with my first bulbs blooming in mid-January and surviving several rounds of mid-to-low 20s temperature. Which daffodils can grow here? Don’t buy what’s in the big box stores if you want your daffodils to return year after year. Pretty much any daffodil you buy will bloom the first year you plant it, but if you want your daffodils to perennialize, you need to be more selective. The easiest way to make sure your bulb is a good performer for east Texas is to buy your bulbs from the Smith County Master Gardener (SCMG) fall bulb sale in October.

I want daffodils that are white and green and pink and yellow and orange and red; I want single daffodils and double daffodils, early daffodils and late daffodils. Is there a blue daffodil yet? I’ll want that too. So I buy from many different sources, from Costco (an inexpensive source) to specialized online bulb nurseries (typically more expensive but with a much wider selection). So how can I be relatively certain that I’m buying bulbs that will do well here? I will share my tips to buying daffodils that will return year after year.

According to the Royal Horticultural Society, there are 13 divisions of daffodils, plus miniatures. If you know what division a daffodil belongs to, you can generally predict its performance here. For example, Division 1 is trumpet daffodils, those with single flowers on a stem and whose trumpet is as long as, or longer than, the petals. Typical of this division is the King Alfred Daffodil offered by the bagful at big box stores. These typically perform well the first year and return sporadically, if at all, in east Texas gardens. Similarly, most double daffodils won’t return – but to be honest I’ve bought some gorgeous double daffodils and planted them as annuals; the price was right and their beauty brought me joy for a season.

The best daffodils for Texas come from Division 7 (Jonquilla, small, fragrant, clustered blooms that locals call sweeties) and Division 8 (Tazetta, with large clusters of up to 20 flowers of small blooms, often with a musky scent, a veritable bouquet on each stem). Most daffodils in these divisions will thrive, return, and increase in east Texas. Some of my favorite jonquils are ‘Golden Echo’ (yellow cup and white petals); ‘Pipit’ (white cup and yellow petals); ‘Kedron’ (orange cup and yellow petals); and ‘Sun Disc’ (gold cup encircled by rounded, overlapping yellow petals). My Tazetta favorites include the incomparable ‘Avalanche’ (an heirloom also called ‘Seventeen Sisters’, a yellow cup with white petals and 15-20 blooms per stem) and ‘Italicus’ (yellow cup and white petals, with a star-shaped bloom).

SCMG also recommend ‘Geranium’ (orange cup and white petals) and ‘Falconet’ (orange cup and yellow petals), but this is the first year I’ve planted them. My favorite double daffodil is ‘Ehrlicheer’, an off-white double that looks like clusters of tiny gardenias; even though it’s in a different division, it clearly has Tazetta in its bloodlines.

Daffodils in bloom are a sign of spring coming to east Texas.
You can still make smarter choices for bulbs from other divisions. Look for bulbs that are described as ‘naturalizing’. Also look for those with a bloom period listed as early- or mid-season; our summers come too early for late-season bloomer. For example, if you were looking for a golden-yellow daffodil with a fairly large cup, you might choose ‘Carlton’ or ‘Gigantic Star’. ‘Ice Follies’ has creamy-white petals surrounding a broad yellow cup that fades to white as it ages, giving the look of two different blooms. My favorite pink narcissus is ‘Pink Charm’, another variety with white petals and a white cup edged in apricot that fades to pink. Finally, if you want a short grower to edge a bed or line a path, you can’t find a better daffodil than ‘Tete-a-tete”, a small 6” daffodil with yellow petals and a darker yellow cup.

Now that you know what bulbs to buy, how do you plant and care for daffodils? Plant daffodil bulbs in the fall when the soil has cooled - generally from Halloween through Christmas. I don't get around to planting mine till after Thanksgiving, and if I've found some good bargains at end-of-season sales it may be Christmas or even New Year's before I plant them. Daffodils need at least 6 hours of sun a day when they're growing, winter through mid-May. Make sure your bed is south or west of any evergreen shrubs so their leaves can get that low sun. Bulbs also prefer well-drained soil, so if you have clay, plant in a raised bed for drainage. When you are picking your spot, consider that daffodil blooms will generally face the sun – so if you plant them on the south or west side of a path, you won't see their gorgeous cups.

I can usually plant 100 bulbs in a half hour or less. Does that sound like boasting? It's not meant that way; I plant my bulbs in the easiest way possible. Many gardeners dig individual holes for each and every bulb, as if they're planting 4" annuals, but the secret to planting a lot of bulbs quickly is to dig a hole to the required depth (usually 4 to 6 inches for large bulbs, 3 to 4 inches for jonquils) that is wide and long enough for a nice spring display. This also ensures that you don't plant your bulbs in a single line like little soldiers all in a row.

Spread some compost in the bottom of your hole, and work it into the soil just a bit. Place the bulbs in the hole pointy-side up, with about 5 or 6 bulbs per square foot (closer if you want a more impressive display, farther apart if you’re content to let them fill in for a year or two). Cover with the soil you took from the hole, top-dress with some more compost, and mulch lightly. That’s it, you’ve planted a bunch of bulbs in just a little time.

As far as continuing care for daffodils, the biggest secret is not to trim, braid, or mow the leaves until after Mother's Day. The leaves need about 6 weeks of growth to feed the bulb for next year’s blooms. The bulbs don’t really need special fertilizer, just a top dressing of compost and mulch lightly. That’s it, you’ve planted a bunch of bulbs in just a little time.

By following these tips, you can have plenty of daffodils next year to welcome spring to your east Texas garden.

For a list of the daffodils in this article and the daffodils I grow in east Texas, as well as links to my favorite online sources, please send an email to txgardengal@gmail.com .

About the author: Lin is the garden manager for the Wood County Arboretum & Botanical Gardens, and is available to answer your gardening questions there each Wednesday from 9 till noon. Her email is txgardengal@gmail.com. For more photos of daffodils in bloom, visit the Arboretum's page on Facebook.
So, this will be the final update on our Spring Conference. I’m looking forward to giving you the wrap-up of how many people came, comments and who all the winners were for the wonderful raffles.

First of all, I want to complement all of the master gardeners who have put in so much time and effort toward the spring conference. I was in the Mineola League of the Arts building today and our conference is on their mind. They are working hard to get some more technology capabilities for us, well really for them, but we get to take advantage of it.

The committee chairs are encouraged to meet next week and walk through the building with me to get a visualization of crowd flow, set-up, and feasible alternatives for rain, etc. I will email them with date options.

I am so proud of the work done on the PLANT*GROW*EAT flyer, it looks great. Karen Musgraves is a very talented person in layout and design of the flyer. I also want to thank her daughter, Kacey Musgraves for her contributions for our raffle.

Since I’ve brought up the raffle, let me say that we have four great raffle options.

- A lovely painted barn square that would look good on anyone’s garden fence or tool shed. This was painted and donated by Ann Fair-Irby.
- A basket brimming with garden tools, books, seeds, gloves, hats, pots, etc. Any gardener would love to have some new digs and things to dig with.
- A gorgeous Leopold Bench with an informative book about Leopold. The bench is hand painted with beautiful sunflowers, built and painted by Wood County Master Gardeners.
- Our last item is the bountiful basket of items donated by the 2019 Grammy Award winner, Kacey Musgraves. The basket is full of CD’s, Albums, Signed Cowboy Hat, Scarves, T-Shirts, jewelry, etc.

Remember, we are selling tickets for the raffle. Names will be drawn for the raffle at the conference, but we can sell tickets before. You don’t have to be present to win.

On the day of the conference we will also have lots of door prizes to distribute from vendors and items we’ve gathered.

Acquiring the vendors and sponsors have taken a lot of work. A big thanks goes out to Ann Reynolds and Ann Fair-Irby for all their effort and follow through. Another thankyou goes out to Shaniqua Davis for all her hard work, leadership and willingness to find answers for all our questions.

I understand that the plants that are being grown for sale are going well. We plan on selling these plants on the breezeway of the fiber arts building in the back. Keep up the good work Keith Zimmerman and crew of master gardener growers.

Gloria Jeane Rosewall has kindly offered to supervise, organize, run, our refreshment area. I’m sure she will need a few more helpers. From what I hear, everything will be a very nice. She has mentioned she is going to need cookies, lots and
WCMG Spring Conference, continued

lots of nice homemade cookies. So please let her know if you can help out with the cookie baking or other refreshment duties.

The master gardener speakers are Deena Taylor and Gayle Mullinax, speaking on preparing the soil for gardening and container gardening respectively.

Everything is in place for our special guest speaker, Daniel Cunningham who is speaking on FoodScaping. I’m looking forward to all of our speakers.

Melissa Deakins is staffing a table with “Tools that Rule” in the Garden. And Linda Timmons will be keeping the kids in our midst busy with hands on projects, hopefully outside.

We will also have tables manned by our master gardeners to answer questions, sell raffle tickets, help with door prizes, and register guests.

The committee heads will need to help with set-up on Friday, March 15 at 1:00 pm.

Hopefully, we all have invited our family and friends to come and enjoy the conference. Please put out all the flyers that you can at any place you do business or community activities.

I’m really looking forward to this conference and I hope you are too. See you there!

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Ann Reynolds: Hawkins City Park & Library

The progress is slow at the city park in Hawkins, Texas. The weather will not cooperate and sometimes we are at the mercy of the city maintenance employees.

Our focus at this time is converting a large, oval flowerbed, that is filled with weeds and 3 sprinkler heads, into a 10' round sensory garden. This garden is located right on the walking/jogging path and next to the children's playground. Hopefully, the city will provide the soil within the next week or two and then the planting will begin!

The "main" flowerbed has daffodils and pansies blooming and volunteers have pruned the roses. Dreams are to convert this flowerbed into a Monarch Way Station this spring with the addition of host and nectar plants.

Hopefully the handiwork of the Wood County Master Gardeners will be evident for Easter in the Park when over 1000 eggs are hidden for children to find and enjoy.

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As you read our WCMG newsletter and learn of all the educational seminars and classes we hold, garden projects we plan and execute, advanced training speakers we share with the public in educational forums, the class room instruction we provide to County ISDs, the newspaper educational articles written by our Associates and the community outreach events we hold, as well as our web-site and Facebook pages, we hope you get an understanding of how great an asset you have available to you especially here in Wood County, Texas.
Upcoming Events

**2019 Wood County Master Gardener Classes**  January 8—April 19  Tuesdays 9:30 am—Noon
*Contact the Wood County Extension Office for more information: 903-763-2924*

**Plant- Grow- Eat  MG Spring Conference**  Saturday, March 16.  9 am—Noon  **Free to the Public!**
Mineola League of the Arts, 200 W Blair Street, Mineola

**WCMG Association Meeting**  Thursday, March 21  9:00 a.m.—11 ish.
Wood County Extension Office (Social time @ 8:30; 3rd Thursday of every month)

**Supercharge Your Garden with Texas Supestar Plants**  April 12, 11:30 am—1:00 pm
Tyler Public Library, 201 S. College Avenue, Tyler  **Free and Open to the Public**

Online with WCMGA

**MG Wood Works Newsletter:**
- You are invited to submit thoughts, lessons, suggestions, upcoming events, or perceptions. You are permitted to count time writing articles as volunteer hours. Please send your articles to: MGNewsletter@hotmail.com
- Unless otherwise annotated, all photos in this publication were taken by the author of the article in which they appear.
- If you have questions please contact the editor: B.J. McGee: MGNewsletter@hotmail.com

**Website** at [http://txmg.org/woodcounty](http://txmg.org/woodcounty) up-to-the-minute news and scheduled events, back issues of the newsletter and seasonal videos. Any new content for the web-site can be sent to Keith Zimmerman: keithzim@yahoo.com

**Facebook:**  [https://www.facebook.com/Wood-County-Master-Gardeners-Inc-205733709448425/?fref=ts](https://www.facebook.com/Wood-County-Master-Gardeners-Inc-205733709448425/?fref=ts)
**Facebook Group:**  [https://www.facebook.com/groups/1534107646899295/](https://www.facebook.com/groups/1534107646899295/)

**Master Gardener Advanced Training**  through Texas A & M AgriLife Extension

**Sunshine:**  Know of a member who needs a get well, warm thought, or sympathy card?
Contact  Elaine Porter:  porterpettus@gmail.com  361 319-7300

**Volunteer Hours:**  [http://texas.volunteersystem.org](http://texas.volunteersystem.org)  Just click on the link and you will see where to enter your password. Before logging in, right click on the page and save to favorites or bookmark or Create Shortcut to your desktop. Thanks for entering your hours. If you need help contact Peggy Rogers.

**Associate Roster:**  You can find all e-mail addresses and contact information for other Master Gardeners. Available after logging into the Volunteer System.

*Update your profile in the Roster!*  Is your phone number up to date? Have you changed your email address? Did you move? Have you uploaded a photo? Please check your listing to be sure your contact information is up to date

**Become a Master Gardener!**
Contact the Wood County Extension Office:  **Phone: 903-763-2924**

[Click to return to index]
Green growing things! Come January, my fingers are itching to get things growing for the spring garden. I have tried growing seedlings in a south facing window in the winter. I even tried adding one of those single tube fluorescent grow lights from the local big box store. My poor seedlings were pale, spindly things!

This year I decided that a better growing set up was in order. I needed a REAL grow light—definitely something more than my single fluorescent tube and the window sill. Wikipedia defines a grow light as “an artificial light source, generally an electric light, designed to stimulate plant growth by emitting a light appropriate for photosynthesis.” A light appropriate for photosynthesis means a light with the right values of lumens and Kelvins.

Lumens is a measure of the brightness of light. The higher the lumen value, the brighter the light. In order to not become spindly, plants need brightness in the order of 2,000 – 3,000 lumens.

A Kelvin is actually a unit of thermodynamic temperature. For plant light purposes, Kelvin is used to describe what color the light appears to be. Cooler (blue) light, which is around 6500 °K, is best for photosynthesis and vegetative growth. Warmer (red) light of around 3000 °K, is best for stem growth, flowering, and chlorophyll production.

For the home gardener, there are several light options available. Fluorescent and LED lamps tend to be the most affordable for home use.

LED lamps are a newer technology, and come in several shapes, sizes, and price ranges. A web search of LED grow lamps will produce a list of many inexpensive red and blue units that do not output sufficient brightness for starting plants; in fact, many online reviews show that their brightness is often much less than what is advertised.

Much better are tubular LED lamps that are designed to be retrofitted into standard fluorescent fixtures. These lamps are often targeted towards commercial growers, produce full-spectrum white light, and are much more efficient than fluorescents. However, they are much more expensive than their fluorescent counterparts.

Fluorescent lamp tubes have been around for several decades. They are denoted by their shape and diameter; the most common being T5, T8, and T12. The “T” indicates that the lamp is a straight tube and the number following is the diameter in eighths of an inch. Thus, a T5 bulb is a tube of 5/8” diameter. There are also different brightness output levels: normal output (NO), high output (HO) and very high output (VHO). HO bulbs provide a happy medium, being both energy-efficient, yet long-lasting.

After investigating many options, I decided upon a 24” long four-bulb T5 fluorescent fixture. This size works with my space constraints and allows me to cover a 1’ x 2’ flat of seedlings. I can also mix both 3000 °K and 6500 °K tubes in the same fixture in order to provide wavelengths beneficial to all the growing stages of my seedlings. This also provides the option to upgrade to LED tubes in the future, if desired.

Overall, this has been a great learning experience. I learned that my cheap little window-sill lights were totally inadequate to produce healthy seedlings, but from the information online, I was able to vastly improve upon this earlier effort. Today, my seedlings are the healthiest and happiest that I have ever started under grow lamps!

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Tina Rainwater: Grow Lights for the Impatient Gardener

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Elaine Porter Spreads the Sunshine!

The MG Sunshine representative sends cards to members who need a get well, sympathy, encouragement, thank you, or other occasion needing special attention. If you know of someone who should receive a card, please let me know.

Ever thought why we send cards? I personally feel it is a special way to show compassion. Compassion is easily understood to be sympathy, empathy, and/or sorry one person or group has for the misfortune or suffering of someone else. It can be summed up as feeling another’s hurt in your own heart.

Likewise, we share our appreciation for another’s good deed and celebrate our triumphs. A card is more authentic, more personal... more emotional... more sharing. Nothing like an actual greeting card to make someone feel consoled, cheered, reassured, or appreciated.
Wood County Master Gardeners present their
Spring Conference

Plant Grow Eat

Saturday, March 16, 2019
9 am ~ 12 pm
Free to the public!

at the Mineola League of the Arts Facility
200 W. Blair Street, Mineola, TX

Daniel Cunningham
Guest Speaker on Food-Scape

- Classes taught by Master Gardeners:
  - Preparing Your Garden to Plant
  - Container Vegetable Gardening
  - Tools that Rule in the Garden
- Vegetable & Herb Plant Sale
- Auditorium full of Vendors
- Kid’s Table
  - Teaching gardening know-how
- Door Prizes
- Raffle Items, including:
  - Hand-Painted Barn Square ~ Hand-Painted Leopold Bench
  - Hand-signed Kacey Musgraves Merchandise

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