

Tarrant County Master Gardener



TEXAS A & M AGRILIFE EXTENSION SERVICE

Volume 3, issue 5

May & June 2019

Thistle Hill Welcomes the Butterflies

By Lorie Grandclair-Diaz &

Keith Olmsted

The Master Gardener Interns from the Winecup team have had a fruitful spring at historic Thistle Hill. Intern Devra Woodfin submitted a grant to the Native Plant Society of Texas on behalf of Thistle Hill, and the project was awarded a \$400 grant to purchase Texas native plants for a new Monarch Watch Bed & Way Station. Since then, the group purchased many native plants from our own TCMG Plant sale in Bedford, and have installed them in a new bed. They are currently planning to add a stone bench and two new walkways from reclaimed brick that at was once in the terrace behind McFarland House Mansion on Penn Street. (last year's Winecup team also used bricks from McFarland House for an herb garden on the SE corner of Thistle Hill) This addition will be a lovely spot for photo ops and to just relax and watch the butterflies.

In addition to thanks to the Native Plant Society of Texas, Project Chairs Keith Olmsted and Elizabeth Staples would like to thank the following:

- David's Patio, 3001 E. Hwy 199, Springtown, Texas for donating the stone bench.
- The Western Hills Garden Club for a generous \$200 donation. They toured Thistle Hill in March, and selected the project for their annual donation.
- The 2019 Winecup Intern class of Devra Woodfin, Jim Mclean, Danese Dunaway, David Burlingame, Jane Curtis, Margaret Olubodun and Janet Shull.

Keith and Elizabeth would like to invite everyone to stop by and visit the Thistle Hill gardens. Our Tarrant County Master Gardeners continue to work hard to maintain these gardens for the public. They gather on Wednesdays around 8 to 9 and finish up around 11:00 to 11:30. They do tours and horticulture education on native plants, composting and the historical significance of this beautiful property.



Tarrant County Master Gardener

The happy, experienced and dedicated team of Perennial Gardeners is searching for new co-leads. If you can assist with the leadership responsibilities, please join us on Wednesday mornings in the FWBG Perennial Garden, 8:00 - 11:00. Valerie and Mercy will be available until mid-May to provide hands on training. Contact Valerie at 832.264.3492.



WEEDING IS WONDERFUL - POEM NOW RE-NAMED: THE AGONY AND THE ECSTASY

Days of dirt and grime, sweat and toil
A gardener's joy is working the soil
Bending and kneeling, huffing and puffing
I feel like a teddy bear losing it's stuffing
I looked in despair at the weeds in the border
I knew it would take hours to get it in order
Back breaking work, hands stiff and sore
When I've finished I'm aching right through to my core

The sight I behold now though is worth all the pain
And I know without doubt I would do it again
The satisfaction I get from that weed-free bed
Gives joy beyond measure, as I see in my head
A profusion of flowers blooming bright in the sun
Giving fabulous confirmation of a job well done

So my fellow Groupies I beg you. take heed
And think of the joy you will get when you weed
I know it's a chore, it's a task we all hate
But the pay-off's enormous when your garden looks great
I cannot believe something as simple as dirt
Would make me euphoric and forget all the hurt
I'm aching, I'm throbbing, but in a short while
I'll forget all this pain, look at my border and smile

The poem left is by Jean Guest, a gardener who resides in Bristol, UK, and was provided by Nancy Taylor.



Common Yarrow, Western Yarrow, Yarrow, Milfoil

Achillea millefolium L.

Asteraceae (Aster Family)

Content provided by Theresa Thomas

Yarrow is a perennial that grows to 3 feet tall and has no branches except near the top. The leaves are **alternate**, 3-5 inches long, with many leaflets on each side of the **midrib** (1- pinnately lobed); and these are further divided into smaller leaflets, giving them a delicate, fernlike, lacy appearance. **Flower** heads are arranged in large, compact clusters at the top of the **stem**, each cluster consisting of 1 or more **flower** heads. The **flower head** has 20-25 yellowish-white (rarely pink) **ray** flowers and similarly colored disk flowers.

Bloom Information

Bloom Color: White , Pink

Bloom Time: April, May , June , July , August, September

Bloom Notes: Flowering late April through early July (south), mid July–mid September (north)

Growing Conditions

Water Use: Medium

Light Requirement: Sun , Part Shade

Soil Moisture: Dry

Drought Tolerance: High

Benefit

Use Ornamental: This is a good garden plant, as it can be used in fresh or dried arrangements and has a pleasing fragrance. Flat-topped clusters of small, whitish flowers grow at the top of a gray-green, leafy, usually hair, stem.

Use Medicinal: Yarrow was formerly used for medicinal purposes: to break a fever by increasing perspiration, to treat hemorrhaging and as a poultice for rashes. A tea used by **Native** Americans to cure stomach disorders was made by steeping the leaves.

Use Other: The foliage has a pleasant smell when crushed.

Conspicuous Flowers: yes

Interesting Foliage: yes

Fragrant Foliage: yes

Special Value to Native Bees

Propagation

Propagation Material: Seeds

Seed Collection: Light tan at maturity, seeds mature in late summer and early fall. Collect entire inflorescence and dry before cleaning.

Seed Treatment: Direct seeding.

Reference Information from the www.wildflower.org



Tarrant County Master Gardeners Continue Their Winning Tradition

By Jim Jenson

International

On June 20, Eleanor Tuck, on behalf of TCMGA, will accept the Search for Excellence award for Special Needs Audiences at the 2019 International Master Gardener Conference in Valley Forge, PA. The second place award is in recognition of TCMGA volunteers' work with the Goodwill Industries S.T.A.R.S (Skills Training Achieves Results) program at the GreenWorks Learning Center.

The goal of the S.T.A.R.S program is to help adults with significant or multiple disabilities achieve as much independence as possible and improve their quality of life.

Our master gardeners work with these special needs individuals to help them achieve that goal using gardening-related activities in the GreenWorks Learning Center which consists of a commercial-grade greenhouse made possible by a grant received by Goodwill and a potting shed provided by the county.



S.T.A.R.S participants learn assimilation and socialization skills through their interactions with each other and the master gardeners who share with them the joy and satisfaction of working with living plants. They develop a sense of responsibility, expanded vocabulary and verbalization, improved hand-eye coordination, learn how to follow directions and experience the pleasure of seeing the outcome of their efforts. Some of the plants grown in the program are sold at local Goodwill retail outlets and TCMGA events. All the money brought in from these sales is put back into the GreenWorks program for supplies.

The following master gardeners make this program possible through their tireless efforts: Claire Alford, Betty Mims-Arber, Betty Story, Charlene McMorrow, Taddie Hamilton, Eleanor Tuck, Judy Ratzlaff, Lance Jepson, Nancy Curl, Pat Higgins, Patti Maness, Rocky Deutscher, Ruth Robinson, Cheri Mills, Diana Vincenti and Theresa Thomas

But wait, there's more . . .

State

The Tarrant County Master Gardener Association also collected five Search for Excellence Awards at the 2019 state convention in Victoria, TX.

1st Place Written Education TCMGA Newsletter

Over the last 30 years, the TCMGA newsletter has evolved from a printed format that was mailed to our current online editions going back 15 years. The newsletter is a communications tool to help inform not only our members but the general public as well. Anyone who logs onto the website can view any of the available editions that are online. A dedicated committee of four, with guidance from the county extension office puts the newsletter together each month. Other TCMGA members are also encouraged to contribute articles.

2nd Place Youth/JMG Peter Rabbit Players

The Peter Rabbit Players present a puppet show to school children to show them where vegetables come from, how to prepare them so they taste good, how different cultures prepare them, and how insects play an important role in helping vegetables grow. The program entertained 1159 children in 24 shows during 2018. It is also popular with teachers and parents and has received statewide recognition. A long-time master gardener with 30 years of puppeteer experience is the creative force behind the program. Today, 27 master gardeners work in the production.

2nd Place Outstanding Association Tarrant County Master Gardener Association (TCMGA)

Our 401 members proudly volunteered 50,776 hours and drove 368,124 miles for our 27 projects, daily phone desk coverage, Home and Garden Shows' education booths, Speakers Bureau and to offer Advanced Training in Propagation and Greenhouse Management utilizing research-based educational gardening information. Individuals in our community turn to us to help solve gardening problems and for assistance with weather/disease/insect issues.

3rd Place Project TCMGA Intern Project Grapevine Botanic Garden (GBG)

This 2018 intern project transformed a shaded and undeveloped area of the GBG into a perennial shade garden. The interns developed the project plan in conjunction with GBG officials and received approval from the city of Grapevine. The new landscape provides a public learning opportunity that complements the other gardens at GBG. It incorporates elements of texture, size, color, and a child friendly lack of thorns and berries. Eight master gardener interns and one intern advisor provided 110 volunteer hours to bring this project to fruition. What was once an unvisited area at the GBG now provides visitors with a new perspective on what can be done in a shady area.

3rd Place Educational Program Durham Intermediate School Garden

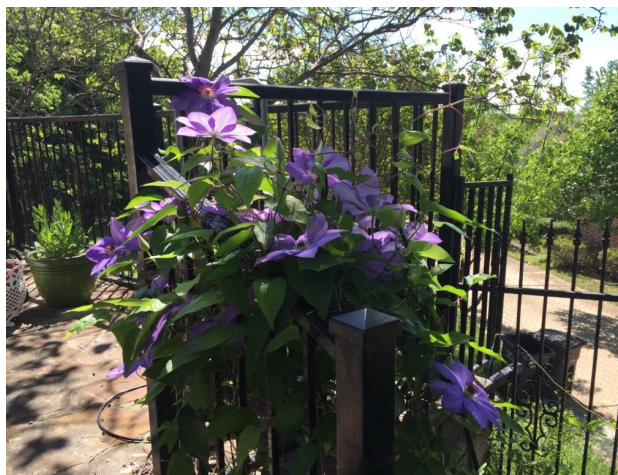
This program is a collaboration between master gardeners and the Durham fifth-grade science faculty who selected this grade level based on their developmental stage and the ease of integrating Junior Master Gardener lesson plans into their science curriculum. The lesson plans include vegetable gardening, a butterfly garden that incorporates pollinator conservation and basic entomology, composting and companion planting, as well as basic research concepts. Kids get hands-on experience with gardening activities and the opportunity to observe the plant life cycle over seasonal changes. They also learn to use measurement tools and how to record their observations. Sixteen master gardeners contribute their time and effort to this program.



Accepting Search for Excellence Awards for TCMGA from left to right: Ginger Bason, Lorie Grandclair-Diaz, Avice Ward, Joyce Hallbauer, and Steve Chaney

What's Blooming in Your Garden?

These photos are from the garden of Patti and Jim Maness. Gorgeous!



A New Publicity Committee

A reloaded Publicity Committee is available to provide art, marketing and communication support for Master Gardener projects, events and achievements. We want to capture your achievements for the ongoing fabric of Tarrant County Master Gardener history. Here are the committee members and the assistance they offer:

Art (Art-Layout-Design): *Laura Madsen, Sharon Neel, Desi Scott, Mary Thomas*

- Decorative painting for garden items and small signs
- Original paintings for print pieces
- Layout and design for brochures, poster and flyers
- Artistic photography

Lead time: 30 days or as availability permits Completion date: As agreed

Facebook: *Linda Hawkins, Gay Larson, Theresa Kay Thomas, Angela Hathaway, Susan Houston*

- Administrators and Editors posts photos, video clips, educational articles and TCMGA events.
- Answers gardening questions from people who follow our Facebook page

Share your photos and articles covering safety and other informative and educational topics, current and seasonal gardening events, and Master Gardeners having a good time. Please include captions or a brief description of submitted content/images.

Lead time: Send anytime

Instagram: *Jenny Spencer, Angela Hathaway*

Posts photos covering gardening topics and events. Please add a caption for submitted images.

Lead time: Send anytime

Photography: *Susan Houston, Janice Sims, Deborah Brown, Jenny Spencer*

- Documents TCMGA events and activities.
- Provides public access to pictures/videos
- Intern Photos
- Membership Directory Photos

Lead time: 2 weeks Completion date: As agreed

Writing/Editing: *Sharon Hidden, Jim Jensen*

- Creates content for any article or announcement submitted
- Technical writing
- Editing

Lead time: 1 week Completion date: As agreed

Video: *Angela Hathaway, Laurin McLaurin*

- Educate/Inform/Inspire
- Events
- Adverts

Lead time: 1 week or as availability permits Completion date: As agreed

Please call or email Mercy Kettler or Rene Muhl for Publicity Committee availability.

AGENT'S CORNER

Understanding Natural Fertilizers

By Steve Chaney, Texas AgriLife Extension, Tarrant County

Content provided by Theresa Thomas

From the Sharecropper July 12, 2012 Issue

If you want to have a healthy, productive garden the first key step is to build great soil. Many gardeners make the mistake of looking first to fertilizers, tonics, or a multitude of miracle working concoctions to produce great plants. There is no long-term substitute for proper soil building. If your soil is poorly drained, too acidic or alkaline, compacted, low in organic matter or has poor structural characteristics, it doesn't matter how much fertilizer you add, the results will be disappointing.

Build your soil first and then fertilizers can play their proper role in promoting plant health and production. Fertilizers are most effective when used to fine tune a soil situation that is already working relatively well. Healthy soil grows healthy, productive plants and is the place where any great garden begins.

Start by adding compost to improve the soil's structure, internal drainage and water holding ability. It stimulates soil microbes and breaks down to feed plants gradually over time. If drainage is at all in question, build raised planting beds to insure that plant roots don't sit in soggy wet conditions.

Have your soil tested to determine the pH and nutrient levels. This provides the basis for correcting deficiencies and preventing nutrient excesses or imbalances. When you get the soil right, plants will naturally thrive. Once the soil has been properly prepared it is time for planting and any fertilizer additions. I just want to stress that fertilizer is a wonderful thing for fine tuning plant health and stimulating maximum production, but is not a fix-all for poor soil conditions.

Compost and manure are soil conditioners that build the soil. While they contain nutrients, their nutrient content is fairly low and as such they are generally not considered fertilizer. Some animal manures (such as poultry manure) are more potent and as such are sometimes formulated into fertilizer blends, but most should be viewed more as a soil amendment.

Natural vs. Organic

The focus of this article is on natural fertilizers as opposed to synthetic products. Sometimes the words natural and organic are used interchangeably but this is not correct. Not everything of natural origin can legally be called organic. Some fertilizers are officially designated as organic, a term reserved for those products that meet strict requirements, originally specified by the Texas Department of Agriculture and now superseded by the USDA's organic regulations. As a result, many natural products are not officially certified as organic.

Rather than get tied up in official laws and regulations, I will simply focus on products that are natural in origin to distinguish these fertilizers from "synthetic" or "chemical" products. Growers wanting to produce vegetables and fruits organically will need to verify a particular fertilizer's status before using it on their crops.

Why Use Natural Fertilizers

Natural fertilizers are typically lower in nutrients than their synthetic counterparts. They also tend to be more expensive per unit of nutrient. Additionally, plants take up nutrients in their basic form, not in a synthetic or organic form. Thus whatever type of fertilizer you use, it will have to break down into the same basic elements for plants to be able to take those elements up.

So why use a natural fertilizer? One reason for gardeners wanting to grow things naturally is simply the fact that they are natural as opposed to synthetic. Gardening is a hobby and source of enjoyment and fulfillment. It is generally not a means to survival and so a few dollars on a natural fertilizer is not significant when you consider that gardening is really a quite inexpensive hobby...or at least it can be, right?

Synthetic fertilizers release nutrients rapidly in most cases, and are often salt based. Thus they can burn plants,

something very few natural products will do. The natural fertilizers release their nutrients gradually as they break down by microbial action. This extends the nutrient release to gradually provide plants nutrition over time. It also helps to reduce water pollution through runoff and leaching. In recent greenhouse turf studies at Texas A&M University, several natural fertilizers produced a top quality turf and had much lower rates of runoff and leaching than several synthetic blends tested.

Natural products stimulate soil microbial activity and in a small way add organic matter to the soil. They contribute to the process of building soil. They are not just 3 major elements in a bag of filler but being derived from once living materials contribute micronutrients and growth stimulating substances.

Types of Natural Fertilizers

Natural fertilizers may be divided into three basic categories based on their origins: plant based, animal based and minerals. Plant based fertilizers include alfalfa meal, corn gluten meal, cottonseed meal, and kelp meal. Animal based fertilizers are primarily a byproduct of the meat processing industry and the commercial fishing industry. Common animal based fertilizers include blood meal, bone meal, feather meal, fish meal and fish emulsion. Mineral fertilizers are mined from the earth. They include greensand, gypsum, lime, soft rock phosphate, and potassium magnesium sulfate. Let's take a look at these natural fertilizers individually.

Alfalfa Meal is used for animal feed. It contains about 3% nitrogen and makes a good low concentration fertilizer. I have even used pelletized rabbit feed in the garden as it is much the same as alfalfa meal.

Blood Meal is a byproduct of slaughterhouses. The blood is collected, dried and powdered. It is very rich in nitrogen (about 12%) and in fact is a top choice among natural products when only nitrogen is needed. It also contains trace elements including iron. This however is one natural product that can burn plants if used in excess, so take care to not over apply it.

Bone Meal comes from the slaughterhouses and is one of the better known natural fertilizers. It contains about 12% phosphate, most of which is available. This makes it a good choice for a fairly quick fix. Many soils already contain high levels of phosphorus, which leads to iron tie up and subsequent iron deficiency of the plants. Take care not to overuse this "middle number" on the fertilizer label, and base any phosphorus additions on soil test results.

Corn Gluten Meal is derived from grain corn. It is high in nitrogen, containing about 10% and as such makes a great supplement for many garden and lawn uses. It also has some weed deterrent qualities, so you should take care when using this product in a garden where seeds may be planted within a couple of months.

Cottonseed Meal is a byproduct of the cotton industry. It is used in producing livestock feed but also makes a great fertilizer. It tends to be somewhat acidify-

ing, a very positive trait for gardeners in the western 2/3's of the state or for east Texas gardeners growing azaleas, camellias, and blueberries. It is a good source of nitrogen and generally has a nutrient content of about 6-2-2.

Feather Meal is acquired from the poultry industry. The ground material is high in nitrogen (approximately 12%) but is in a form that is very slowly available. Therefore it is more effectively used for long term nitrogen supplementation rather than as a quick fix for a growing crop of vegetables.

Fish Meal contains about 10% nitrogen. It is very useful in giving plants a boost of this primary nutrient. I like to mix some into the soil prior to planting and also use it to side dress plants when they need a little extra vigor.

Fish Emulsion is made up of finely ground fish parts that have been partially decomposed. It is high in nitrogen and trace elements. Specific nutrient content is about 5-1-1 but varies considerably among various manufacturers and depending on how it is processed. This product is a favorite for both soil application and foliar feeding when diluted properly. The older types had an odor that let the neighborhood know you had fertilized and would most likely have every cat in town salivating big time. The odor dissipates in a couple of days, but you would not want to use it on indoor plants for sure! Newer formulations are available which have been pretty much deodorized. Continued on next page

Greensand is a clay type mineral, also known as glauconite, which contains about 5% potash. The nutrient is tightly bound up in the compound and is only very slowly available. It is much better suited to long term soil building than quick fix results.

Kelp Meal is basically seaweed that has been dried and ground. It is low in nutrients, containing about 1% nitrogen and 2% potash, but it also contains magnesium, sulfur and many trace elements. There are also many seaweed extracts that are popular as a foliar applied product.

Gypsum is most commonly promoted as a way to “fix” tight clay soils. However it works only on clays that have high levels of sodium which destroys soil structure resulting in tight, poorly drained soils. Gypsum knocks the sodium off the soil particles replacing it with magnesium and thus leading to better structure. Gypsum will not help just any clay. It provides the nutrients calcium and sulfur and is a good way to supplement these nutrients when they are lacking.

Lime is basically a source of calcium and a way to raise pH in an acid soil. It is mined from the earth and is primarily needed in the east Texas areas where acidic soils prevail. Dolomitic lime also contains magnesium, another element often lacking in the acid sands of east Texas.

Soft Rock Phosphate is mined from ancient marine deposits. It contains about 30% phosphate but most is unavailable to plants at any given time. In fact only 1 to 2% is available. Very slowly over time this phosphate is released to the soil solution where plants can receive the nutrients. This is a good long term solution in soils where phosphorus is lacking.

Potassium Magnesium Sulfate is also known as lang-beinite. It is mined from the earth and ground for sale as a fertilizer. This fertilizer contains 22% potash as well as 18% Mg and 27% sulfur. Companies often process this material into various forms, which are thus a bit less “natural” perhaps than the mined form. Sul Po Mag and K Mag are two common brand names of potassium magnesium sulfate fertilizer.

Blends are combinations of ingredients formulated into fertilizers with popular ratios of nitrogen, phosphorus and potassium. For most purposes in most areas of the state, in the absence of a soil test a good rule of thumb is to apply a 4-1-2 or 3-1-2 blend of nutrients. This avoids adding too much phosphorus, while provides nitrogen, which is almost always needed and potassium, which is also often needed.

Many of these natural fertilizer products are available in local garden centers. Others may not be locally available. Buying them by mail order can be expensive. In such cases it is often best to make do with locally available products. Plant nutrition is not an exact science and although it is easy to get lost in the numbers just remember that well built soil is very forgiving and exact blends are not essential.

Conclusion

Natural fertilizers can be an integral part of a good soil building program for your garden and landscape. Along with compost additions and soil testing they provide the basis for a healthy productive garden.

Remember to start with a soil test to determine your soil’s current nutrient status and needs. Build soil prior to planting and continue to improve it by amendments and proper fertilizing each time you transition from one crop to another.

While some natural fertilizers provide a quick fix, similar to the way synthetic products can, most are part of a long term solution. The goal is to build soil that need few additional inputs rather than soil dependent on a continual series of “quick fixes”. Gardeners who want to garden naturally are willing to build their gardens over time recognize the value in such an approach. They will enjoy the benefits for years to come in terms of great soil, healthy plants, and productive gardens.

A Note From Our President



Our June Meeting is the Silent Auction that benefits the Projects. This fundraiser always has great things to bid on, so bring lots of cash. This is one way to support each lead and each volunteer that work at the projects. The projects appreciate the opportunity to earn money for their project needs.

If you haven't signed up to work at one of the TCMGA projects you are missing out. We have the best time learning ourselves and sharing with the public. We say this all the time but there is a way to help for everyone. If you don't believe it I challenge you to ask a Project Lead.

To top the morning off at our meeting, Dave Wilson is bringing his BBQ for all the members to enjoy. And yummy sides will be provided by our members. There will be \$5.00 charge. Dave always has extra that members can take home for an extra \$5.00 already bagged up and ready to go.

There will be 3 CEUs after the meeting in the Maple Room.

Last month on April 24-27 was the Texas State Conference in Victoria, TX. There were 9 TCMGA members that went for the weekend. I think that all of us picked up something new to bring back and share with our members. There is a new State Logo that was unveiled at the meeting that you will be hearing more about. They finally finished the State Handbook and is at the printer.

Next year's State Convention is May 12-14, 2020 in Waco, TX. It is close enough we should have more TCMGA members that will be able to attend.

INTERNATIONAL AND STATE TCMGA AWARDS for 2018. Congratulations to each and all TCMGA winners. There is a wonderful article on the In Search of Excellence Awards by Jim Jenson in this newsletter about all the awards and winners. Please read and congratulate them.

Three new Computers have been ordered for the office and should be arriving any day.

In thinking about my report, I was going over all the happenings and all the members that make them happen throughout our Association this year. All you need to do is read the Eblasts, Newsletter, Facebook and Instagram to see it. How can you not be excited and want to get involved? **THANK YOU THANK YOU each and everyone for supporting and representing TCMGA.**

This is mid-year so how are you doing in getting all of your Certification hours for 2019? If you need help let us know.

Theresa

The best fertilizer is a gardener's shadow.