

Williamson County Master Gardener Journal

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Williamson County gets a New Class of Master Gardeners!



The Williamson County Master Gardeners are happy to welcome thirty-four new members to their ranks. On August 12, an orientation meeting was held where the Williamson County Master Gardener Association's President Wayne Rhoden discussed with the prospective trainees what the program entails and what their part in the organization would be. After Wayne's presentation the new County Extension agent, Bob Whitney, talked to the group about the role he wanted them to play.

The new class come from from all over the county, but the majority are from either the Georgetown area, Round Rock, or parts of Austin within Williamson County. Six new members are from the west, either Leander or Liberty Hill, and one comes from the east in Taylor.

Since orientation the students have been exposed to Earthkind gardening techniques, Earthkind roses, Oak Wilt and of course more details about the Master Gardener Program and its relationship with the state and extension service. Over the next month they will be discussing soils, fruit and nut trees, vegetables, perennials, herbs, and native plants. As always, if you need to catch up on a lecture topic you can come and sit in. In fact, we have several new members joining us from other parts of Texas who are auditing the classes to learn what they need to know to help members of our community.

This new class are dynamic, enthusiastic, and excited to be amongst our number so take the time to welcome them at our next monthly meeting on September 8th.



In the News

OK, so these guys don't look so happy but they were listening to the fascinating lecture with the new students. Remember, if you are still needing volunteer and advanced training time contact John Papich to sign up—we have fun!

Green Gardening

Austin recently held a Green Gardening Symposium at Zilker Park. Ingrid Langdon and I went along to see what it was all about. The first day on the August 5th, covered “How to Design and Install an Earth-Wise Landscape.” It started with the ideas and designs of John Gleason, Landscape Architect of the Watershed Protection Irrigation Planning. We saw how he had put Green Gardening Practices into action at his own home. This actually made the whole concept “real” and proved to be incredibly informative and suggested numerous ways of using his plan. Karen Stewart, a Water Utility Conservation consultant from the City of Austin, discussed various aspects of the City's policies and how we could use them. Rainwater Harvesting expert Dick Peterson, from Austin Energy Green Building, advised the audience on the latest techniques and offers available.

Day two started on August 7th with an informative and exceptional talk by Denise Delaney, Horticulturist with Watershed Protection on maintenance of native plants.

Wildlife Habitats organizer for the City of Austin Alice Nance, Parks Conservation Program Coordinator, discussed the

City of Austin's current policy on Wildlife Habitats.

Installation Techniques were discussed by Liz McVeety, Botanist at Zilker Garden and the Center's Coordinator. It was an exceptional opportunity to see what Austin was implementing and what would eventually become the norm for all of us.

Seed Cleaning Parties

More seed cleaning went on in August and was a lot of fun. We ran out of seeds early but still were given lunch. I think from the

three of us there—Gaye Kriegel, Janet Church, and Christine Powell—we all agreed that coneflowers (*Echinacea spp.* below) were not high on our list of seeds to clean. They were sharp and, at times, painful but it was very interesting to study the various types of seed in a genus and observe all the variations.

Seed collecting goes on all year so it is a never-ending cycle. Join us on September 13th or at one of the other parties on the calendar.

Next Monthly Meeting

At our general monthly meeting on September 8th, our very own Jeanne Barker will give us a “moving” presentation on Worm Composting. Make a note of the date now and join us for a stimulating talk and to see old friends and make new ones. Remember, this is an approved advanced training opportunity (and who doesn't love worms!). See you there.



Liz and Jack Grieder really enjoyed the Fall Vegetable Gardening class held at Gardenville on August 16th. Wayne did a great job and the classroom was packed to standing room only with eager gardeners.

Master Gardener Classes

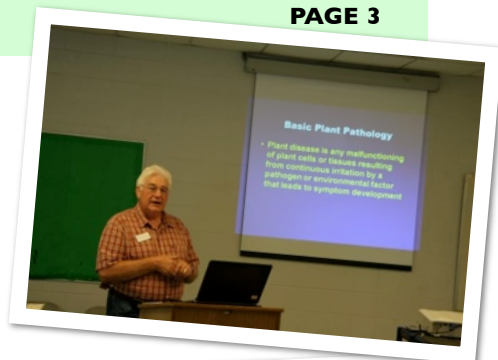
Master Gardener/Junior Master Gardener Teacher Training

Wayne Rhoden

From July 29 through August 1, the Williamson County Master Gardeners trained seventeen teachers from schools in Georgetown, Round Rock, Leander, and Austin on the same

subjects that our Master Gardeners receive in the master gardener training. In addition to that training they also were trained to set up and administer Junior Master Gardener Groups in their schools. All of the teachers were enthusiastic about the class and left to go to their various schools and start training our youth about gardening and earthkind landscaping. The Williamson County Master Gardener JMG specialists will mentor the teachers and help set up the JMG programs in each of the schools and assist with planning gardens for the schools. After setting up their JMG groups and volunteering the same hours as our master gardeners, they will become certified master gardeners in our program. Many of the teachers have attended our monthly program and educational programs to earn their certification. Our thanks go out to the members that helped with the training and

appreciate the ones that taught the classes. Members that helped and taught classes are Winola Van Artsdalen, Wayne Rhoden, Jeanne Barker, Patsy Bredahl, Juanita James, John Womack, Sandra Rosen, Leslie Myers, Sam Myers, Nancy Moore, Teresa Robinson, and Eileen Files. The Herb Study Group from Bell County also came to present a program on growing and using herbs. A special thanks to our new County Extension Agent, Bob Whitney, who took time out of his moving chores to help teach the programs on soils and vegetables.



Images by Sam Myers



Bob's watering tips

The August 11 meeting of the Williamson County Master Gardener Association was treated to a presentation by new Williamson County Agent Bob Whitney. After introducing himself (see Sidebar), he began his presentation on water use and conservation. As Bob pointed out, one of the more important questions in gardening (and in our part of the world perhaps the most fundamental) is "How much water do I need to put out there?"

The answer to this number one question asked of extension agents and Master Gardeners is often "Far more water than you think." That is a problem these days, when water systems in much of Williamson County are imposing dramatic conservation measures. These restrictions are, in part, a short-term result of the current severe drought conditions, which have lowered both reservoirs and aquifers to historic lows. However, it would be foolish to ignore the long-term issues that will likely make water restrictions a permanent feature of life in Central Texas.

The restrictions are largely a consequence of growth within the service areas of water utilities that have reallocated supplies from their existing customers' yards and gardens to household use in new subdivisions. Water, not roads or other infrastructure, has become the critical limit to growth. To meet state requirements, the utilities cannot connect a new customer unless they can assure an adequate household water supply for at least thirty years. Often, they are unable to promise this without dramatically reducing the average level of consumption by all their customers, including those who have planned and planted gardens based on the former levels of water availability. Low-flow toilets and the like can only do so much, compared with cutbacks on lawn and garden irrigation.

As a result, some utilities in Williamson County have restricted watering to using a handheld hose between 8 PM and 7 AM just one day a week. The majority of utilities still allow automated irrigation systems, but they have substantially restricted days, times, and methods of operation. Since this is going to be an increasing issue, homeowners and farmers both need to learn more efficient ways to use the available resources. That is why it is so critical to answer the question, "How much water do I need to put out there?"

The normal rainfall in this area is roughly thirty-five inches per year, with twenty-two inches in the growing season. The native vegetation in Central Texas expects about this amount on average, although it can tolerate drought years. The "exotic" turf and other plant species (native to Europe, Asia, or the Northeast U.S.) that are often found in local lawns and gardens require substantially more water... and need it every year.

In 2008, the driest areas of the county have had only a few inches during the growing season. Most homeowners are trying to replace the missing rainfall by broadcasting artificial irrigation through a sprinkler system. For most of us, that is financially impractical. An inch of rain covering an acre of land is 27,154 gallons, so if all the annual rainfall on a typical 1/4-acre lot were replaced artificially through an irrigation system, it would require almost 238,000 gallons. Check your latest utility bill to see how much that would cost you. Then consider: that would still be insufficient to save most of the exotic species on your property. Clearly, there needs to be another way to deliver the water you need to put out there.

Besides the obvious suggestion to



A WORD FROM OUR SPONSOR

Bob Whitney gave a brief biography at the August 11 Master Gardener Meeting. You could read many of the details in last month's newsletter, but it was much more interesting to hear his personal take on events. He discussed high points, such as his time as "Don't Bag It Bob" running a program to divert household organic waste such as lawn clippings from landfills in the Fort Worth area. From there, he moved to "Frontier Texas," Comanche County, which is among the state's leaders in pecans, dairy, and seedless watermelons. In Iraq, his program trained some 22,000 people as agricultural leaders and educators.

Williamson County is Bob's next challenge. Although the public face of the county is increasingly suburban or even urban, it is still an important agricultural center, with some 150,000 acres of crops. Bob is responsible for both the County Agent—Agriculture and Horticulture positions. It may be possible to add a separate Horticultural Agent someday, perhaps in combination with a neighboring county. In the meantime, the Natural Resources Agent will also be covering livestock and some other areas so that Bob can focus on crops and horticulture. Bob's concentration has been on fruits and vegetables, not so much on ornamentals. He is hoping to mobilize the Master Gardeners as an important element in Extension's outreach to the community.

use native or xeric species, the advice Bob gave was to water smartly. The first point is not to water too quickly. Most soils in Williamson County can tolerate no more than 2 inches per hour. Any additional rainfall (or irrigation) will simply run off and provide no additional moisture for the local soil and plants. Some of the thicker clay soils in the eastern part of the county may seal off with as little as a third of an inch. Sandy soils may be able to absorb six inches, but a part of that may simply pass through and end up too deep for many plants to use. Watering should therefore be done with care.

It takes steady watering to saturate the soil to its full carrying capacity, but once it is saturated it can take no more. Most soils can carry 0.1 to 0.2 inch of water per inch of soil depth, so an inch of water will go from five to ten inches deep. The top 12 inches of soil, then, can carry at most 2.4 inches of rain, or 65,170 gallons per acre. Once it is at

capacity, any additional irrigation will either run off or pass through. This may be useful for plants with deep root systems, but for many lawn and garden plants the extra watering is a waste. A gardener needs to know how deep the roots of his plants go, so he can avoid overwatering.

However, the soil does need additional watering to replace the water lost to evaporation and transpiration from vegetation. On average in a typical Central Texas summer, it can take 0.45 inch of additional watering every day to keep the soil at its carrying capacity. Mulch and other ground coverings can substantially reduce evaporation and thus the requirement for replacement watering.

If 0.45 inch were applied to an entire acre, it would require over 12,219 gallons daily. If it were applied with a broadcast spray sprinkler system, even more gallons would be lost to evaporation in the air or on

the ground before it could soak in. It is therefore more efficient to apply the water directly to the soil above or around the plants. Drip tape can deliver about 0.5 gallons per minute at exactly the place it is required. Again, a gardener needs to know how much is required. The requirements differ from species to species. For example, pecans need two inches per acre per week, or 222 gallons per tree per day.

The key to saving our scarce water resources without killing our lawns or gardens is twofold. First, we need to plant smartly. Then we need to water smartly. We should water when it is needed, but only when it is needed and only as much as is needed. Bob ended his presentation with a description of various instruments used to measure soil moisture. These will help a homeowner or other gardener to answer the question, "How much water do I need to put out there?"



Berry Springs Park & Preserve Volunteer Opportunities

Volunteering from the Summer Master Gardener Class has begun at Berry Springs Park & Preserve (1801 CR 152, Georgetown). Lisa LaPaso (pictured below) & Sally Todd have been two of the first to get busy with beautification and watering the grounds at Berry Springs. Presently Volunteers are needed for :

- ♦ Weeding and trimming back existing flower beds.
- ♦ Harvesting wildflower seeds for fall planting. Donate what you find elsewhere.
- ♦ Watering flower beds, Memorial trees, grafted pecan trees & small tree seedlings. An orientation of watering procedures and plant locations needs to be taken prior to signing up for watering. Partnering works best to expedite watering. Find a buddy to coordinate with.
- ♦ Gathering of plants and cuttings for a new Butterfly flower garden. Lisa LaPaso coordinating plants needed. Donate plants & or cuttings for transplanting.
- ♦ Harvesting of wildflower seeds to be planted in new and existing wildflower areas. Share wildflower seeds that you have harvested.
- ♦ Planting of new Butterfly garden, office flower beds and wildflower flower beds Sat. Oct. 4th Space limited to 1st 12 that sign up.
- ♦ Sat. Oct. 11th, 4th Annual Archeology Day at Berry Springs. Need 6 volunteers to serve lunch at Pavilion. Need Volunteers to help man booths during the day. Morning 9a.m. to 1p.m. and Noon to 4 p.m. afternoon shifts available. Mostly need help filling afternoon shifts. The event is hosted by Williamson County, History Museum.

To work at Berry you must coordinate with Park Manager Susan Blackledge. Park Phone is 930-0040. She will be on vacation Sept. 9th through Sept. 24th. Plan ahead to work!





Texas Master Gardener Specialist Training

Vegetable Gardening

October 16 – 17, 2008
Williamson County Agrilife Extension Office
3151 SE Inner Loop Road
Georgetown, Texas 78628

Master Gardener Specialist – Vegetable Gardening Training will include training by experts on the subject of all phases of vegetable growing such as Soils and Soil Preparation, Garden Location and Set Up, Cultural Practices, Plant Growing and Plant Growing Structures, Vegetables A to Z, Insects, Disease and Weed Control and Harvesting and Handling Vegetables.

There have been many requests for this training because of the problems with vegetable growing in this country and this is an excellent time to provide this training to our associations. Master Gardeners can use this course to train their own members and it is a great tool to use for training our young people about how vegetables get on our tables and how fresh tasting they can be when grown locally.

The class will be taught by Bob Whitney, County Extension Agent, Williamson County, Tom LeRoy, County Extension Agent, Montgomery County and Dr. Joe Masabni, State Extension Vegetable Specialist at Texas A&M University.

We will be accepting 30 applications for this training.



Expanded Shale - A new Possibility for Amending Clay Soils

**Dr. Douglas F. Welsh,
Professor & Landscape Horticulturist, Texas A&M University**

A form of expanded shale is now available to gardeners that will be useful in loosening tight clay soils and making them more workable.

'Blue Shale' from the Midway Shale formation is present in a pattern across Texas through Corsicana to Texarkana and stopping near Laredo. It is usually found 10-15 feet underground. It was formed during Cretaceous times when Texas was a large lakebed and the lakebed sediments solidified under pressure into the present-day shale formation.

Jack Sinclair of TXI Industries has explained that the shale is mined and ground to 1" to 1/2" range particles and then kiln fired. As it progresses through the kiln for 40 minutes at 2,000 degrees C, certain chemical processes take place in the silica content (60-70%) causing the material to expand. The expansion of Kitty Litter (calcined clay), for example, occurs at only 800-900 degrees.

As the material cools, cavities are left after gases escape, leaving a porous lightweight chunk capable of absorbing water and releasing it slowly at a later time.

Recommendations for using expanded shale with containerized plants call for putting one-third of the material in the bottom, then mixing the expanded shale with potting soil 50-50 for the rest of the pot.

For flower beds with sticky or gumbo-type soil, Dr. Steve George of the Texas Cooperative Extension recommends putting down 3 inches of expanded shale on top of the area, and tilling it in six to eight inches deep. Also add 3 inches of finished, plant-based compost as well, which results in a 6-inch raised bed. Crown the bed to further improve water drainage.

Dr. George also remarked:

"Based on a two-year research study and six years of field trials, I feel that expanded shale will open up and aerate heavy, sticky clay soils faster than any material that I have ever tested. Due to its porous nature, it provides aeration from within the shale particles and, in poorly aerated clay soils, resulted in a more extensive and healthier root system than did other treatments being tested.... Even though I dearly love finished, plant-based compost, if I were

limited to only one application of one soil amendment with which to open up heavy clay soils, I would take expanded shale and never look back!"

Several trials are underway at the present time to test the long-term effects of using expanded shale. Last June, Dr. Frank Allen and the City of Duncanville laid out perennial flower beds in black gumbo and the city of Carrollton (situated on Blackland Prairie soils) is working on field trials with Dr. Steve George. Trials include working with black gumbo only, lava sand with gumbo, compost with Blackland soil, and compost and expanded shale in existing soil. It is anticipated that the lightweight material might create a permanent physical change in the blackland soil (or, according to Dr. George, last at least 10 years as a conservative estimate).

The amendment is now sold by the TXI Corporation under the brand name "Tru-Grow." It may be purchased in the Dallas/Fort Worth, Houston, and Navasota areas. Check with local garden centers and suppliers for availability in your area.

Many people were interested in a relatively new product, Expanded Shale, that was described at the recent class on Earthwise Roses. With that in mind I have reproduced this article from Aggie-horticulture.

Landscaping with Expanded Shale

Expanded shale was originally developed as a lightweight aggregate for concrete and other structural uses. When the source materials are heated to 2000° F in a rotary kiln, they "puff up" into a material with many internal and exterior pore spaces that lower its density and allow it to bind well with cement. Laying at full compaction, as much as half of the material's volume can be open space.

For horticultural use, those same pores can hold air, water, and nutrients. This allows

both free flow to plant roots and excellent draining. Because it is so light, expanded shale is easy to handle and particularly useful for movable pots and rooftop gardens. It is the favored medium for the greenhouse industry and for the rooftop gardens of famed landscape architect Theodore Osmundson. Expanded shale can also be used as a rapidly-draining material for walkways and trails or as a decorative ground cover. Perhaps most signifi-

cantly, however, it can also be used as part of a quality topsoil.

The nationally-recognized gardens around Temple Square in Salt Lake City use a modular soil mix of 1-to-1 expanded shale and sphagnum moss laid six inches deep. This has proved a much more reliable growing medium than any locally-available topsoil. Before moving to the new materials, the landscaping staff supervising the 35 acres of gardens (including 3.5 acres of flowerbeds) had never been able to locate a

consistent source of soil. Since switching over a decade ago, the gardens have won national awards from the American Nurseryman's Association and designation by the American Society of Landscape Architects as a "National Landmark for Landscape Architecture." As retired garden

manager Peter Lassig (who worked for 46 years at Temple Square) has said, "This material is better than dirt." As a conditioner for heavy clay soil, three inches of expanded shale can be tilled into six inches of soil until there is a uniform mixture. One cubic yard of the material

will cover 100 square feet to three inches deep. It can be purchased in bulk from various suppliers. The concrete and aggregate company TXI, for example, sells it under the TruGro brand name. Bags may be available from a local garden center or nursery.



A Master Gardener Remembers Growing up Gardening

Lisa LaPaso

I have been a gardener from about the age of three. My earliest outdoor memories are of times spent with my grandfather in what seemed like an enormous vegetable garden that produced the most wondrous edibles in its rich and fertile soil. My grandfather was a second-generation Italian who took great pride in his garden; he took his work there very seriously. I spent many weekends with my grandparents who lived along the Kankakee River and grew whatever was in season. That garden provided food, peacefulness, and purpose.

Along the riverbank was a hill covered with the most glorious array of flowers, both wild and intentional. A Rose bed (my grandmother's namesake) adorned the front of the cottage home and the little paradise they carved themselves seemed a million miles from anything.

In the early morning, my grandfather would take me to the garden to admire the progress the vegetables had made from the day before. He labored carefully over every leaf and each row as though he had not seen them before. He would pick fresh goodies for dinner, letting me smell each picked morsel and rewarding my compliments with a taste. I still hear the sound the beans made when he snapped them. I still taste the beautiful red tomatoes I ate like apples. I still remember the way the soil felt in my hands and

the look on Grandpa's face when he caught my expression of joy in the garden.

My grandmother would can for the winter months whatever we weren't able to finish each season. The attention and love she put into each jar was palpable. Grandma and I would cut fresh peonies, zinnias, lilacs, and hollyhocks and make bouquets that would have pleased the gods. I was in my safest place in the garden. It was a spiritual experience being one with the earth and creating life in an ever-changing way.

I had a sense of pride, a purpose, and a gift that has stayed with me my entire life. I have a passion for gardening that is greater with every season. The therapeutic tranquility and spiritual enlightenment one gets from being close to the Earth is overpowering.

I am blessed for the privilege of doing for a living what I love the most. It would be my dream to have every living person appreciate the importance of what gardeners do and to realize it is a higher calling. We need to look out for the planet we live on. What better way to give back to each other? My grandparents live on in me and all the other gardeners whose love of the Earth and all of its glories inspires us to create works of art and more beautiful places to live.



Green Master Gardening Green Gardening Christine Powell

Recently, I was in Whole Foods downtown in Austin and discovered that they are continuing to go green and greener. One of their latest additions is a green wall hanging over the escalators. I have seen green walls in Europe but this was my first here. One of the online gardening catalogues I subscribe to has started to sell small starter green wall kits for the avid home gardener. Think what a wonderful display you could make in your home and clean the air at the same time. Now that is green!



Meet Your Master Gardeners Nancy Moore

Each month we will be spotlighting one of the master gardeners in our group. Getting to know each other is something that we don't really seem to have time to do, so hopefully, this will be a way to make some more "connections" with the people in our group.

Nancy and her husband brought a truckload of beautiful tropical plants to Central Texas when they moved from Treasure Isle, Florida. Quite soon, Nancy realized that she would need some help adjusting to gardening in Texas. As she says, "In Florida, you just throw it in the ground and it grows!" She joined our Master Gardener program in Williamson County and now her half acre back yard in Round Rock is coming along very nicely.

She is using native plants and adaptive plants. In addition, she and her husband have a nice collection of bonsai plants that they have incorporated into this setting. It is, of course, a work in progress, and they are still trying to find the right balance of perennials and evergreens for the year round garden that they want. Planting vegetables in raised beds is also a future goal. Completing the Master Gardener program has meant that Nancy now looks forward to working in her garden. Someday, she thinks, she might enjoy learning more about rainwater harvesting.

Nancy's family name is Suchodolski - Polish - and several years ago she visited Poland to find and visit family. While there, the unemployment rate was fifty percent, and she saw many older men with bags full of mushrooms that they gathered from the forest. She remembered that her Polish grandfather would hunt for mushrooms along the railroad track in Buffalo, New York, where they lived. He readily knew which were edible and which were not.



As with most avid gardeners, Nancy's interest began early. Her mom grew tomatoes, radishes, and carrots among the roses. She and her three brothers would pick the vegetables and then sit on the porch with tomatoes and salt and munch away! Life was simple and easy and good.

Nancy's family includes her husband and three four-legged kids. She was a computer programmer for about twenty years before retiring. She and her husband enjoy the Austin music scene. Plays the guitar, but just for fun and their own relaxation. Nancy also enjoys all sorts of arts and crafts.

Nancy is our new Master Gardener treasurer. With her pretty smile and her willingness to help, she is a huge asset to our group.

Sandra Rosen

What's Missing?

Some of you may have noticed that even though this issue has lots of new items in it, it is also lacking in other ways. I have repeatedly asked for your help and it is either the same few wonderful people who send me items or, this month several new members who have chipped in and they have only been with us for a month. I thank all of them with all my heart.

We now have a hundred members, yet I have to beg, chase and cajole for help. My regular contributors are great but we have many members who have never submitted anything. It's not hard folks—a paragraph or two, a photograph and a caption, anything! We cannot, should not, depend on everyone else to supply items for something I am told you all enjoy, are proud of, look forward to. Step up to the plate and contribute.

Someone complained recently there is not enough about the chapter and what is going on in it—I say to that person, put pen to paper and send me something...

Why?

A Master Composter's Summer Tips

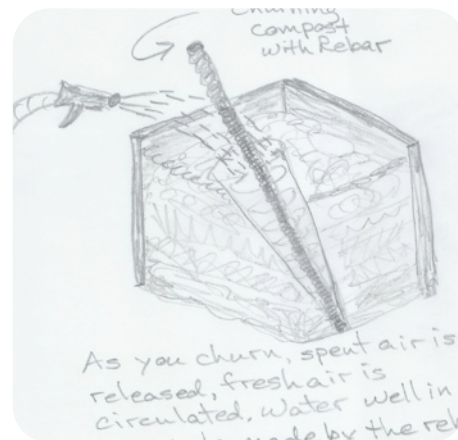
Composting In The Summer Heat

Patty Hoenigman

Composters may well be some of the most dedicated gardeners, but we have an extra challenge when it's excessively hot outside. How to keep the pile wet enough that it keeps working. Everyone knows the 4 essentials to composting: Greens, Browns, Air and Water. If any one of them is lacking, things just won't cook up right! But don't worry, there's good news and bad. We'll get the bad news out of the way first. All this heat dries things out so fast! If your outdoor plants are needing extra water, so is your compost pile. Check the top 6 inches and those pesky corners in bins that tend to dry out first. Keep a hose going in one hand while you mix around your surface materials with the other. Grab a 4 foot length of rebar, (available for about a dollar at any building supply store), about half an inch in diameter is ideal. Now plunge your rebar down into the bottom of your pile creating a deep hole and water it well down into that hole. Repeat this all over the surface of the

pile at various angles to get as much water down in there as you can. Do this at least once a week when it's really hot like it has been this summer. By rotating the rebar in circles you'll be churning the pile, which aerates the materials as you water them, and gives you a little exercise too (pictured right). You'll want to use duct tape to cover about 8 inches of the rebar on one end to protect your hand from its jagged edges.

The good news is that the heat is actually helping your pile stay active. The thermophillic bacteria thrive in the hottest temperatures and they're working 24/7 to turn your leaves and grass into that lush humus that your fall veggies will love! Mind you, the heat from a compost pile is primarily what's being generated by the activity of the bacteria in the pile...sort of like when you go for a walk and come back all hot and sweaty... same thing happens with them. So they rely on you for an extra drink



of water and some fresh air to keep them going.

If you've got a place in the shade for your pile, or can hang some shade cloth overhead, you'll be knocking the temperature down a bit and helping to keep the pile from drying out quite so fast. Once everything is dry in your bin, all the bacteria either die or go dormant and then nothing will be deteriorating. No water, no compost. So do what you can to find a spot for your pile that has some shade, keep it watered regularly and pretty soon you'll have a great batch of compost for your garden!

Master Gardener Finds

Great Finds

Gaye Kriegel

What was my Great Find in August? A precious, rare commodity during those relentless 100-plus-degree days: shade! After losing many of my 4-inch starter plants while daring to go on vacation, I sought some desperate help for the "nursery" and for me. The result was an hour-long project (with my handyman husband's help) to stretch a piece of shade cloth between the side of the house and the fence rail using 1 X 3 boards, brick screws, and staples. Ahhh...relief! Now where is my "I survived August in Austin" badge?



Did You Notice?

Christine Powell

I wondered if any of you noticed after that very brief rain last week the beautiful display of rain lilies that appeared along some of our roads and in the fields? We are all used to seeing this magical little flower appear in spring and occasionally in fall but this was a real treat. There were large banks of them all along Mopac and Loop 360 but nowhere that I was able to stop and take a picture! Standing only four or five inches tall with a single flower surrounded by a few grass like leaves they are usually easily overlooked. However, en masse they are stunning. They will soon be producing seed that easily scatters in the wind but due to its size drops close to the parent plant, hence the drifts of blooms. They also form bulbs which delights me since I am conditioned to planting bulbs each fall - the national pastime of the British nation. Now, if only I could find some enterprising person who would just produce the bulbs for me!



A Master Gardener Walks

...along the trails Annette Banks

Georgetown has done a superb job of affording us wonderful scenic areas full of surprises. Plan to hit the nature trails soon...while there, look for...

Southern Maidenhair Fern *Adiantum Capillus - Veneris*

On the trails you may find it growing in soggy spots, stands of water, or growing out of the natural spring crevices of the limestone cliffs. It's a special treat to see them hanging on the side of the cliffs, away from direct sunlight and protected from southwest winds. One area containing good displays of the fern is along the trails to the east of Booty's Road parking area.

The delicate Southern Maidenhair seen on the trails of Georgetown is also known as Common Maidenhair or Venus Maidenhair. It is a small, slow-growing deciduous fern, which reaches 10 to 15 inches. Its pinnules are 1 1/2 inches long. The fine-textured, clustered, bright green fronds are wedge shaped bases with rounded toothed lobes on the outside edge. The stalks of this perennial are thin, dark in color, smooth in texture, and reach about 8 inches tall. Spores are borne under the curved edges of the leaves. The fern reproduces

sexually through the spores, as well as through rhizomes. The creeping short rhizomes are under water in its native habitat.

This plant is found mostly in southern United States. In North America there are two other known areas of this fern population. In the states it is restricted to the hot springs of Cascade Creek to Cascade Falls in South Dakota. The fern is also at Fairmont Hot Springs in British Columbia, Canada, where it is declared an endangered species. The plants are heavily protected with severe penalties for illegal removal. It is believed that the fern was brought into Canada from Virginia. Interestingly, the Canadian plants no longer have spores.

The plant is also native across areas in Eurasia and Africa, where there is a warm and tropical climate. There is a close relative of the Southern or Common Maidenhair found in California: the California Maidenhair (*Adiantum jordanii*).

The Southern Maidenhair fern requires porous rock and mineral rich waters, perfect for its Georgetown location!

Note: For years I have been hesitant to classify a fern as maidenhair since I have seen and heard so many varieties called maidenhair. Research on this article answered my question. *Adiantum* (maidenhair fern) is a genus of about two-hundred species in the family of *pteridaceae*. However, most researchers now place the Southern Maidenhair in its own family, *Adiantaceae*.



Plant of the Month

Adiantum capillus-veneris

Southern maidenhair, Common maidenhair,
Maidenhair fern, Venus hair fern

Bug of the Month

Have you seen them? They're baaa-aack! It always warms my heart a bit when I go outside to look at my milkweed and find monarch caterpillars or their chrysalis dangling on the branches.

Monarch caterpillars are pretty distinct. Obviously, they are a caterpillar, so they have a worm-like body that is yellow, white and black striped. The caterpillars have two long, black projections that look similar to antennae towards the head region and then two black shorter projections near the end of the abdomen.



After the adult (the butterfly) emerges from the chrysalis, it spreads it's wings and stays in place for several hours to allow it's exoskeleton to dry and harden before it can fly away.

Courtesy [Urban IPM](#)



The pupa, or chrysalis, is usually formed on the milkweed plant and starts off bright green with metallic gold at the top. The chrysalis will change colors as time goes on and the caterpillar transforms into a butterfly. It eventually becomes transparent and you can kind-of see the butterfly inside.



Entomology Specialist Program

Sept 15-19, 2008 Austin, TX Hosted by Wizzie Brown, Extension Program Specialist, Travis County

• Registration fee of \$300.00 includes collecting kit with lots of goodies; lectures; Extension bulletins; 3 lunches, 1 dinner, snacks & drinks • Transportation and lodging is on your own • Course is limited to 20 applicants; deadline is July 18, 2008 Contact Wizzie Brown at wbrown@ag.tamu.edu or 512.854.9600 with any questions.

SUPERSTAR

Gaye Kriegel

Who says that sprengeri fern, aka asparagus fern, has always to be planted in a hanging basket? To be sure, sprengeri does look great used that way, with its fine lime green foliage, delicate white flowers, and pretty red berries. However, the dramatic draping qualities that make sprengeri great for hanging baskets, make it perform equally well planted to cascade over a stone wall or spilling over the edge of a container. Sprengeri is also an impressive and inexpensive way to anchor rocks in landscape beds, as well as to control erosion on steep banks because it is so root invasive.

Tips:

*When I use sprengeri in containers, I submerge the fern in another pot to try to limit the roots from overtaking the whole container.

* Plan to repot hanging baskets annually. Remove the plant and saw off (really) half of the roots, and then repot the fern with fresh potting soil and water well.

*Over-winter your hanging baskets in the garage to protect them from freezes. Sprengeri ferns planted in the yard will freeze, but simply cut them back, and next spring they'll be even larger and prettier than the year before.



Sprengeri fern in a traditional hanging basket (left)



Sprengeri fern cascading over a stone wall (center)



Sprengeri fern anchoring a rock...or is the rock anchoring the fern? (right)

Name that Plant

What's in a Native-Plant Name?

Part III

Bill Ward

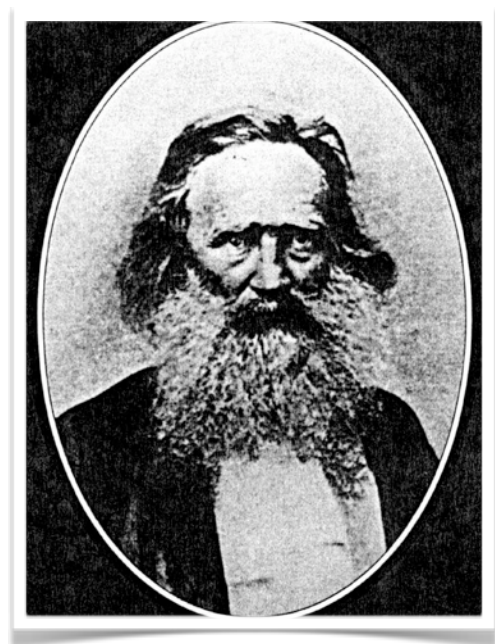
All during the time of the Texas Republic, from 1836 to 1845, Ferdinand Lindheimer botanized in southeastern Texas. Part of the time he collected in the coastal area around Houston and, later, inland around the area of the important German center of Industry. He sent specimens to George Engelmann at the Missouri Botanical Gardens, and Engelmann sent Lindheimer money, equipment, and books. Lindheimer looked forward to the annexation of Texas by the U.S. so that the crates of plant specimens he sent to St. Louis would not have to be broken open by customs agents in New Orleans.

Lindheimer was among the Texas Germans who met the first arrivals of Carl von Solms-Braunfels' colonists when they landed at Port Lavaca in December, 1844. He accompanied these immigrants to a site on Comal Spring northeast of San Antonio, where a new German colony of about 500 people was founded in the spring of 1845.

Lindheimer was given a small cabin, and next to that he pitched a borrowed tent for his botanical collections. Eventually Lindheimer was able to move his specimens indoors on a plot of land he acquired on the banks of the Comal River. On his little parcel he wanted to have a botanical garden of Texas plants, an arboretum, and an agricultural experimental garden.

Top: *Ferdinand Lindheimer.*

Right: *The Lindheimer house still stands on the banks of the Comal River on Comal Street in New Braunfels, and is now a museum.*



The Ferdinand Lindheimer Mural

The Lindheimer mural was painted by the San Antonio muralist, Alex Brochon, to honor the 200th birthday of Ferdinand J. Lindheimer, considered the "Father of Texas Botany." It was dedicated on his two-hundredth birthday celebration, May 21, 2001, and it is located on the historic L.A. Hoffman building at 165 South Seguin Avenue, one-half block from the downtown Main Plaza in New Braunfels

Tending his little farm, cooking his own meals, mending his own clothes, and keeping up his botanical collection required more work than he could do alone. At first he hired help, but eventually found it necessary to get married. Fortunately he found a woman who diligently toiled side by side with him in all his endeavors. The house in which the Lindheimers lived and worked and raised a family is now a tourist attraction in an older section of New Braunfels.

Among Lindheimer's many contributions to New Braunfels was editing and publishing a highly regarded and widely influential German-language newspaper, the *Nuc-Braunfelser Zeitung*. The first issue was printed in 1852, and this newspaper was continuously published solely in German until 1957.

Ferdinand Lindheimer gained international recognition during the 1840s when Gray and Engelmann published "*Plantae Lindheimerianae*," containing Lindheimer's Texas collections. Because of Lindheimer's esteemed reputation, he was sought out by the young German paleontologist and naturalist Dr. Ferdinand von Roemer, who visited New Braunfels in 1846. Roemer wrote, "At the end of the town, some distance from the last house, half hidden beneath a group of elm and oak trees, stood a hut or little house close to the banks of the Comal." There in the yard of that little house, the coarsely dressed, bearded man who would become known as the Father of Texas Botany looked up from chopping wood to meet the young German aristocrat who would one day be called the Father of Texas Geology.

Ferdinand Roemer was sent by the Berlin Academy of Sciences to help survey the mineral resources of Texas, at the request of the *Adelsverein*, a society of German nobles which intended to purchase Texas land for German colonization.

From December 1845 to April 1847, Roemer explored much of Texas, making notes on the landscape, geology, soils, vegetation, and peoples. Also he collected fossils and plants. During Roemer's stay in the New Braunfels colony, he made collecting trips with Lindheimer. Roemer's observations were published in 1849 in a volume he entitled "Texas" (also known as "Roemer's Texas").

Roemer made the first general physiographic and geologic maps of Texas. In addition, he took many plant specimens back to Germany to be described by botanists there. In a scientific misstep, some of the plant collections he had exchanged with Lindheimer were mixed with his own collections, and descriptions of many Lindheimer specimens were published in Germany before Gray and Engelmann could complete the rest of "*Plantae Lindheimerianae*." Several Hill Country plants bear Roemer's name. For example, his name is given to cedar sage (*Salvia roemeriana*), Roemer's acacia or catclaw (*Acacia roemeriana*), and Roemer's spurge (*Euphorbia roemeriana*).

Bill Ward of the Boerne Chapter of the Native Plant Society of Texas has kindly allowed me to reproduce this series of articles that I think you will enjoy. Please let me know if you do so I can send on your thanks to Bill.



Left: *Amorpha roemeriana* or *Roemer's false indigo* is showier than other *amorpha* species. It is Endemic to Edwards Plateau and prefers moist limestone soils. Above center: *Senna roemeriana* or *Twoleaf senna* is an attractive perennial that has showy yellow pea-like flowers. When not in flower the leaves are quite unique and divided into two leaflets giving interest to the none flowering plant.

Right: *Mimosa roemeriana* or *Romer's mimosa* or *Sensitive briar* has beautiful pink puffball flowers and compound leaves that close upon being touched. It is common on rocky, chalky or sandy soils in North Central Texas and the Edwards Plateau.

Images courtesy of the LBJWC

Treats from the Master Garden

The “in-between” Gardens Doldrums

Margaret Seals

I hate to admit it, but my Central Texas table this September is suffering from the “in-between” doldrums of spring and fall gardens. Yes, the okra is still producing, but we dare not eat it all if we want to have gumbo this winter. Everything else has been removed, making way for fall planting. After a summer of fresh vegetables on a daily basis, “what to eat from the garden today” has almost become “what’s in the freezer or on the pantry shelf in jars?” I always hate to start using the garden vegetables that I processed during the summer at this time of year, since I know they will taste better later, during the cold, dark days of winter, but what’s a cook to do while waiting for the fall crops to make? Lately, I’ve looked no farther than my back porch herb garden. There a bounty of sweet basil waits, and there is ample lemon balm, thyme, marjoram, chives, parsley, mint and rosemary to bridge the gap until the new vegetable crops begin to produce. Fresh herbs are a great way to add that “just from the garden” taste to meals. Certainly basil pesto can help tide us over. It is good on almost everything and can even make a store-bought tomato worth eating. Well, some of them anyway!

Sweet Basil Pesto (this is my favorite pesto recipe)

2 C loosely packed fresh sweet basil leaves, stems removed

¼ C pine nuts, toasted and cooled (or use ¼ C walnuts instead)

½ C freshly and finely grated Parmesan cheese

2 cloves garlic

Salt and pepper to taste

½ C Olive Oil (I use either McEvoy Ranch or Bozzano Olive Ranch Extra Virgin)

Toast the pine nuts in a heavy skillet until slightly brown and fragrant. Set aside to cool.

Place the basil leaves in a Ziploc bag, leaving the bag open a little bit to allow air to escape. Using a rolling pin or a meat tenderizer, pound the basil leaves several times until the leaves are bruised, about 2 minutes.

Place the bruised basil leaves, toasted pine nuts, Parmesan cheese, garlic, salt and pepper in a food processor, and pulse until a paste is formed. With the motor running, pour the olive oil through the feed tube until all of the ingredients are well combined, scraping the bowl as necessary.

Use on cooked pasta, grilled chicken or fish, grilled tomatoes or whatever you like.

Any leftover pesto can be frozen very successfully. If you have a large quantity, use an old ice tray, freezing the pesto into cubes. Keep the cubes stored in a plastic bag. Throw a cube into soup or stew near the end of the cooking time.

Sweet basil also stars in another of my doldrums favorites, Basil Lemon Cake. This cake needs to sit a day before you serve it for the flavors to meld. Don’t refrigerate it unless you need to store it for more than a day or two before serving. Topped with some fresh berries and a dollop of whipped cream, this cake is a real winner. Believe me, with this dessert on the table, it won’t matter what else you’ve served.

Basil Lemon Cake

From *Simply Organic, A Cookbook for Sustainable, Seasonal and Local Ingredients* by Jesse Ziff Cool

2 ½ C unbleached, all purpose flour

2 ½ t baking powder

½ t salt

1 stick unsalted butter, softened (don’t substitute)

1 ½ C sugar

2 large eggs

½ C chopped fresh basil

2 T finely grated lemon zest

1 t vanilla

1 C + 2 T buttermilk

2 C fresh berries

Whipped cream

Preheat the oven to 375 degrees. Lightly oil a 9-inch spring form pan. In a medium bowl, combine the flour, baking powder and salt. Combine the butter and sugar in a large bowl. Set the electric mixer on medium speed and beat until creamy. Add the eggs, basil, lemon zest and vanilla. Beat until blended. Add the flour mixture, one-third at a time, alternating with the buttermilk and beating on low speed until smooth. Pour the batter into the prepared spring form pan. Bake for 35 to 45 minutes, until a wooden pick inserted into the center comes out clean. Cool in the pan on a rack for 10 minutes before removing sides of the pan. Cover the cake and let it sit, outside the refrigerator, for 24 hours before serving. Serve with fresh berries on top each slice. Add a dollop of whipped cream for good measure!

Roasted chicken flavored with rosemary has been appearing on tables for centuries, and is a favorite of almost everyone. However, if you add some honey and a little lemon juice, the meat really takes on a different, jazzed up taste. Try the following recipe for an easy entrée that will taste great sliced into a sandwich in lunch boxes the next day if you make enough for leftovers. I find that kids really like chicken fixed this way.

Honey Lemon Rosemary Chicken

4 Boneless Chicken Breasts, skin removed

3 ½ T honey

2 T + 2 t lemon juice

2 ½ t fresh rosemary leaves, chopped

1/8 t red pepper flakes (optional)

Preheat oven to 350 degrees. Combine all ingredients, except chicken in a bowl. Dip chicken breasts in honey mixture and arrange in a shallow baking dish. Bake 40-50 minutes or until chicken is cooked throughout, brushing occasionally with remaining sauce.

Every morning, I rub my hands over the mint growing in a pot on my back porch, and then pet my cats-stroking them around the face with my minty hands. They love it! I sometimes tuck a sprig of mint into their collars too. They smell good all day. The fresh mint leaves find their way into the kitchen added to drinks, fruit cobblers, and sauces. Mint syrup that I am particularly fond of can be made in a wink, and can be added to tea, sangria, mixed drinks and smoothies for a cool, fresh taste.

Mint Syrup

From *The Herb Garden Cook Book* by Lucinda Hutson

2 C water

2 C sugar

1 ¼ C loosely chopped mint, tightly packed (combine lemon balm and spearmint for best taste)

Make the syrup by slowly bringing sugar and water to a boil, reduce the heat and add mint. Simmer for 6 minutes. Set aside to cool for at least an hour. Keep refrigerated. You can strain the mint out of the syrup or leave it in as you please.

Finally, this recipe from *Martha Stewart's Food Magazine* is one that seems to fit the bill when fresh garden vegetables are scarce. It requires a mixture of Golden Delicious and McIntosh apples to be at its best, but any cooking apple will do.

Sautéed Apples with Thyme

Core 3 McIntosh or Golden Delicious (or a mixture of both). Cut each apple into 8 wedges, and halve the wedges crosswise. Heat 2 T butter in a large skillet over medium heat. Add apples, 1 t fresh thyme leaves and 1 t grated lemon zest. Season with salt and pepper (and maybe a little sugar if your apples are very tart). Cook, tossing occasionally, until apples are just tender when pierced with the tip of a paring knife, about 3-5 minutes. Serve hot.

Note about the variety of thyme to use: I have several varieties of thyme growing in my garden and in pots on my back porch. Lemon thyme, lime thyme, coconut thyme, and good old Mother of Thyme have all been used successfully in this recipe. I think I like the lemon thyme best since it blends with the lemon zest very well, but the lime thyme was tasty too. Happy eating until those fall tomatoes begin to ripen!

Submissions?

If you would like to contribute to the *Williamson County Master Gardeners Journal* please send your articles, item, and photographs to Christine Powell at xtinepowell@verizon.net by the 25th of the month. Remember to include captions and attribution details. The Editor is grateful to all those who have submitted items in the past and would like to thank those who would like to send things in the future. Thank you!

President's Column

Changes

Wayne Rhoden



We finally have a little relief from the hot summer days and the plants have perked up from all the wilting of our drought this summer. We have a new County Extension Agent, Bob Whitney, and most of you have had an opportunity to meet him. He has hit the ground running, as the saying goes, and has taken an active role in the greenhouse and in the training of our new Master Gardener class. We have 35 new interns in the class and they all seem eager to learn and join our association when they complete their training. Many are already attending our monthly programs and educational opportunities to start their volunteer and educational hours that they must fulfill to gain certification. We look forward to their participation in our association.

We will be hosting a Texas Master Gardener Specialist Training -Vegetable Gardening in October this year. We will be calling on some of you to help with the training and certified members may attend the training if they wish.

We are still defining our association and with Bob here there will be some changes in the way hours are counted and what is valid. We want to really concentrate on the education of the community that we as volunteers in the Master Gardener program must participate in. After all, assisting Extension in the education of the community is the purpose of the Master Gardener Program. Perhaps we will get to start that vegetable garden demonstration area before too long.

It is time to start your fall vegetable garden and now we have some rain to help. Many wildflower seeds are planted at this time of the year and we can start growing some herbs and lettuces that do very well in our fall season. You can pick up publications on vegetables that grow well in Williamson County as well as planting times, harvesting times and disease and pest control at the Extension Office.

I am looking forward to happier times in our association and having some fun. We also want to enter the awards competition of the Texas Master Gardener Association and showcase our association to the rest of the state. I hope all of you will join in the pursuit of these goals.

Balcones Canyonlands National Wildlife Refuge

Invites you to participate in free activities on
Saturday October 11 at Doeskin Ranch on RR 1174.

- ♦ SATURDAY, OCTOBER 11- guided walks & programs include:
- ♦ BIRDS & BUTTERFLIES for Beginners walk - 8:30 – 10:30 am (binoculars and identification books provided).
- ♦ ANIMALS ON THE MOVE walk- We'll examine which animals are moving, where, how far, & why. 8:30 am- 10:30 am
- ♦ NATURE PHOTOGRAPHY- digital & 35 mm walk & workshop 8:30 – 10:30 pm. Bring your camera manual & camera. ***Sign up in advance! ***
- ♦ NATURE WALK. Learn about ferns, flowers, fire, frogs & fossils! 10:30 am - noon & 1:30 pm - 3 pm
- ♦ SPIDER WALK 11 am – 12:15 pm and 2:30- 3:45 pm. Sign up ahead to share amazing facts about spiders w/ “Spider Joe” Lapp!
- ♦ DRAGONFLIES & Damselflies- noon- 1:30 pm. Look for different species found at the creek and pond
- ♦ Snakes Alive! Live snake program 12:15 pm- 1 pm.
- ♦ USEFUL NATIVE PLANTS Walk 2 - 4 pm
- ♦ NATIVE GRASSES: the Big 4 & a few more walk! 2:30 - 4 pm

At your leisure:

- ♦ Look for migrating hawks!
- ♦ Build Bluebird nest boxes- 9 am until supply lasts. \$5 each.
- ♦ Creatures from the Pond: view bizarre water creatures each from 10 am- 4 pm. Help capture the creatures from 9-10 am.!
- ♦ Catch Monarch Butterflies & tag them with tiny stickers if Monarchs are present.
- ♦ Enter the Butterfly tent!
- ♦ For more info call Rob Iski at 512-339-9432 x 70 Groups: please call in advance to register. Times & Activities subject to change.

Williamson County Master Gardener Association Officers for 2008

Officers:

Wayne Rhoden, President:	mgardener@suddenlink.net	(512) 869-8016
Vice-President:		
Nancy Moore, Treasurer:	wwwb@austin.rr.com	(512) 215-9697
Jeanne Barker, Secretary:	jubarker@yahoo.com	(512) 608-1296

Standing Committees/Chairpersons:

Programs/Education:

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Membership/Volunteer Opportunities:			
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Monthly Meetings

Williamson County Master Gardeners hold monthly meetings at the Williamson County Extension Office, 3151 SE Innerloop Road, Suite A, Georgetown on the second Monday of each month at 6:00pm. Master Gardeners and the public are welcome to attend.