

Williamson County Master Gardener *Journal*

Award Winning

Master Gardener's Need to Vote

Our Elections Are Here!

CONTENTS

- 2
- ELECTIONS**
- 5
- NEWS AND NOTES**
- 6
- BOOFEST**
- 8
- TREE DISEASES**
- 12
- AN IRRIGATION TALE**
- 13
- JMG**
- 17
- AGRICULTURE IS LOOKING UP**
- 18
- ROSES**
- 21
- BUG OF THE MONTH**
- 22
- MEET YOUR MG**
- 23
- CAULIFLOWER**
- 17
- FROM THE PRESIDENT**



WE NEED YOUR VOTE

Come to the November monthly meeting to elect your new Board.

In accordance with our bylaws at the November 3, 2009 Monthly Members Meeting, we will be holding our election of the WCMG Board of Directors. Below is the slate of those volunteering for the positions of President, Vice-President, Secretary and Treasurer. Remember, you can only vote in this election if you are a member in good standing and present at the meeting. Please take some time to read their bio's and then come along to the meeting to vote.

After the Election we will have our regular meeting and presentation



Join Us November 9th for our Monthly Meeting

Grace Bryce will be working with the newly emerging Oak Wilt Team to share their genesis, their training experiences, the evolution of their highly successful public outreach program and their plans for the future. They will let others know how they can become involved in fighting the good fight against this devastating infestation to our live oak treasures in Central Texas. Oh yea, we are going to have elections this night as well; it could run a few minutes long.

WCMG Election Candidates for 2010

As you may recall, our bylaws provide: The nominating committee, appointed in June of each year shall present to the Executive Committee and Board of Directors an officer's nominee slate in September. The Nominating Committee chair or its designee shall then inform the membership by email, web, and the newsletter and announce this slate at the next regularly scheduled General Membership meeting (October). Additional nominations from the floor shall be accepted at the October meeting. At the November meeting, the officers will be elected by ballot by a simple majority of the members in good standing and in attendance. In the event of a tie, a run-off election shall be held immediately, by a signal of hands, until a candidate has been elected.

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President — Winola VanArtsdalen



The confidence shown in me by the nominating committee is sincerely appreciated, and I would accept the responsibility of this office if elected. I have served as an officer in various organizations, including president of the Classroom Teachers Association of the Clear Creek School District. Many fortunate experiences led me to Master Gardeners. Growing up on a farm in Southeastern Kansas, I developed an early love for soil and plants. Family history tells me that, in the late 1800s, my great-grandmother had a nursery on that farm, and people came by horse and buggy to buy seeds and plants from her. While teaching fifth grade science and language arts, I was asked to write curriculum and train

teachers at the Space Earth Ocean Center, a joint venture of NASA, The University of Houston Clear Lake, and Armand Bayou Nature Center. This experience included in-the-field training at Armand Bayou and on site at NASA. It was this experience that magnified my interest in native plants and environmental science.

After retirement, I had the opportunity to work as a volunteer at McAshen Gardens in Round Top, extending my interest in plants to a deeper knowledge of herbs. Upon moving to Georgetown, I volunteered with the Williamson County Cities Health District and learned extensively about organic gardening. When the Master Gardeners class became available, I immediately accepted that challenge and have worked in the greenhouse, at schools and parks, and have taught classes/given presentations on botany, propagation, herbs, soils, vegetable gardening, and oak wilt.

I want to work with you as Texas A&M's volunteer arm for horticulture education. We as master gardeners have the opportunity, through presentations, demonstration gardens, and hands-on interaction, to share with the citizens of Williamson County our research-based knowledge and delight in gardening while encouraging protection of the global environment. With the strong base given us by our founders, joined by an abundance of talent from classes 2007-2009, we have the knowledge, creativity and enthusiasm to give us unlimited potential. So, get out your gardening boots, roll up your sleeves, and let's get going for 2010!

Vice President - Norma Beissner



Norma Beissner, now a Williamson county resident, has been in love with gardening from a very young age. I love sharing fond memories of life on a 30-acre cotton farm in El Campo where I picked cotton and helped my siblings and parents care for our 2-acre vegetable garden. Canning most of what we produced to sustain a family of 8 was a big part of my childhood. My summers were spent helping Grandmother care for the flower gardens outside of the chicken yard, where compost and manure were plentiful.

Part of my adult life was in Houston where rain is plentiful and sometimes too much. Gardening knowledge is my top reading pastime. With all that is available to us, I am always amazed at how little I know.

tle I know.

When I moved to the Austin area, my biggest challenge was—I could not dig down very deep. So that perfect place for those four new plants were not going to go where I had planned. Instead, I went up with raised beds. I have lost my share of plants over the years and was told by a San Antonio master gardener "you must kill at least 1000 plants before you are truly a master gardener." I enjoy meeting others that have any interest in playing in the dirt! - Young or old.

My daily reward is waiting for the sun to rise so that I can see what changes are in my garden — this will never get old. My newest adventure is a thousand earthworms living in the closet of my office. As member of the Williamson County Master Gardener Association, my mission is to promote sound gardening techniques to local neighborhoods. Also to help educate and encourage natural methods of growing plants and maintaining yards and soil vitality within the areas with which we live.



Vice President - Walter Hoke

Since June 2008, Walter Hoke and his wife Carol have lived in the Georgetown area. They decided to relocate to be closer to their daughter and grandchildren who lived in Georgetown after their son-in-law was killed in an accident. Prior to that, Walter had served as a pastor for the United Methodist Church.

Walter's first career (20 years) was as an accountant working with public and private organizations in Houston and Austin. In 1990, he began evening classes at St. Edwards to complete a degree in Masters of Business Administration. That degree program was changed to a Master of Arts and Human Services. After graduation, he worked as a Licensed Professional Counselor working at Charter Behavior Health Center in Austin. The career change continued to evolve when he when he was accepted to into a Clinical Pastoral Education program at Austin State Hospital which then led to seminary.

In looking back there seems to be a parallel to the things that Walter has enjoyed doing such as helping plants and people grow. Both need a healthy environment, space to grow, nutrients to help them develop, pruning from time to time, and a great deal of TLC...tender loving care. The Master Gardener program has provided an opportunity to expand a new understanding and knowledge of working with plants and provided opportunities to work with others who have a similar interest.

In the short time Walter has worked with this program, he has seen the excitement of the children in the JMG program as well as the successes in plants sales as the Williamson County MG program grows. So many folks are reaching out to so many people of this county in so many ways. This is what Walter sees as the job of leadership, to help provide the training, give individuals space to grow, and giving a great deal of encouragement.

Secretary - Jeanne Barker



Having been a Master Gardener and a Master Composter in North Carolina, one of my first stops when I returned to Texas was the county extension office to ask about their Master Gardener program. I was very disappointed when I was told that Williamson County did not have one. Thankfully, a few months later I saw an item in the newspaper announcing the initial MG class in Williamson County. I jumped at the chance and have been a part of the group ever since.

I currently serve as the WCMGA secretary and think that I also contribute as a board member. I would love to continue as secretary for another term. However, regardless of how the election turns out, I will certainly continue to be an active member in WCMGA. How

can I not? It's a great group of people who provide a much needed service to the county.

Treasurer - Sandy Lawrence



As a fourth generation Texan, my roots began in the farming communities of Robertson, Falls, Fayetteville, and Austin counties where my ancestors settled and farmed. I grew up in the Houston & Katy areas and began helping my parents in their garden. Although not really excited about growing things until my teen years, my first after-school job at a commercial grower really piqued my interest. I began bringing home all kinds of plants and started landscaping the back yard. I remember my father saying the only reason for planting was for food – unless you could eat it, it wasn't worth planting! I beg to differ.

After high school, I graduated from SW Texas State University (now Texas State University) with a BBA in Accounting and went to work in Houston. Ever passionate about growing plants, I decorated my patio and apartment with all sorts of greenery and flowers. I met my husband, Paul, and we relocated to Midland, where I gardened in cement cinder blocks, then West Virginia where I had my first "real" garden. Eventually we moved to the Portland, Maine area, where we raised our son and settled on land that had been in Paul's family since the 1700's. I had ample space for continuing my love of gardening, creating perennial borders and vegetable beds. In addition to my gardening, I also owned a bookkeeping and consulting business. Additionally, I volunteered on various non-profit boards and served as Treasurer for several of them. After 20 years in Maine and 25 years away, it was time to come home to Texas. Three years ago, we did just that.

Since returning to Texas, I have formed another bookkeeping and consulting company and have clients from Williamson & Travis Counties. I enjoy the challenge of helping my clients organize and set up their financial records' systems. As a result of the establishment and maintenance of these effective financial systems, my clients are able to realize their financial reporting goals, even through periods of stressful growth.

I joined the 2008 WCMGA class to provide myself with a volunteer outlet, while accommodating the pursuit of my passion for gardening at the same time. I have found my first year of active service to be very fulfilling and look forward to being a contributing member of an effective and growing organization. I would like to see our organization play a critical role in the gardening lives of individuals and groups of the various communities that comprise Williamson County. In order for our group to realize its potential, we must stay organized while we grow. I believe that my professional experience with growing companies has prepared me to help the MGs through their next year of significant growth.

Master Gardeners at Work

News and Notes



Congratulations!

George Whiting with WCMG President Wayne Rhoden receiving his certificate and name tag for completing his hours for Master Gardener certification. Way to go, George!



Composting and Vermiculture at Monthly Meeting

Ed Myatt and John Hesser gave a very informative presentation at the November general meeting on composting and vermiculture (worm farming). These are fascinating skills that, once mastered, allow the gardener to reduce their waste stream to the curb while providing their gardens with some high-quality nutrients. More information on composting can be found in *The Field Guide For Actively Aerated Compost Tea* by Dr. Elaine Ingram or at www.soilfoodweb.com and growing Solutions Incorporated www.growingsolutions.com. Excellent resources for information on vermiculture can be found at Uncle Jim's worm Farm www.unclejimswormfarm.com. *Worm's Eat My Garbage* by Mary Appelhof is the best book on the market but *The Worm Book* and *Worm's Eat Our Garbage – Classroom Activity Book* by Loren Nancarrow and Janet Taylor are also very good.

Tanya's Kitchen Garden!

Tanya Vessels cooked up a veritable kitchen garden in cupcakes recently for the new 2009 class.



Master Gardeners Volunteer

BOOfest 2009 -- A New Adventure for Master Gardeners

Winola VanArtsdalen

Photos by Jack Grieder

Driving past 3700 Williams Drive in the dark hours of the early morning on October 31, you would have only seen swinging flashlights in the distance, the ghost of a white pickup under a huge live oak tree near the front, and total darkness beyond. This was the early beginning of a first experience for master gardeners and all the other vendors – BOOfest Georgetown! The swinging flashlights were held by myself and other vendors as we searched for painted numbers in the grass to determine what was to be our booth location. The white pickup near the front was Bob Whitney, who, of course, ignored the instructions of that person at the entrance who told us the numbers for the booths started back at the building! He was waiting in the right spot all the time while I floundered around until informed of the error. Oh, well! All's well that ends well. The other vendors and myself laughed off the first little fiasco, found our right locations, and I united with Bob at our prime location—Booths #1 and 2 right at the entrance!

The darkness lifted, the sun came out, and the Master Gardener team moved in sync. Paul Lawrence with crew of Wayne Rhoden, Jack Grieder, Hank Belapavlovich, and George Whiting worked with Bob getting plants and setup equipment out of trucks while Brenda McIndoo, Rebecca Malone, Janet Church, and myself began arranging the scene. Our prime location was arranged by Joan Adams' daughter, Yvette Jarvis, who was in charge of BOOfest. Joan then spent many hours on numerous days with Paul shopping for plants to sell, and what beautiful specimens they found!) Grace Bryce decorated with her beautifully made signs, the MG banner was raised, and, yes, a rain barrel was set in its place of honor in front of the booth! The money people then went to work. Janell Crego and Sandy Lawrence set up that system with correct procedures, sales slips, and cash. Ingrid Langdon took the seat for cashier's job, to be followed by Ruth Olmstead later in the day, and Master Gardener and oak wilt brochures were put in place. In the smoothest operation, there is always at least one thing to be forgot-

ten, and, this day, it was the treats for the little visitors in costume. Ruth Olmstead came to the rescue by going out to get treats, and we were ready for business, just ready as customers were right on time at 9:15!

Now, my fellow Master Gardeners, I have a piece of advice for you. If you have never arrived in the dark of night to help set up for such a project, you are missing out on a special experience. There is a feeling of creation and bonding with fellow workers when you work together in such an endeavor. So, the next time you volunteer, be one of those brave souls who set their alarm for the wee hours, grumble about how you ever got into this, and stagger out into the

darkness to be a part of something big. You will be well rewarded!



The day flowed flawlessly with teams signing over sales receipt books and other responsibilities to replacements throughout the day. In addition to those mentioned earlier, those “in the dark” workers were joined by Bonnie Sladek, Carey Thornell, Claire Hall, Valerie Clark, Tina Bertucci, Megan Barron, Kay Johnson, Jane Williamson, Liz Grieder,

Sandra Pikoff, Marlyn Hooper, and Linda Zazula. It was especially fun to see the costumes of visitors and fellow workers. Megan was adorable in long sleeved bright red top with a matching hat that had belonged to her grandmother, and Grace Bryce and son, Michael, caused a mild sensation when they arrived in pirate costumes! Bob returned late in the afternoon with fresh produce to share from his garden, and, oh yes, Grace brought some delicious zombie finger cookies to share! Closing time, 4:30 p.m., slipped up on us quickly, as we were selling plants until the very last minute. Janell and Ruth were good sports having to keep adding money to their total. In fact, one woman arrived with \$20 in hand and bought four more *salvia greggi* just as we were loading the remaining native plants into Joss Growers' truck!



You might think, “Moan, groan, cleanup time has arrived!” Actually, even the breakdown went quickly. The morning setup crew returned, and all end-of-the-day sales people joined in clearing tables and carrying plants to racks. In very short order, the grower had picked up remaining native plants, and we were heading to the greenhouse and extension office with all leftover annuals and equipment. It was a great day! Be sure to join us in future projects for an experience in comradie extraordinaire!



A Master Gardener Educates

Sorting Out Tree Diseases

Grace Bryce

Tree problems are difficult to diagnose. For one, the roots are not visible for inspection, and they make up a significant portion of the tree. Secondly, the spatial relationship between cause and effect can be obscure. Trees also naturally support the growth of many microbes. Trees respond slowly to injury and it is a rare thing that only one disease relationship is present. No wonder it is confusing and somewhat complicated.

In late September, Dr. David Appel from the Department of Plant Pathology and Microbiology at Texas A & M, presented a seminar on tree diseases at the Williamson County AgriLIFE Extension office. There were over thirty people in attendance, many were Master Gardeners. The class concluded with a walking tour of Old Town to look at various diseased trees. This is a brief summary about tree diseases.

Diagnosis

Diagnosing tree diseases is not always 100% accurate and sometimes we have to resort to an exclusionary diagnosis. So what are the steps to diagnosis?

- ◆ Is there a pattern of mortality within the population of trees?
- ◆ Is there a pattern related to time and space for individual trees?
- ◆ What symptoms are present? Symptoms refer to the response of the tree and are present on foliage, branches, trunk, or soil. (i.e., veinal necrosis)
- ◆ What signs are present? Signs refers to the presence of a pathogen. (i.e., tar spot or fungal mats)
- ◆ Clinical diagnosis in the laboratory can confirm the diagnosis. It is usually a combination of factors that contribute to the death of a tree.

When trying to determine what tree disease is plaguing your trees, it is useful to know:

- ◆ Host characteristics
- ◆ Potential pathogens and their characteristics
- ◆ Conditions that allow the disease to develop

To learn more about the specific tree diseases visit: <http://plantclinic.tamu.edu>. The website has many fact sheets with great pictures and is a great tool for sorting out tree diseases and the pathogens involved. An excellent reference book is *Diseases of Trees and Shrubs*, by Wayne A. Sinclair and Howard H. Lyon. There is another book that is just about tree insects, *Insects That Feed On Trees and Shrubs*, by Warren T. Johnson and Howard H. Lyon. Both have fabulous color plates. Our county agent, Bob Whitney, is also an excellent resource. Learning to identify trees and shrubs is also useful, because some species are more susceptible to certain diseases.

Prognosis

Prognosis is more important than diagnosis. Don't be intimidated by all of the questions. Being observant goes a long way. Many of the answers are simple, similar or don't matter. According to Dr. David Appel, the prognosis is far more important than the

diagnosis. Prognosis refers to prospects for recovery. Knowing the prognosis gives us the opportunity to save time and money and prevents doing more harm than good.

- ◆ Roughly 85% of the time the answer is, "Yes, it is a fungus, and No, don't spray anything on it." Some things resolve themselves when the conditions change.
- ◆ If the tree has the foliar signs of a pathogen, then it is important to rake up those leaves and put them in the compost bin. Removing the leaves helps reduce the number of spores (which over-winter in the leaves and twigs) around the tree, for the next season.
- ◆ Severe conditions of any kind will contribute to an environment that is perfect for a pathogen to take hold (i.e., drought, flooding, wind etc.).
- ◆ Sometimes, by the time the symptoms are noticed, the tree is going to die anyway.
- ◆ It is either oak wilt or it is not, but it has to be an oak tree to have oak wilt.
- ◆ Injury to a tree can invite disease or the over-stress of nearby construction can cause an early death.
- ◆ Heartwood rot or heart rot is caused by a fungus and will begin with conchs near the base of the tree. Trees rot from the inside out. Burls caused by a bacteria in the soil will also cause rot. Is the tree structurally safe? Does it need to be removed before it falls on someone or something?

Do's and Don't's for healthy trees.

- ◆ Do plant native trees.
- ◆ Do mulch, but don't crowd the trunk.
- ◆ Do clean tools between trees and plants to prevent the spread of microbes.
- ◆ Do use proper pruning techniques.
- ◆ Do paint cuts on oaks after pruning (to prevent oak wilt).
- ◆ Don't paint any other tree after pruning.
- ◆ Don't use concrete to fill a cavity, if it must be filled, use expanding foam.
- ◆ Don't over-water, water at the drip line.
- ◆ Don't use Weed & Feed.

Tree problems this summer:

Due to the severe drought conditions in Central Texas, our trees have suffered. Severe conditions have opened the door for several tree diseases. Here are a few things you may find:

Hypoxylon canker is caused by *Hypoxylon antropunctatum*, a fungus that doesn't infect healthy trees, but will infect damaged, weakened or drought stressed trees. The velvety spores can be seen in shades of gray, brown or taupe and the bark drops off. See *WCMG Journal* August 09 page 15 for an in depth article. The tree will die.

Tar Spot also known as *Morenoella quercina*, tends to show up after we've had a decent rain. A little pruning of low hanging branches to increase air circulation could help. This is one of those foliar pathogens, so leaves should be raked up and removed.

Oak wilt can infect trees whether they are healthy or not. Oak wilt is caused by the fungus, *Ceratocystis fagacearum* and moves through land in waves. It can travel about 75 to 100 feet per year, moving through roots and root grafts. Veinal necrosis in Live Oaks is one of the diagnostic symptoms. Oak wilt is a devastating disease and is best caught early, so treatments can be done. For more information about oak wilt, please visit www.texasoakwilt.org

Mistletoe is certainly alive and well in Williamson County and frequently seen in Cedar Elms. Mistletoe is parasitic and drains water and minerals from the tree. The berries are poisonous. From the genus *Phoradendron*, there are many species of Mistletoe. They will infect trees that are already stressed or unhealthy and further weaken the limbs, with a possibility of breakage. Branches infected with mistletoe can be pruned a foot away from the mistletoe in the healthy tissue further up the branch.

Insects certainly take their toll on trees. Wasp galls and blisters and skeletonization and chewing damage are just a few problems insects can cause. Planted non-native species trees will grow fine for the first few years, then they succumb to disease and insect damage and die. Remember to plant native trees and make sure the species is native for central Texas.

There are too many tree diseases and problems to list them all here, so check out the websites and take a look around your yard. Observation and awareness are the first steps to taking better care of your trees.



Dr. David N. Appel

Dr. Appel came to Texas A&M in 1981 to work on the oak mortality problem in central Texas. Since then, his research program has since been largely focused on the epidemiology, diagnosis and control of oak wilt. He has also developed research programs dealing with *Phymatotrichum* root rot of apple, and more recently Pierce's Disease of winegrapes. He has taught graduate and undergraduate courses on introductory plant pathology, plant disease diagnosis, forest protection, and environmental regulations. He was recently appointed as the Program Leader in PLPM for faculty specialists with Texas AgriLife Extension Service.



The Texas Plant Disease Diagnostic Laboratory (TPDDL) started 28 years ago to provide plant disease diagnostic support to our AgriLife Extension personnel and to assist clients in the identification of plant disease problems. This laboratory provides a service to the people of Texas by Department of Plant Pathology and Microbiology at Texas A&M University in conjunction with Texas AgriLife Extension Service. This laboratory provides plant disease diagnostic service to AgriLife Extension personnel, homeowners, farmers, greenhouse and nursery producers, landscape contractors, interiorscapers, arborists, consultants, and any other group or individual needing accurate identification of plant disease problems. The TPDDL strives to provide the most accurate and rapid plant disease diagnosis together with recommendations for effective plant disease management.



Dr. Appel points out callous tissue where the tree is compartmentalizing



Catalpa tree with possible BLS (bacterial leaf scorch.)



This one is a goner. Some trees have a number of problems and need to be removed for safety reasons.



The group found powdery mildew on a red oak.



Chinese Tallow and Magnolia are not native to our area. The Chinese tallow can be invasive, so planting it should be avoided.



This beautiful oak has some issues, but the small amount of ball moss doesn't pose a danger. Ball moss is not parasitic.



Hypoxylon canker is caused by a fungus, Hypoxylon antropunctatum.



Veinal necrosis on a Live Oak with oak wilt.



Damage from skeletonization insect to a species of non-native red oak.



Oak galls from insects cause no damage to the tree, but can be alarming to see for the first time.



The Cinipid Wasp will leave discoloration and blisters from stings on leaves.



Tar spot on Live Oak leaves.

Master Gardener Installation

An Irrigation Tale
Jane Williamson

The drought may be ending, but just a short time ago, water woes hampered progress on the vegetable gardens at the Extension Office. Following the initial planting of the Square Foot garden beds, the Vegetable Committee was faced with the problem of irrigating the beds.

The only water spigot available was out in the field approximately 50 feet from the raised beds. The first attempts to irrigate the beds consisted of stringing a hose from this spigot, connecting soaker hoses, and hoping the grounds maintenance workers would not run over the hose with lawnmowers. The soaker hoses were then threaded around and through the garden squares. A four-zone timer was placed on one of the raised beds, and everything was connected to this timer. With this method, vegetable seeds germinated, and the vegetable beds began to show signs of life. So while the soaker hose set-up was not the best for water conservation, the system did work.

About this time in the water saga, watering restrictions went into effect. The Vegetable Committee wanted to conserve water as well as water more effectively, so the next step involved adding a drip irrigation system to the beds. At the end of August, members of the Rainwater Harvesting Team, Clyde Adley, Grace Bryce, Paul Lawrence, Kris Stanley and Sally Todd, conducted a hands-on learning and working session for Master Gardeners at the Extension Office. Participants learned about the different components needed to install a drip irrigation system and how to lay out the system to increase watering effi-

ciency. Then the Master Gardeners, under the guidance of Rainwater Harvesting Team members, actually constructed a drip system for two vegetable beds. Bob Whitney also showed the group how to establish a vegetable irrigation system using drip tape. A drip tape system was constructed for one bed. A post was cemented into the ground, the timer was mounted to the post, and the drip systems were connected to the timer. This irrigation method delivered water to selected squares in the garden, and water use was controlled with specific emitters. The planted squares continued to grow.

The latest in the irrigation tale has been the installation of individual water spigots at each bed. An irrigation specialist connected the existing water supply to the vegetable beds and to the future demonstration rose garden. Now growing vegetables in the raised beds will be an easier task. Of course, the rains have come and with the rains, the fire ants. If it isn't one problem, it's another, but Master Gardeners persevere, and the first harvest of vegetables has taken place.



Master Gardeners construct a drip irrigation system.



Bob Whitney demonstrates the use of drip tape.



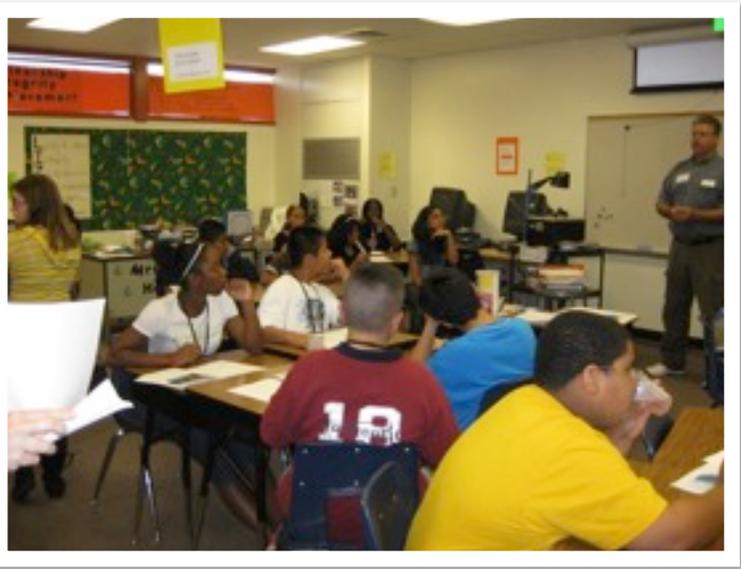
Beans are the first vegetable to be harvested.

Master Gardener JMG

New JMG Programs Juanita James & Patsy Bendahl

On October 7 we started a JMG program at C.D. Fulkes Middle School in Round Rock. We started with 38 sixth graders. This number has decreased, however we still have at least 25. We have planted a garden consisting of vegetables, herbs and flowers in four raised beds. The rainwater harvesting class presented by Paul Lawrence and the rainwater program presented by Bob Whitney was loved by the children.

The program is going very well. We are putting on this program with Brigid Mejia of the 4-H office. Master Gardeners involved in this are Walter Hoke and Juanita James along with Interns Hank Belopavlovich, Jessica Woods and Jane Thorngate. The following interns helped build and plant the garden, Robert Barnebey, Megan Barron, Karen Black, Carol Hoke, Don Markette, Richard Robbins and David Weinthal.



JMG is taking off in Williamson County! Fulkes Middle School in Round Rock has a Wednesday afternoon program and McCoy Elementary School in Georgetown has a Thursday afternoon program. They are both going great! Brigid Mejia, 4-H agent, and Juanita James are both working hard with both those programs as well as several other Williamson County Master Gardeners. At McCoy Master Gardener and teacher Tina Bertucci is in charge of the project.



Master Gardener's JMG

New JMG Group at Discovery United Methodist Church, Hutto

Patsy Bredahl

Discovery United Methodist Church of Hutto is so kind to let us use their Church for our JMG program that I can't refuse! It is my Church home and what wonderful people they all are. There are no after-school programs in Hutto Elementary schools. With our ten acres of open space we have a great location. So I want to see how many Hutto kids plus any other area kids we can teach about gardening!

We had our first group of Discovery Gardeners this summer with eleven earning their JMG certification. We handed out their certificates July 26 at the morning Church service.

We have eleven kids signed up for our second group. This time it will run from October 14-April 28. We meet from 4:00 PM-5:00 PM every Wednesday afternoon. This way we can plant a fall and spring garden.

As soon as we told the children about what to expect from the program on our first day, it was out to the garden to start planting fall vegetables. There are still a few okra and black eyed peas that are thriving from the summer. We wanted the kids to see those so we left a few. Then we planted cabbage, cauliflower, and broccoli transplants. We planted carrot seeds and radish seeds. Hopefully we'll get another bed built in the next couple of weeks to plant lettuces.

As much as the children loved planting the garden, there were a few that became fascinated with the soil over the nearby septic tank. I couldn't say that I blamed them. It is a very distinct orange color. One of the boys thought it looked like UT's burnt orange. I had to tell them the story of the color of the soil over our septic tank when I was a kid. (Actually, we called it a cesspool then). The soil was a really cool pink. I loved making mud pies and it was good to throw in a strawberry pie occasionally!

At our second class on October 21 we had a special treat! Winola Van Artsdalen gave us a Botany lesson. The kids were so attentive with lots of questions. As usual, when Winola teaches, everyone learns something-even the grownups!

This Wednesday, October 28, Jeanne Barker and her worms are coming to class! We told them it was about worm composting but I think the boys just heard worms and were really excited!

Along with myself and fellow Master Gardeners, JoAnne Dietrich, Bonnie Sladek, and Master Gardener Interns Sherry Miller and Judy Gibney, we are having as much fun as the kids. We also have some parents who are staying for class which is great!

Anyone who wants to "really" get excited about gardening -work with kids! Their excitement makes you feel like a kid again!



Children who received certificates for JMG last summer at Discovery United Methodist Church of Hutto

Master Gardener's JMG

Fiesta! Juanita James

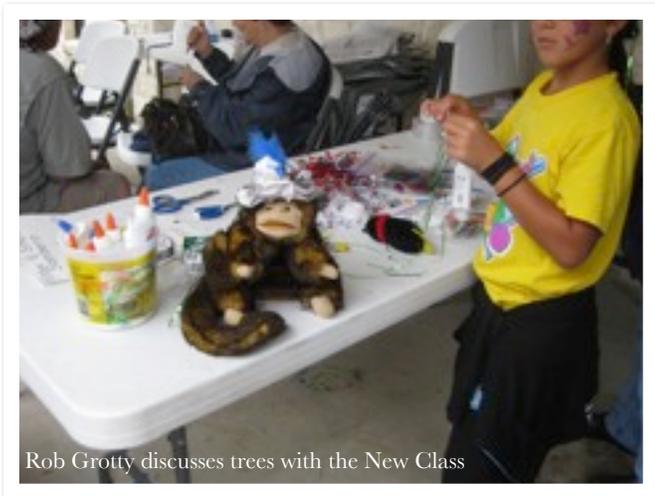
On October 3, 2009, Fellowship Baptist Church in Liberty Hill had their annual Festival and asked the Master Gardeners to do an activity with the children. We decided to make the "Know and Show Sombreros". It was a rainy day and we started out in the parking lot of the church but ended up on the porch to get out of the rain. In spite of the rain they had a good attendance. The following Master Gardeners and interns helped with this project: Beth Blankenship, Hank Belopavlovich, Jared Sudekum, Valerie Clark and Juanita James. Patsy Bredahl and JoAnne Dieterich came for the afternoon after Patsy finished her duties at the Farmers Market in Hutto and JoAnne finished her Greenhouse duties. We all had a great time, especially making hats for some very small animals.



Suck a Bug



Megan, Ailinda, Janet, Ed, Sherry, Rebecca & Judy rappin' with the JMG



Rob Grotty discusses trees with the New Class



A "hands on" demonstration of tree pruning.

Master Gardener Falls in Love

Ageratina havanensis (Shrubby boneset, White mistflower) Christine Powell



Master Gardener Specialist Training

Earth-Kind Landscape Management Specialist Seminar

Norma Beissner

On October 8 thru October 11, 2009 the Earth-Kind Landscape Management Specialist Seminar was attended by Williamson County Master Gardeners Norma Beissner and Joan Adams. This class was hosted in Fort Worth at the Tarrant County AgriLIFE Extension offices. Great information was given by all the speakers.

Check out the amazing roses (below) that were in the test gardens with no spraying or fertilizing!

Two field trips of Earth-Kind test sites were visited by our group which are also open to the public to visit and see firsthand the amazing variations of roses and their different growing habits. These plants are planted in native soil with only double digging, adding 3 inches of compost to the areas and finishing them with 3-4 inches of mulch. During the 3 year period they are watered the first year and left to their own survival the second and third year. Specific data is collected during the last 2 years of the study. This information is then used to determine if they will make the earth-kind

selection. There are now 21 roses that have passed the test to become Earth-kind roses.

We learned Earth-Kind techniques in soil management for growing better plants. Plans are being made to study perennials in the same manner as roses to come up with a list of earth-kind plants that will be easy for gardeners of all levels to enjoy. My experience was much more than I expected, with access to many experts that are available to give information by email or presentations to interested groups all over Texas.

The best news is that Earth-Kind fever is making a huge impact in some Texas cities by use of the earth-kind management in their communities public areas. This change has made a significant savings of manpower for maintenance and—even better—city budget cost are reduced. Joan and I have plans to talk to area officials to consider getting on-board with this amazing program.



Earth-Kind is an important designation given to select roses by the Texas AgriLife Extension Service. Earth-Kind Roses have been through rigorous state-wide testing and evaluation by a team of horticultural experts and found to possess the high level of landscape performance and outstanding disease and insect resistance required for this special designation.

Earth-Kind roses are not immune to pest problems but their tolerance to pests is so great that they rarely require the use of chemical pesticides.

Only a few rose varieties have received the Earth-Kind designation, however, the list continues to grow as new selections meet the rigorous criteria.

Earth-Kind Roses are among the most thoroughly tested, and environmentally responsible plants for the use in Texas landscapes. These roses do very well in almost any soil type, from the well-drained acid sands of East Texas to the poorly aerated, highly alkaline clays of central and Southwest Texas.



Master Gardener Favorites

Texas Pistache**George Whiting**

The Texas Pistache tree is a drought tolerant evergreen, needing little water. It can act as a great privacy (and sound) barrier in tight urban settings. Known as a shrub or small tree with clusters of small fernlike leaves, emanating from slender branches along multiple trunks.

Typical height is 10-20ft tall and 10 foot wide. Texas Pistache is in the Sumac family (*Anacardiaceae*). Highly adaptive as long as it has well drained, alkaline soil and a sunny location.

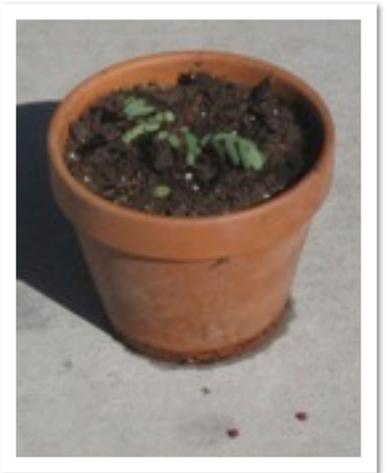
Natural Habitat: Found in Mexico, central and southern Texas. Occurs abundantly in Texas along Rio Grande canyons, particularly near the intersection of the Pecos River. It can be grown in Central Texas and I have successfully grown several in Northwest, Austin.

Flowers & Fruit: The tree is Dioecious(two households - greek), meaning male and female trees are required for reproduction. The female tree bears white flowers, followed, in late summer by red to purple berry clusters. Birds and wildlife are attracted to the berries. Game and livestock will browse these berries as well.

Propagation: Can be propagated from seed or hardwood root stock. If seed, best to germinate immediately after harvest in August or September timeframe.

Note: I took one of those little red berries and germinated it about three weeks ago. Now I have a small tree, already.

Right is a picture of a Texas Pistache tree that I grew from seed (berry). If you look closely near the base of the pot you will see two red berries. It was one berry just like the ones near the pot that I used to germinate the tree. I will, one day plant it on my land in Granger.



“Bug” of the month

Our Bug of the month is the lynx spider. Lynx Spiders are hunting spiders that spend their lives on plants, flowers and shrubs. Nimble runners and jumpers, they rely on their keen eyesight to stalk, chase or ambush prey. Six of their eight eyes are arranged in a hexagon-like pattern, a characteristic that identifies them as members of the family Oxyopidae. They also have spiny legs. The one I found in my yard is the Green Lynx Spider which was on one of my yellow bells, and was feasting on a honeybee, see attached photograph. *Peucetia viridans*, the green lynx spider, is a conspicuous bright-green spider found on shrubs. It is the largest North American lynx spider. The female reaches a body length of 22 millimeters (0.87 in); the more slender male averages 12 millimeters (0.47 in). There usually is a red patch between the eyes, with red spots over the body. The eye region is clothed with white appressed hairs. The legs are green to yellow, with very long black spines, and covered with black spots. The green lynx spider very seldom bites humans, and its bite is harmless though painful. It is primarily of interest for its use in agricultural pest management, for example in cotton fields. The spiders have been observed to hunt several moth species and their larvae, including some of the most important crop pests, such as the bollworm moth (*Heliothis zea*), the cotton leafworm moth (*Alabama agrillacea*) and the cabbage looper moth (*Trichoplusia ni*). However, they also prey on beneficial insects, such as honey bees. So think twice before smashing the next spider you see. They are beneficial insects.

The one of the spider eating the honeybee was taken by me, and the other two are from the Wikipedia web site which is the free internet encyclopedia.

Wayne Rhoden
Entomologist Specialist



Meet Your Master Gardeners

Tricia Clay

Each month we will spotlight 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.

Sandra Rosen

Tricia's lifelong love of gardening started early—in the red clay hills, the farm country of Mississippi. She grew up in Central Mississippi on a 240 acre farm that has been in the family for over 100 years. Her dad and granddad held onto the land through the Great Depression when cattle were selling for \$3 a head. During this time, they literally lived off the land and even in later years, grew most of their own food. Spring planting was for crops of cotton, corn, sugar cane, and fields of peas and butter beans and other vegetables. They also grew sweet potatoes. Although farm life has many rewards, it could and can still be very tough: drought, floods, and the endless chores—milking dairy cows, feeding and tending to all the animals, planting, harvesting, and cutting and using the timber. The good memories, the lessons learned, and the ties to the land are very strong for Tricia.

Family and roots are very important to this southern girl. Tricia married her college sweetheart, Charles, 40 years ago. They have 3 children: a son who is a Lt. Col. serving in Korea, and two daughters living in The Woodlands and Cypress. Then, of course, 7 grandchildren - feisty, fun, and wonderful! They recently celebrated her mom's 90th birthday.

Tricia started out as pre-med major in college, then switched to chemistry. She loves the organization of math, the "hands-on" experiments and the excitement of learning in science and chemistry. She taught high school science and chemistry for 31 years and retired from Dulles HS in Sugar Land, Texas. After retirement, she and

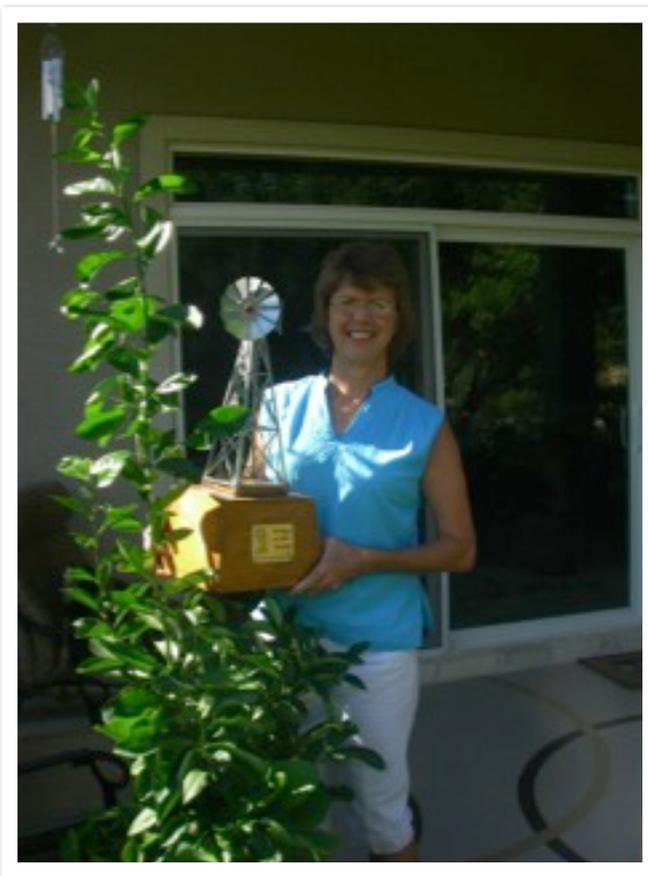
Charles came to Sun City for just a "getaway weekend," - no intention at all of moving. However, they liked what they saw and even heard that there would be a horticulture garden. Soon they had a lot and the house in Sugarland was for sale.

Besides her family, Tricia is passionate about gardening and nature. She hikes and spends most of her "spare" time outdoors. She became a certified Williamson County Master Gardener in 2007, and

her backyard is beautiful and abundant with plants and wildlife. It is a tranquil and peaceful place with butterflies of all varieties flitting around. Some of the flowers she used to attract the butterflies are Greg's mistflower, Meyer lemon, *salvia greggi*, passion vine, milkweed, buddleia, flame acanthus, and sienna tree. She and Bob Hazelwood created a lovely "pocket park" at the Sun City Horticulture Center, and she enjoys working at the experimental vegetable garden at the Master Gardener site, and at St. Richard's Church, and just about wherever anyone is working on gardening projects. Tricia hasn't forgotten those hard-working farm roots!

When she has time, Tricia also likes to read, bike, do quilting and scrap booking, and is very active in her church. Like most Master

Gardeners, however, she wants to be "doing active stuff" now and save the "quiet stuff" for later. This quiet, pretty lady who might appear to be a Southern belle is really a farm girl!



Treats from the Master Garden

Cauliflower, a staple in the Central Texas Fall Garden

Margaret Seals

I'll admit it right up front, growing up I didn't like cauliflower much. My mother always boiled it to a pulp, and seasoned it with nutmeg, a spice I associated with a sweet treat not a vegetable. Besides that, it was white, or sort of white under all the nutmeg, and I didn't care for white food with the exception of angel food cake. Thankfully now, having outgrown picky-kid eating and having learned that cauliflower can be cooked many ways more appetizing than in a pot of boiling water, I look forward to my fall garden so that I can have fresh cauliflower again.

I try to get the transplants into the ground around the end of August or first week in September. This is always a challenge since most nurseries don't put out cauliflower transplants until much later. Sometimes I have started my own plants from seeds, but without an adequate greenhouse situation for seed starts, I have had some bad experiences with that. Let's just say that now I cut to the chase, and buy transplants when I can. This year, due to the heat and drought, the local nurseries didn't have the transplants until October, so my cauliflower will have to be covered when November 15 rolls around if the temperature is slated to drop below 25 degrees. I will mulch them heavily with hay to keep the frost at bay. Hey, that rhymes! Maybe I am on to something to help everyone remember that cauliflower likes a thick mulch to help the soil stay moist and retain the heat.

This year, my transplants are Snow Crowns. This is a fairly short growth-to-harvest variety with a maturity date of 50 days. Other varieties good for Williamson County are Cheddar, Snowball, Graffiti, Veronica, Guardian, White Magic and Snowman. These have maturity dates from 68 to 90 days. It is good to plant several varieties of cauliflower in your garden if you have the space, so that you can extend the harvest season. Of course, cauliflower is easily frozen by separating the flowerets, washing them well, blanching them in boiling water for 3-5 minutes, removing them to an ice bath to cool, draining them and storing them in freezer containers.

Cauliflower likes a humus rich soil, and a good supply of water. I find that cauliflower's reputation of being hard to grow is not de-



served if you will take a few simple measures: First, don't overcrowd it in the garden. Cauliflower needs a good 18 to 24 inches to stretch out those big protective leaves. Second, cauliflower is a heavy feeder and likes a dose or two of nitrogen rich fertilizer every 2-3 weeks as the heads mature. Finally, if you want your heads to be white, as soon as the heads begin to form, pull the outer leaves over the head and tie them, pin them with a clothes pin or use a rubber band to secure them. This keeps the cauliflower from yellowing. From the time you tie the leaves over the plants, they usually take about a month to make a mature head. I always untie one or two and peek after three weeks just to see how they are coming along.

Cabbage loopers are the worst pest, chewing on the leaves and stressing the plants, but they are easily controlled with a weekly application of Bt. Downy mildew can be a problem if there is a lot of rain, but it is also easily controlled with applications of approved fungicide. I have never had downy mildew on my cauliflower, but we have not had wet fall seasons lately either. This year may be the exception. I do rotate the crops in my garden bed, taking care not to



plant cauliflower where broccoli, cabbage or turnips were planted last year to avoid problems.

Nowadays, I eat cauliflower raw in salads or served with ranch dressing as an appetizer. But I also like it cooked. Here are a couple of tasty recipes for cooking cauliflower.

Gratin of Cauliflower

(From *Modern Maturity Magazine*)

2 lbs cauliflower florets

1/3 C milk

4 T butter

2 t. mustard

Salt and pepper to taste

1/8 t nutmeg (optional if you have picky eaters!)

1/2 C grated parmesan cheese

After the cauliflower is separated into florets, cook it uncovered in boiling, salted water for 12 minutes until the florets are softened.

Drain and puree cauliflower with the milk butter and mustard.

Season with salt, pepper and nutmeg.

Place in a shallow baking dish and cover with Parmesan Cheese.

Bake in a preheated 350 degree oven for 30 minutes until a golden crust has formed over the top.

Roasted Curried Cauliflower with Sweet Onions

(My source for this recipe is obscure. I think it was sent to *Bon Appetite Magazine* by a reader who ate this dish in a restaurant called A.O.C. but I don't know for sure about the magazine or the restaurant location.)

The recipe makes enough for a crowd, but is easily halved.

12 C cauliflower florets (from about 4 lbs of cauliflower)

1 large sweet onion, peeled and quartered

1 t. coriander seeds

1 t. cumin seeds

3/4 C olive oil

1/2 C red wine vinegar

3 1/2 t. curry powder

1 T Hungarian Hot Paprika

1 3/4 t. salt

1/4 C chopped, fresh cilantro for garnish

Preheat the oven to 450 degrees.

Place cauliflower florets in a large roasting pan. Pull apart onion quarters into separate layers and add to cauliflower.

Stir coriander seeds and cumin seeds in a small skillet over medium heat until slightly darkened, about 5 minutes. Crush darkened seeds coarsely in a mortar with pestle or grind in a blender. Place crushed seeds in a medium bowl. Whisk in olive oil, vinegar, curry powder, paprika and salt. Pour dressing over vegetables, tossing them to coat. Spread vegetables in a single layer, sprinkle with pepper.

Roast vegetables until tender, stirring occasionally, about 35 minutes.

Mound vegetables in a large bowl and sprinkle with cilantro.

This dish can be served warm or at room temperature. It can be made 2 hours ahead. Let stand at room temperature.

Reheat in a 450 degree oven 10 minutes, if desired. Save cilantro garnish until just before serving.

Cauliflower, boiled, 1.00 cup 124.00 grams, 28.52 calories				
Nutrient Amount	DV %	Nutrient	Density	World's Healthiest Food Rating
vitamin C	54.93 mg	91.5	57.8	excellent
vitamin K	11.17 mcg	14	8.8	excellent
folate	54.56 mcg	13.6	8.6	excellent
dietary fiber	3.35 g	13.4	8.5	excellent
vitamin B6 (pyridoxine)	0.21 mg	10.5	6.6	very good
tryptophan	0.03 g	9.4	5.9	very good
omega 3 fatty acids	0.21 g	8.8	5.5	very good
manganese	0.17 mg	8.5	5.4	very good
vitamin B5 (pantothenic)	0.63 mg	6.3	4	very good
potassium	176.08 mg	5	3.2	good
protein	2.28 g	4.6	2.9	good
phosphorus	39.68 mg	4	2.5	good
vitamin B2 (riboflavin)	0.06 mg	3.5	2.2	good
vitamin B1 (thiamin)	0.05 mg	3.3	2.1	good
magnesium	11.16 mg	2.8	1.8	good
vitamin B3 (niacin)	0.51 mg	2.5	1.6	good

President's Column
Wayne Rhoden



Hello Master Gardeners!

What a year we have been through! It seems like we just had the plant sale and now we are propagating plants for the next one. As we look back, we have progressed quite a bit during the year with twenty-seven of our 2008 class certified already and our new class is almost finished with some of them ready to be certified. When you stop to think about it, a little over two years ago there was not a Master Gardener Association in Williamson County and now we have sixty-six certified members. Our association is getting recognition all over the county with our involvement in programs and our Junior Master Gardener Program expanding to several schools in different parts of Williamson County. Patsy Bredahl and Juanita James are working with Brigid Mejia, County 4-H coordinator, on several projects and the new class members have joined in whole heartedly to help on some of the JMG programs. Keep up the good work. The other day I was listing the projects going on in our association and it made me tired to just list all of them. With our Monthly Program, Newsletter and Website, Oak Wilt Program, Rainwater Harvesting, Greenhouse, Vegetable and Herb Demonstration Garden, Earthkind Rose Garden Preparation, New Class, Speaker's Bureau, Berry Springs Park and Preserve, Hutto Discovery Methodist Church, St. Richards Church, participation in the Georgetown Home and Garden Show, Plant Sales, plus Pioneer Days in Old Settler's Park and our JMG Programs we have had opportunities for everyone. In addition several of our members have attended Specialist Programs in Oak Wilt, Rainwater Harvesting and Earthkind Roses. All of you should give yourselves a pat on the back. We are all looking forward to more of the same next year.

Happy gardening,
 Wayne

The Sixth Edition of the Texas Master Gardener Handbook is now available!

New features include:

Chapter 3 Earth-Kind Landscaping

Weeds and weed management

Updated plant lists

Master Gardeners can purchase the latest edition through their Master Gardener Coordinators at a price of \$43.00.

The 6th edition —Text Only|| (no binder or tabs) can be purchased for \$28.00.

Master Gardeners, please contact your MG Coordinator, Wayne Rhoden to order this edition, publication number B-6217T.



Williamson County Master Gardener Association Officers for 2008

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<http://grovesite.com/mg/wcmg>

Mailing address:

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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.