

2010 Madison County
Master Gardener

madisoncountymg.org



The Bridge to Knowledge

Volume 80, Issue 7

July 2010

Inside this Issue

Page

2 Jenkin's Tuliptree

3 Master Gardener News

5-8 MCMG Corner
Pointers
Tetanus & Ticks
Herbs
Landscaping
Hot Weather

9 Pruning Cuts

10 Summer Celebration

From the President

Dear Master Gardeners,

The trip to Asheville was such a huge success we are already planning for next year's adventures! Make sure to share our appreciation to Jason Reeves for a well-planned trip. Bill Bobbitt and Kayo Mullins are hosting hypertufa workshops for us to sell items at Summer Celebration for fund raising. If you are interested in helping please contact them. If the sessions are already full please let me know and we'll schedule another session in the future. If you have not signed up for working the Summer Celebration Plant sale please let me know if you want to work. Madison County will be the site of an Alliance meeting for Master Gardeners on the same day as the Celebration. If you see Master Gardeners from other counties please make sure to extend a warm welcome. Look forward to seeing you at Summer Celebration!

*Respectfully,
Linda Laney*

Notes From Bill.....

I will send a letter to prospective MG Interns to begin registration for the Fall 2010 classes in mid-July. Classes will be held in the evening this year beginning in early September. If you know of someone who is interested please have them contact me or provide me with their name and address. A schedule of dates, topics, etc. will be in the next newsletter as I complete plans and arrangements.

William B. Wyatt
Extension Agent Madison County
(731) 668-8543



THE JENKINS TULIPTREE:

from the Bulletin of the Eastern Native Tree Society Vol 5 Winter/Spring 2010

Don C. Bragg

Submitted by Doris Holder

USDA Forest Service, Southern Research Station, P.O. Box 3516 UAM, Monticello, AR 71656

Over the years, the Eastern Native Tree Society has been contacted by many private citizens regarding large trees on their property. The following picture of a large tuliptree is from such an instance—property owners Heather and Harold Jenkins contacted Will Blozan in April of 2009 about this tree. I, being closer to their home, was then contacted to investigate it further. My travel schedule did not permit me to visit the tree until this month, when a conference in Kentucky allowed me an opportunity to travel past the tree. I arranged to meet Heather near their Jacks Creek, Tennessee home, and she showed me this specimen along the small stream that acts as the town's namesake.

The Jenkins Tuliptree is a large, formerly open-grown tuliptree growing on a small flat along Jacks Creek. As can be seen in these pictures, this robustly healthy individual has considerable volume even though it is not particularly tall. A large number of big branches and a stout, gently tapering main bole constitute the bulk of the volume. Though considerably older than most of the second-growth timber in the adjoining woodlot (visible in the background of the first two pictures), this tree has few other obvious signs of extreme old age. Given its large crown, good site, and lack of competition during most of its life, I believe this individual is probably between 150 and 200 years old, and probably originated after the abandonment of a small cultivated field or pasture along the banks of Jacks Creek, perhaps by an early Euroamerican settler to this portion of western Tennessee, or possibly by one of the Native Americans who populated this region prior to 1820.

This article is in the public domain.



APRIL 2010

The Jenkins Tuliptree is 6.6 ft in diameter, 107.6 ft tall, with a crown spread of about 105 ft.

Photo by Don C. Bragg.

Editor's Note: The tiny person to the right of the trunk is Heather Jenkins

Master Gardener News from Around the State and Across the Country

Nashville:

A new issue of the Ornamental Pest and Disease Update has been posted at:

<http://soilplantandpest.utk.edu/pdf/OPandDUpdates/jun2010vol4n4.pdf>

In the Mid-June Issue of the Ornamental Pest and Disease Update

- Dead Man's Fingers point to Decline of Ornamental Pear
- Bacterial Scorch of Shade Trees
- Virus Symptoms on Impatiens
- Agent's Corner- dieback on Yew
- Dollar spot active on bermudagrass
- Ornamental and Turf Diseases Active
- Insects and Mites Active Now

Knoxville:

The UT Gardens is excited to present our first-ever, fun-filled summer of day camps for children ages 6 to 12! Each camp will explore a different garden topic and include fun activities and take-home projects. Come explore, and have fun at the Gardens this summer!

Explorers

6 - 12 year olds

Cost per session: \$25 per member child;
\$30 per non-member child

Budding Artists

Tuesday, July 6, 9:30 a.m. to 3:30 p.m.
(ages 6 to 8)

Wednesday, July 7, 9:30 a.m. to 3:30 p.m.
(ages 9 to 12)

Grab your paintbrush and get ready to dip in as we learn how famous artists gained inspiration from nature. Campers will learn painting techniques and use plant materials to create their very own art projects to take home.

Nature Scene Investigations

Tuesday, July 20, 9:30 a.m. to 3:30 p.m.
(ages 6 to 8)

Wednesday, July 21, 9:30 a.m. to 3:30 p.m.
(ages 9 to 12)

Snatch your detective hat and join us as we follow various clues leading us through a

garden adventure! The names of flowers often give clues to their personalities. As garden sleuths, we will be solving the mystery of "Who grew that plant?" Grab your four-leaf clovers; we will need all of the luck we can get!

Veggie Ventures

Tuesday, August 10, 9:30 a.m. to 3:30 p.m.
(ages 6 to 8)

Wednesday, August 11, 9:30 a.m. to 3:30 p.m. (ages 9 to 12)

From carrots to peppers, this adventure digs into the wide world of vegetables.

Campers will plant their own kitchen garden from recycled kitchen scraps.

Our camp motto is, "Don't throw it; grow it!" The registration form can be found at

http://utgardens.tennessee.edu/events/discovery_camps.html

Jackson:

Western Region Alliance Meeting

TMG Advocates are having a regional meeting in Jackson. The advocates contribute to the planning of the TMG program. This meeting is a forum to present information, concerns and provides feedback on your county programs to improve the state MG program.

It is at 8:00 am, July 8th, before Summer Celebration at the Jackson WTREC UT Gardens.

Some members of the Madison County MG board will attend so that MCMG can get to know how the advocate network supports projects and shares ideas.

Hosting Advocates

Beth Babbit, MG State Coordinator ebabbit@utk.edu

Chris Cooper, Shelby County MG Coordinator

Carol Watkins, Memphis Area Master Gardener

Denisa Cate, Northwest TN Master Gardener

Brief Agenda:

Welcome and Introductions,

Linda Laney, Madison County MGs

Strategic Goals, County Groups & Advocates

Brief Overview of Winter School, Beth

Identify West TN Club Issues, County Groups

Closing Remarks, Chris

Location: Century Farm Winery

1548 Lower Brownsville Rd, Jackson TN 38301

And of course Summer Celebration at WTREC from 10 AM. Admission is \$5.

*MCMG Members' Corner
Information
Project Workdays
Questions & Answers*

I perhaps owe having become a painter to flowers.

-- Claude Monet



Work Day at Jackson-Madison County Library 433 East Lafayette

Saturday, June 26, 2010 8-10 A.M.

Routine Maintenance. Earn volunteer hours on an official MG project. Pruning, weeding, general cleanup as needed. **Bring hand tools (hoes, rakes, pruners, weeders, etc.) and a container for debris.** If anyone has a chain saw you can use, we have one overgrown holly which needs to be heavily pruned back. We currently have several bags of pine needles and chips for mulch but pine needles for mulch are always welcomed. Beds on Lafayette Street side of library will be our main focus. Parking available in small lot east of program center off Lafayette.

MCMG Directory Updates

If your contact information has changed since the Directory was published, you can contact the editor with the new information.

Georgia Morehead gardenlady70@eplus.net

Pot Sitter Thank You

A couple of birthdays ago my sister gave me a couple of garden gnome pot sitters, little painted resin figures that have a groove on their bottoms so they sit on the rim of a pot. I still have them and love them, but I love even more the generous people who are foster parenting the indoor plants from Parkview Montessori School. They are doing a great service by caring for these plants and giving them space on their porches or in the shade in their yards. There were 48 plants this year, about 1/3 of them small to medium, but most in very big pots. I have kept just six of them, the rest have gone home with:

Brenda Coffey, Kathy House, Joan Hughes, Janice Johnson, Pam Karr, Ann Kay, Karen Rushing, David Tanner and Ann Tafoya.
Thank you all, Sue Ann Barnes



Sugar Cookies

- 2 eggs
- 1 cup sugar
- 1 1/2 stick butter
- 1 tsp. vanilla
- 2 1/2 cups self rising flour

If you have ever tasted one of Linda's sugar cookies, sometimes referred to as "Tennessee Tea Cakes", you will be glad to have the recipe. And if you haven't tried one, give these a try.

Linda says they freeze well, so keep some on hand for company.

Beat eggs lightly, stir in butter, and vanilla.

Blend in sugar, add flour and mix well.

Drop by tsp. on lightly greased cookie sheet.

Gently press each cookie flat with the bottom of a glass.

(grease the bottom of the glass and dip in sugar before pressing each cookie)

bake 350 * 10 minutes

remove immediately from cookie sheet

makes 3 dozen

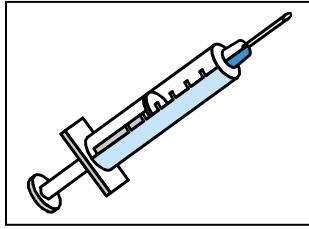
submitted by Linda Browning

- ◆ Keep deer and rabbits from eating your deciduous trees and shrubs in winter by wrapping them with inexpensive netting from a fabric store and securing with clothes pins, cut a big enough piece to cover them generously and check them after wind storms.
- ◆ Keep snails and slugs from your raised flower and vegetable beds by painting the top edges of the bed surround and while the paint is wet sprinkle with sand. This makes a rough surface that is undesirable for crawling on.
- ◆ 2 ways to keep cutworms at bay:
 - ◆ 1 tear newspaper in strips 2 inches wide and 4 to 5 inches long. Wrap the paper strips around the stems of tomatoes, peppers, cabbage and other plants where cutworms are a problem. Leave about 1 or 1 1/2 inches above the ground and the other under the ground.
 - ◆ 2 Take a 6 to 8 inch stick and push it into the ground about 1/8 inch from the plant, this keeps the worm from being able to wrap around the plant and being able to cut it.
- ◆ When to water your houseplants and patio plants: Place some pine cones in the top of your flower pots around your plants, then water your plants. As the pinecone gets wet it will close up and as it dries out the pinecone will open up. When the pinecone is open fully it is time to water again. The pinecones also make a decorative effect.
- ◆ Keeping deer away from hostas and other favorite plants: Try taking your dryer lint and putting it under the leaves of your and the deer's favorite plants. The lint should have enough of the human odor left in it to deter the deer and make you happy. You can also scatter dryer lint in the early spring for nesting material for birds, it makes a really soft lining for their nests.
- ◆ Here is a simple little craft that I like to do, nothing grand and nothing hard. It can be a good thing to do with the kids and grandkids. Take your terra cotta or plastic pots and clean the outside of them and let dry. The type of pot you use determines the type of paint to use. Just go with your or the child's imagination and paint anything you want, being sure to protect your painting surface. Name your painting, sign your painting, act like you and your kids are artist, and be inspired. When your pot is dried completely cover it with a waterproof sealer and enjoy. My grandkids really liked this.

Saint Fiacre, Patron Saint of Gardeners

Fiacre was an Irish monk born 600 AD, who settled in France near Paris. He was noted for his amazing cures of Many ailments ... specializing in proctology and urology. Hemorrhoids were called "figs of St. Fiacre". He was also the patron saint of gardeners, being noted for the superb vegetables he grew at his monastery. He is usually pictured holding a spade, dressed in coarse clothing and shoes and looking at the ground where he will soon dig. His aid may be implored in clearing weeds, brush and rocks and he can at least grant patience for tasks such as lifting and digging. His blessings are welcomed by all who love springtime and planting., summer and harvest, the smell of turned earth and the joy of a flowering land.

from Harvard Magazine by author Richard Martus
submitted by Ida Feldman



Darlene Tanner has submitted some timely medical news for gardeners.

Have you had your Tetanus shot?

Going to the Doctor and getting a shot is not something we look forward to. However, most of us are woefully behind on this very important vaccination. For those of us who work outside in the soil, it is critical to be aware of and prevent this infection.

*What is Tetanus? It is a bacterium called *Clostridium tetani* that lives in the soil. Some spores can live as long as 40 years!

*Why should I be worried about preventing it? A Tetanus infection can cause what is called “lockjaw” because symptoms of a Tetanus infection usually start with muscle spasms of the jaw. The infection can then move to your nervous system.

*How can I get exposed? If you have not had your Tetanus shot in the last 5 years (although most clinics say that you should have a Tetanus shot every 10 years), and you get or have a cut or scrape that comes in contact with the soil, you have been exposed!!

*What should I do? Call your clinic and check to see when you had your last Tetanus shot. If you have not had one in the last 5 years, go in right away. If you have had a cut that came in contact with the soil, you will need to get the shot and also start on antibiotics. Symptoms can start in 7-21 days, so you don’t have time to lose.

*Why are you scaring us to death? I stepped on a rusty nail in the goat pen. When I called to see when I had received my last Tetanus shot, they had **NO RECORD** of me ever getting the shot!! All this time, as I worked outside, I had been exposed. Because I had gotten shots as a teenager, I had not realized how much time had passed. It was definitely longer than 10 years.

Those of us who work outside need to be careful, safe and aware of our health needs. I hope you will call your clinic and check to see if you are up to date on this very important vaccination.

On another note....

Lyme disease

Lyme disease is caused by spirochete bacteria called *Borrelia burgdorferi*. It is spread by tick bites. This disease has become a growing problem. Between 1992 and 2006, the cases of Lyme disease have doubled. 29,000 new cases were reported last year. Some of these numbers reflect better diagnosis and reporting, but it does not minimize the seriousness of this disease. Symptoms include a red rash at the site of the bite. If the Lyme disease is not diagnosed quickly, your skin, joints, nervous system and heart could be infected.



The best prevention is keeping the ticks off of us! By covering our skin and using insect sprays that contain DEET we can try our best to keep the ticks from getting on us and biting us. However, as we all know, we will still get ticks.

After being outdoors, always do a “tick check”. It is imperative that the tick is found and removed within 36 hours. There are several kinds of ticks, some of which are very small. Look carefully; some are so small they look like a freckle.

If you have any symptoms (especially the red rash), see your Doctor right away! You will need to start on an antibiotic like Cephalexin or Doxycycline. Check with your healthcare provider to make sure the antibiotic prescribed for you has been proven to work for Lyme disease. Any old antibiotic will NOT do.

Unfortunately, one of the reasons this disease is so harmful is that some people have what is called “Post Lyme Disease syndrome”. This affects 10%-20% of patients. These patients suffer symptoms of joint pain, memory loss, fatigue and rashes even though they took the antibiotics.

Another word of caution: check your indoor/outdoor pets. You cannot get Lyme disease from them, but check them for ticks and use tick prevention medicines. You might get a tick bite from a tick that rode in on them in their fur.

I hope this information has been helpful, and that you will have a cautious but wonderful summer!! I researched medical websites for the information in this article. I confirmed them at the CDC (Center for Disease Control) website. If you have any other medical questions, you can look up these and other subjects you are interested in. *Darlene Tanner*

A summer garden quote:

“It’s difficult to think anything but pleasant thoughts while eating a homegrown tomato.”

Lewis Grizzard

Gardening Tips gleaned by Jan Priddy

Growing and Preserving Herbs

Fresh herbs can turn an ordinary meal into an extraordinary culinary experience. You can easily grow your own herbs at home, even if you have limited space for plants.

Herbs can be grown in the vegetable garden, in a flowerbed, in their own garden bed, in pots on a balcony, or indoors beside a sunny window. Herbs generally are not fussy plants.

Most herbs prefer to grow in a sunny location in well-drained soil. Few herbs will grow well in compacted or soggy soil. If your garden has soil that is hard, compacted clay or if it retains standing water after a rainfall, you may wish to grow herbs in a raised bed or in pots.

If you must grow herbs in pots, make sure that the pots provide ample drainage, and use a good quality potting soil. Herbs in pots will need to be watered more than herbs growing in the ground, but be careful not to allow the soil to remain soggy.

Herbs are not heavy feeders and generally don't need a lot of fertilizer. Herbs grown in containers will need more fertilizer than those grown in the ground, but don't get carried away with fertilizer even for container-grown herbs.

Most herbs dry very well for storage. If you grow more herbs than you can use fresh, you might consider drying some for later use.

To dry herbs, gather several stems together in a small bundle. Remove a few of the leaves near the base of the stems to make the stems easier to bundle together, then secure the stems with a small rubber band. Hang the bundle of herbs to dry in a cool place out of direct sunlight.

Individual herb leaves can also be spread out on a screen in an airy room out of direct sunlight. Turn the leaves daily so they dry evenly, and store them in an airtight jar.

Some herbs freeze well for storage, and will retain their flavor and bright color better than dried herbs. Parsley and chives freeze particularly well. To freeze chives or parsley, first snip or chop them to the size you generally use in recipes. Spread out the chopped herbs on a baking sheet and place the sheet in the freezer for a few hours. Frozen herbs can be stored within freezer bags or small containers.

The ideal time to harvest any herb is in the morning just as the dew has dried from the leaves. For the most flavor, harvest herbs just before the plants begin to flower. Do not harvest more than one third of the plant at one time.

Referenced from Mike McGroarty newsletter

Here are some simple tips on creating a beautiful landscape for your home.

1. Taller plants in the background, mid size plants in the middle of the bed, low growing plants closest to the lawn or the sidewalk.
2. Specimen plants, like a Weeping Japanese Maple should be planted just one to an area, then accented with smaller plants around the specimen.
3. Accent plants should be planted in groups. Often odd numbers are easier to work with. 3, 5, 7, or 9 of the same plant arranged in a group, or planted in an ark if the plant grows relatively low.
4. Don't alternate plants or colors. Plants of different colors also grow different. Some plants faster than others, some wider and flatter than others.
5. Raise the bed with good rich topsoil before you start. Your landscaping will really stand out in a raised bed.
6. Spend some money on specimen plants. They'll make you happy every time you look at that them!

Planting In Hot Weather Chancy

By JIMMY WILLIAMS

Less than two weeks from the summer solstice, and there you sit, staring balefully at all those nursery pots of trees and shrubs in your driveway that should have been put into the ground weeks or months ago. We all know that late planting carries with it all manner of pitfalls.

We will be facing scorching heat very soon, and indeed have seen 90 degrees or more already. Those plants are no more capable of coping with it than humans are. They will need an undue amount of coddling.

Woody things planted out in fall or winter are infinitely more prepared. Their roots have, hopefully, gained some purchase into the surrounding soil and are able to absorb what water is there.

On the other hand, new plants have roots confined to the shape of the pot. They dry out far quicker than those whose roots have quested afield. Adding to the problem is the current practice of growers using so-called "soil conditioner" as the planting medium. This consists of coarsely ground bark and very little else.

This is fine and dandy in nursery growing areas with automated watering and fertilizing. In fact, plants grown thusly exhibit extremely rapid growth, just what the grower desires. The quicker the plants attain salable size, the less the expense and the greater the profit margin.

However, once the plant is set out in the garden the roots almost immediately begin to dry out. Without virtually constant watering the specimen can go under quicker than you can say Jack Robinson. The hotter the weather, the more severe the problem.

It's not just woody things, either. Just lately, in fact, I set out several perennials which would wilt the next day following copious hand watering. After several days of succoring, the problem gradually eased. Herbaceous things, as a rule, root out more quickly than trees and shrubs.

Automatic irrigation, needless to say, alleviates the situation, but even then, if the watering cycle in a particular area is of short duration not enough water falls to satisfy the newly planted things.

A grass watering timer set-up, for instance, which may not water for more than 15 minutes in a given area, is entirely insufficient for woodies and perennials.

Yes, it is entirely feasible to plant all summer. But nobody said it was easy, and things can rapidly go awry.

Submitted by Liz Whitsitt, taken from the Paris Intelligencer

The love of gardening is a seed once sown that never dies.
-- Gertrude Jekyll





Proper Pruning Cuts

By Master Gardener C. Rae Hozer,
MGardenerRae@frontiernet.net

A knowledgeable gardener can make a plant grow in a particular direction, branch, flower or produce vegetation where they wish with minimal harm to the plant by skilled pruning. This is achieved by making proper pruning cuts in the right places.

Knowing how shrubs, trees and woody vines grow is important because pruning cuts must be made near a plant's natural growth points. Those spots include 1. "terminal" or "apical" buds at stem, shoot and branch tips 2. sites along a stem at the base of each leaf known as "nodes" where "lateral" or "axillary" buds grow and 3. the bulge where a branch attaches to a tree trunk called a "branch collar". All of these (except the branch collar which is a feature unique to trees) occur on both soft-stemmed and woody-stemmed vascular plants as shown in diagram 1- Vascular Plant Parts.

Plant growth takes place in special meristem cells that keep dividing to form various plant tissues and organs. Meristem cells at root, stem and lateral shoot tips make roots, stems, and side branches grow longer. Meristem cells generate buds with the potential to become new shoots, leaves and flowers. The cambium layer which is just under the bark on a tree trunk is made up of meristem cells that add tissues each season. New outer bark forms to protect the trunk from harmful outside forces. New inner bark (phloem) is the pipeline that carries carbohydrates made in leaves throughout the plant. New sapwood (xylem) transports water and minerals up from the roots to leaves where food is made. Older sapwood then becomes heartwood which supports the tree at its center. This growth process thickens and strengthens a tree trunk over time and produces annual growth rings.

The lateral bud immediately below a pruning cut will be the strongest new growth point and grow in the direction it faces. Be sure to select a bud that points the way you want the plant to grow. (Or prune just above a young lateral branch heading in the right direction.) In some plants buds grow opposite each other on either side of stems and branches. In this situation, cut above the opposite buds then pinch or rub off the bud pointing the wrong way.

More and better flowers (as well as plentiful fruit or berries in species where this applies) are produced when lots of sunlight reaches the middle of the plant. Cut small branches growing toward the middle of the plant back to larger branches to eliminate dense interior branching. Opening up the center of flowering trees, shrubs and vines not only encourages better flowering, it also promotes good air circulation for better plant health.

Cutting at a slant about 1/4 inch above a bud is best. Rain runs off slanted cuts but lays on flat-topped cuts. Wet wood at a pruning site is more prone to rot and disease. Cutting closer to the bud can injure bud tissue or cause it to dry out. A longer stub is too far from the growth point and will be slow to heal. Stubs are entry points for rot and disease as well as being unsightly. Which brings me to an all too common pruning tragedy- crape myrtle mutilation leaving a potentially graceful plant looking ugly and unnatural with multiple stubby, flat cuts which are also unhealthy for the plant. (Some call it "crape murder".) See photo 2.

Plateau Gardening is written by Master Gardeners for those tending home landscapes and gardens in Tennessee's Upper Cumberland Region. **UT Extension Cumberland County at P.O. Box 483, Crossville, TN 38557 (931-484-6743)** has answers for horticulture questions, free publications and details on how to become a Master Gardener. Send email comments or yard & garden inquiries to Master Gardener Rae, *mgardenerae@frontiernet.net*.

Wanted: Garden Ideas! Great! or Small.

Contributors to this month's newsletter include: Doris Holder, Pam Karr, Liz Whitsitt, Jan Priddy, Darlene Tanner, Ida Feldman, Lorene Robinson, Linda Laney, Bill Wyatt, Rae Hozer, Beth Babbit.

Keep contributing.
Keep reading.
Keep sharing.

Sue Ann Barnes, Editor
205 Westwood Ave.
Jackson, TN 38301
731-422-5253
barnes-s@charter.net

Board of Directors

Linda Laney, President
Manuel McKnight, 1st Vice-President (Programs)
Nancy Murray, 2nd Vice-President (Projects)
Darlene Tanner, Secretary
Lorene Robinson, Treasurer
Board Members
Doris Holder
Carol Sams
Tom Stallings
Barbara Tucker
Non-voting members
Sue Ann Barnes, Editor
Marilyn Taylor, Webmaster
Bill Wyatt, Advisor



Notice the cool pale blue borders on many of the text boxes. It has been so hot, I thought we needed something cool to look at.

The Bridge to Knowledge The University of Tennessee Extension

Madison County
309-C North Parkway
Jackson, TN 38305
Phone 731-668-8543
Fax 731-668-8440
Email wwyatt1@utk.edu

Summer Celebration Thursday July 8

Location:
West Tennessee Research and
Education Center

Speakers, Activities, Looking,
Shopping, Eating and
Fun, Fun, Fun!

10 AM to 7 PM

For more information go to:
<http://westtennessee.tennessee.edu/>
Admission: \$5.00



Pat Jenkins, class of 2004, passed away on May 8th. Pat had been diagnosed with multiple myeloma cancer in Feb 2006.

Her best friend, June Milam, class of 04, said, "Pat was a master gardener before she ever took the class" She had a beautiful garden with a greenhouse and could root cuttings of just about any plant. I had become friends with Pat and June when we attended the tri-state MG conference in Memphis in 2004 and I had come to realize that Pat was very knowledgeable when it came to the plant world.

Georgia Morehead