



ECHO



Texas AgriLife's Community Horticultural Outreach

A Word From Your Friendly Horticultural Agent

By Greg Church



It's not often enough that I take the time to write to a letter in our **ECHO** newsletter. This newsletter offers our members an opportunity to become educated and informed about many aspects of gardening and volunteering in Collin County. Just like this newsletter, the Collin County Master Gardener Association has a lot to offer both our members and the public.

Since starting with the Extension Service two years ago, I have discovered the common description of the Extension Service and the Master Gardener program is that "we are one the best kept secrets in Collin County." Admittedly, before I started this job, I, too, knew very little about the Master Gardeners. Since then that has changed dramatically. Although my role as the Master Gardener Coordinator is only a portion of my responsibilities, its impact can be felt through all the Horticulture programming that we offer in Collin County. Simply put: the Collin County Master Gardeners are integral and essential to the success of Extension Horticulture education and outreach in Collin County. I would like to say that without your help and support, my efforts alone would be but a small fraction of what together we are able to accomplish.

Our efforts to provide research based horticulture information to the public and provide outreach programs to our community continues to improve through our joint efforts and passion for gardening. The New Year offers us many opportunities to improve and expand our projects so that we can better serve our clientele. Each year our numbers grow with the addition of trained Master Gardener interns. These valued additions offer a renewed fervor to the existing members. I can't express how remarkable your commitment and enthusiasm to our mission is to me. Recently we participated in the Collin County Home and Garden Show at the new Allen Event Center. This three day event was nothing short of success for our organization. Our Information Booth and Speaker Bureau Projects were outstanding. The number of people we were able to reach vastly exceeded all expectations. We owe it to the project leaders and to those

(More on page 2)

March–April 2010

Educational programs of Texas AgriLife Extension serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability, or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas cooperating.

In this issue:

- Message from Dr. Greg Church* Pages 1, 2
- Book Reviews/ Updates*....Page 3
- Great Blooming Bulbs*.....Page 4
- Monthly Presentations*Page 5
- Greening of Thumbs*.....Page 6, 7
- Wine and Roses*Page 8
- Youth Education Program*.....
..... Pages 9
- You Call This Dirt?*.....Page 10, 11
- For Coffee Drinkers*.....Page 12
- Garden Checklist*.....Pages 13, 14
- What is a Megapixel?*.....Page 15
- Contributors*.....Page 16



A Word From Your Friendly Horticultural Agent *(Continued from page 1)*



MGs at Collin County Home and Garden Show in Allen

more than 25 volunteers that came out to help with this event. I can say it was such a big success that we already signed up for next year's show.

I can't finish this letter without encouraging each of you to sign up for a volunteer opportunity. We are increasing the number of opportunities available to you each year. The eMinders weekly newsletter has provided our organization with an outstanding communication tools. You can find the latest information in your inbox each week. We have dedicated

volunteers that work to put this information together each week. I encourage you to take the time each week to read your eMinders and pick out a volunteer or educational opportunity that interests and works for you.

There are numerous issues that affect our county residences. We are working to utilize, develop, and implement programs that address the needs our clientele. Providing the public with education that empowers our clientele to become better stewards of the environment and our natural resources is of critical concern for us. The Earth Kind Environmental Stewardship program addresses this programming need in a variety of ways. The overall program continues to be improved through your efforts and the efforts our statewide Earth Kind Advisory Team. As a member of this team we are working to provide you with the resources needed to accomplish our mission. The newly revised Earth Kind web site offers many improvements, so take the time to check it out.

We have some upcoming improvements to how we report and communicate via our award winning website. I can't express enough how important reporting is to the Extension Service and the Master Gardeners. I believe that this new and improved method of reporting will be easier and more effective than anything you've seen yet. Janet and web site committee have out done themselves, yet again.

I look forward to working with you in 2010 and beyond. I hope to see you at the next volunteer opportunity. 🌸

Greg Church, Ph.D.
County Extension Agent - Horticulture



Enthusiastic volunteers are what it's all about!

Book Review

Mary Means

Remarkable Plants of Texas: Uncommon Accounts of Our Common Natives

by Matt Warnock Turner

Remarkable Plants of Texas is a wonderful book about the history and folklore of some of our native Texas plants.

The author chose the plants to write about based on their availability to the public, and those that had the most interesting stories to tell. The book describes twenty-two trees, thirteen shrubs, and thirty other plants including flowers, vines, and grasses. Each description covers three or four pages and includes a half-page picture of the plant being described. Most of the photographs were taken by the author.

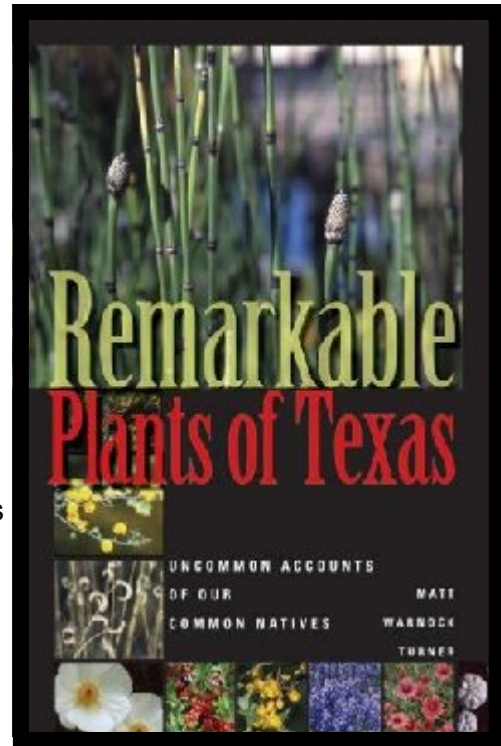
The beginning of each description contains botanical information, but most of the text is devoted to cultural, historical, and current uses of the plant. For example, berries of the soapberry tree were used as a lather to wash hands and clothes. Wood of the dogwood tree was used to make shuttles for the textile industry because the wood keeps its shape under continual wear. Significant and champion specimens of plants are also given; for example, Texas is currently “home to the National Champion mesquite” tree.

Uses of each plant by Native Americans are also described. The writer discusses which Indian tribe used the plant for which purposes. The Kiowa chewed willow bark for toothache; the Choctaw and Chippewa used dried Sassafras leaves to flavor soups.

Dr. Turner gives fascinating facts about each plant and he puts a great deal of effort into authenticity, backing up his stories with liberal footnotes. The section on our native *Ephedra* species makes colorful reading. Before he died, Governor Jim Hogg requested that a pecan tree and a walnut tree be placed on his gravesite rather than a monument. “The nut growers who gathered in Austin to decide which trees to plant ... ended up forming the Texas Nut Growers Association.” The bibliography in the back of the book spans eighteen pages.

The chapter on wild grapes gives a beautiful account of how the Texas grapes saved the French wine industry in the late 1800’s. Two of the three Americans who have won the French Legion of Honor are from Denison, Texas. To find out who they are, ask me at the next monthly meeting.

Remarkable Plants of Texas was published in 2009 by the University of Texas Press in Austin. This is not a field book; rather, it is a heavy book, more resembling a textbook. Further information about the author can be found at DrMattTurner.com. **Remarkable Plants of Texas** received the Carroll Abbott Memorial Award in 2009 from the Native Plant Society of Texas. Anyone who regards native plants as cherished friends will enjoy this book. 🌻



Great Blooming Bulbs

By Theresa Merritt



Star of Bethlehem (*O. umbellatum*)

The bulb sale committee would like to thank all the Master Gardeners who helped make the 2009 sale a success; over 11,000 were sold.

A successful sale is much more than just selling bulbs. Bulbs that are proven performers in the soils and climate of Collin County must be researched and selected. Those chosen should not be readily available at the neighborhood big box store and a variety of species to choose from is essential. Finally, the bulbs chosen must also fit in diverse landscapes.

For only the second time since the annual sale began in 2004, an Iris was offered and the species chosen, Blue Magic, was the runaway best seller of the year. Debuting in 2009, the *O. umbellatum* (Star of Bethlehem) was the first shade loving bulb ever offered and was on many order forms. The *Hyacinthoides hispanica Excelsior* (Spanish Bluebells), an excellent naturalizer, was second only to the Iris in popularity. Old favorites, the Narcissi Quail and Tahiti continued to be sought after and hopefully will be offered at the next annual sale. Others, to include the *Tulipa clusiana* Lady Jane, Narcissi Thalia, and Leucojum Gravetye Giant were no longer as popular; gardeners choosing the new offerings far more often.

The bulb sale committee is grateful to everyone for sharing their knowledge and enthusiasm to make the 2009 sale such a success. By taking the time to learn about the new bulbs and renew their knowledge with old favorites the Collin County Master Gardeners ensured those offered were sought after additions for local landscapes.

Be sure to read the July/August edition of the Echo to learn the identity of the bulbs that will be offered at CCMGA's 2010 Spring Bulb Sale. 🌸



The Best Seller—Blue Magic

CCMGA Monthly Presentations 2010

By David Spadoni

January 28th	Association Committee Reports & 2010 Projects
February 25th	Rob Weir - Shades of Green Nursery
March 25th	NWF Speaker - How To Certify Your Wildlife Habitat
April 22nd	Plant Sale Update & Tour of Forest Grove Greenhouses
May 27th	Speaker from Trinity River Audubon Association
June 24th	Dave - Raising Butterflies & Tour of Heard Butterfly Garden
July 22nd	Speaker - Blackland Prairie Master Naturalist Program
August 26th	Dave - Perennial Research Garden Update & Tour Myers Park
September 23rd	CCMGA Specialist - Rainwater Harvesting Program
October 28th	CCMGA Members - 2010 Special/Unusual Garden Photos
November 18th	[3 rd Thurs.] Plant/Seed Exchange/Pot Luck Lunch
December	2010 Intern Graduation Dinner (Date and Location TBA)☼



Photo by M.Hicken

Greening of the Thumbs

By Mary Nell Jackson

I am glancing at my thumbs as I type, and my eyes tell me that neither thumb has a green pigment. Wishing for magically green thumbs won't make it happen, trust me.

Gardeners who brag about how easy it is to stick anything in the soil and stand back to watch it grow should be muzzled at public garden club settings. My thumbs are beginning to ache just thinking about these super achievers. Don't believe it; something must have died in their garden that was overlooked.

As winter slowly turns into spring thoughts naturally turn to 'greening up' the landscape. Here we go again with the color **green**.

Alas, we must ask, 'Is there really such a thing as a **green** thumb?'

Garden writer and professor of philosophy, Allen Lacy wrote in his book, **The Gardener's Eye** that he does not believe in a **green** thumb. He does, however, believe that there is such a thing as a gardener's eye and that it is a gift and 'that it comes from outside, some call it 'grace'. This description is a bit too vague for me. I need proof on my

thumbs and in my garden. It has occurred to me that some thumbs could be much like a chameleon, perhaps **green** only some of the time. That would account for some failures in the garden as well as successes.

I'm afraid both the idea of **green**

thumbs and the gardener's eye leave me doubtful. To achieve what many refer to as a **green** thumb the gardener must have a reference point, a beginning. Gardening success does not arrive by osmosis. Well, maybe one just knows that mint can grow on concrete and iris and daylilies multiply as fast as rabbits!

Success must be measured by education, or a thoughtful, more experienced gardener sharing failures every other gardener experiences and learns by painful and expensive meas-

ures. There is nothing like a hit to one's pocket book to not make that same mistake again.

How would we know if not for other gardeners' failures that to get African Violets to bloom they should be placed in an Eastern exposure? That orchids love the bright light of an East window but no hot West sun?

I do believe **passion** may be one

(More on page 7)



Greening of the Thumbs

(Continued from page 6)

of the forces Lacy was referring to in his book. If not passion who in their right mind would work planting bulbs in freezing temperatures and weed when the heat index is in the three digit numbers? We can observe nature and see that naturalizing bulbs are more aesthetically pleasing than ones planted in stiff rows. By reading, studying, and learning about bulbs, we can attain the look of Mother Nature's hand in their placement.

Michael Pollan, author of *The Botany of Desire* once wrote that he 'reads to garden and gardens to read'. This may be the answer to a **green** thumb; can it be as simple as educating oneself?

Every spring my dilemma begins again with the pruning sheers in hand. Which hydrangeas should be pruned in spring and which varieties should be pruned after their summer bloom? I continue to second guess my clipping but have read that the big leaf Hydrangea macrophylla, big leaf (*H. serrata*) and Oak leaf (*H. quericifolia*) blooms on *old* wood. Panicle hydrangea (*H. paniculata*) and smooth hydrangeas need to be cut back almost to the soil level because they bloom on *new* wood. I don't think that this garden practice would come naturally to me, it has to be drilled every spring and I refer to my garden journal notes to make sure. It remains a toss up to see if I do this correctly as I await my blooms. I am aware that these plants should be removed from my garden to make room for natives, but I continue to nourish them as my shade canopy welcomes them. In a few years sadly they will die out as our water shortage becomes critical; it's but nature's way of elimination.

Would I know that putting some seeds in the freezer is advised; soaking seeds to quicken their sprouting; or simply throwing some seeds on the soils surface will be all they need to flourish? If someone had not told me or if I had not read about these successful garden practices, I think not.

The true origin of a **green** thumb dates back to the times when tobacco farmers removed the flowers from the crops in order to increase the size and weight of the leaves. This process, known as 'topping' continues today. In early colonial America, when tobacco was a major cash crop, farmers would hand pick the flowers using their thumb nail to cut the stem. After a while, the farmer's thumb would be stained **green**.

The origin of the **green** thumb is not a fairy tale after all; it is a method that developed out of trial and error from farmer to farmer, generous gardeners sharing their knowledge for a bigger crop yield.

We can all relax now that we know the true origin of the **green** thumb and begin anew this spring with our individual gardens. We all strive for that knowledge that will surely bring **green** thumbs. Hildegard of Bingen, the 12th Century mystic and herbalist wrote about viriditas, it means 'the **greening** of the soul'. That is what I am striving for, forget my thumbs!🌱



Wine and Roses: A Dedication to Modern Masters

By Nancy Joslin

On April 17, from 10:00-3:00, Chambersville Tree Farms is hosting a dedication of the newest garden, Legacy of Legends.

This is the most complete collection

of Dr. Griffith Buck roses outside of University of Iowa. Also featured will be a display of all Earthkind, Earthkind Brigade, Knockouts, Pioneer, and a sampling of David Austin roses.

Please join us for an introduction by Mike Shoup, followed by the dedication

and chatting with our county officials. We have Landon's Vineyard for tastings and sales of local wines (by the glass and bottle...check out Red Rose wine with our dedication label); a local cheesemaker demonstrating mozzarella and selling cheese trays; hamburgers and hotdogs; a hot air bal-

loon flyover and landing; and many more fun activities. We call this day **WINE AND ROSES, A DEDICATION TO MODERN MASTERS**. We also ask for our MG rose specialists to give guided tours of this new garden. Please contact Nancy Joslin, njoslin@verizon.net, for further information and to

add your name to the volunteer list. We are in the process of requesting volunteer hours for docents. We also have an information booth so you can sign up on the eMinders. If you can't volunteer, just join us and en-



Belinda's Dream

joy the gardens. There is no charge for this event so spread the word! 🌹

Youth Education Program

by Kathleen Brooks

Using Junior Master Gardener activities Collin County Master Gardeners are teaching children on a broad range of horticultural and environmental topics.

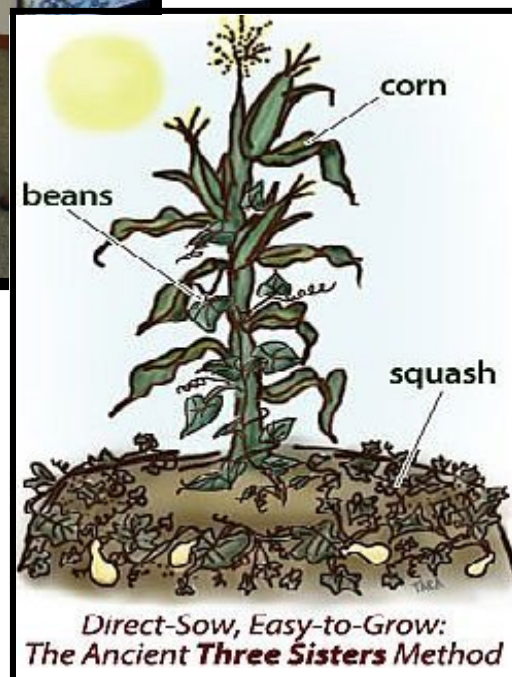
We are planning to teach summer camp sessions in June of 2010 in conjunction with the Heard Museum’s Education Department. During our plant sale in April, we intend to offer activities from the JMG curriculum to children and adults too, such as a propagation display using a gallon milk container for a green house.

Working with the Speakers Bureau we hope to present programs to scout troops that will facilitate completion of a badge or award. At this time we are coaching Junior Girl Scout Troop 365 in Plano to earn their Bronze Award. The Heritage Farmstead in Plano has given them permission to grow crops for the farm animals and Master Gardeners are providing information and encouragement.

Using the ancient Iroquois Indian method called the Three Sisters, the scouts will grow corn, squash, and bean together in their plot. All eleven and their families are participating in their project.



Kathy Ward and Kathleen Brooks captivating students within the Junior Master Gardener Program



Join us in teaching the next generation of gardeners!



You Call This Dirt? Science of the Clay

-John Worley

When we got our first house in the late 70s, I was excited to start some *real* gardening. Oh sure, back in married student housing, we built containers and grew tomatoes. But that didn't really count.

The Houston Black series occurs on about 1.5 million acres in the Blackland Prairie which extends from north of Dallas south to San Antonio.



It had a 10'x20' fenced area that could be used for a garden. I ran out with a shovel and it just bounced off the dirt. I cursed, "**You call this dirt? It's as hard as concrete!**" (Colorful language - get it?)

Over the years, turning in straw that had been used as mulch (along with what amendments I could afford in those early days of my career) resulted in a pretty good garden.

But I'm a nerd. I *had* to learn some of the science of this clay. I heard about gardening classes at the A&M Extension Center and took as many as I could. And now I finally found the time to become a Master Gardener (intern).

Our soil has a name: Houston Black clay. (What did Houston do wrong?) In the 1969 publication **Soil Survey: Collin County Texas**, the USDA said: "rated **fair** as a source of topsoil", "**not well suited** to gardening and landscaping", "rated **poor** as a source of road fill", "**risky** for building foundations or for pipelines", and "**does not provide** good reservoir areas". (*Oh-come-on-don't-hold-back-tell-us-what-you-really-think!*)



Clay particles are less than 2/1000th of an inch. When dry, the particles clump together to form clods that are as hard as rocks. Wet clay sticks to **shoes, shovels, hands, dog paws,** (more colorful language).

(More on page 11)

You Call This Dirt? *(Continued from page 10)*

The soil shrinks by 30% in each dimension when it is dry. Our clay soil can crack more than 3" wide and 3' deep in dry summers. It's a testament to turf grass roots, stolons, and rhizomes in their ability to stabilize the soil. Bunch grasses are more common in rural areas and cracks more easily form there.



The top and top right photos were taken during a drought, just a few feet from some newly transplanted (hand watered) persimmon trees. But time and rain heals all things. That area looks fine three years later. The persimmon trees (above right) are doing well, too.

Permeability to water is less than 1/10th inch/hour. I can attest to that fact. Living with a septic tank and lateral lines can be a challenge in the rainy season.

In my case, water that manages to infiltrate takes the easy way (rather than going deeper), back up the lateral line, filling the septic tank up almost to ground level. Then, the septic tank can't expel it's product until the water level drops. That leaves about a 2' section of a 4" pipe for washing clothes, dishes, and people, and specially **flushing the toilet**. (and yet more colorful language).

With that lousy permeability, a 2" rain can take several very, very long, tedious, anxious days to work out of my system (so to speak). 🌸

For All Those Coffee Drinkers Out There!

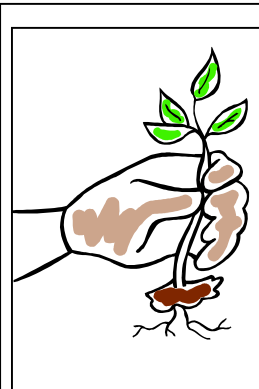
-Kim Schofield, Program Specialist-IPM

Coffee is one of the biggest cash crops in many parts of the world, and the coffee berry borer is one of the most widespread pests of the coffee berry.

The female borer drills a hole into the berry and then lays her eggs. The eggs hatch and the larvae complete their development by feeding on the berry. These tiny beetles cause economic losses estimated at \$500 million. Recently, however, a group of scientists discovered a thrips species, *Karnyothrips flavipes*, which is a natural enemy of the coffee borer. This thrips was identified as feeding on the eggs and larvae of the coffee borer inside the coffee berry. Scientists found the highest percentage of thrips preying on borer larvae and eggs early in the growing season, which coincides with the coffee borer populations being the highest. More research is needed to determine how effective this predator is at controlling the coffee borer and to see if this thrips is preying on the coffee berry borers in other coffee producing countries. For the full story, please view http://www.sripmc.org/news_popover.cfm?id=4153. ☘



Photo of green Arabica coffee berries growing in Kona, Hawaii.



When weeding, the best way to make sure you are removing a weed and not a valuable plant is to pull on it. If it comes out of the ground easily, it is a valuable plant.

~Author unknown

Garden Checklist for March –April

By: Dr. William C. Welch, Professor & Landscape Horticulturist, Texas A&M University, College Station, TX. The following information was compiled from the 2009 updates available at <http://aggie-horticulture.tamu.edu/extension/newsletters/hortupdate/>.

Note: Check with your local county agent for the average last killing freeze date for your area. Killing freezes can and do occur after this date but it is a good indication.

March

- Often tomato and pepper plants started outdoors from seed grow quickly; they will catch up with commercial plants in size within a few weeks. For many gardeners, this is the way to obtain rare or heirloom varieties.
- Pruning of evergreens and summer flowering trees and shrubs should be completed in early March. Prune spring flowering trees and shrubs as soon as they finish blooming.
- Start hanging baskets of petunias or ferns for another dimension in landscape color.
- Plant dahlia tubers in fertile, well-drained soil.
- In North Texas there is still time to plant seeds of your favorite annuals in flats to be transplanted out-of-doors when danger of frost is past.
- Select and order caladium tubers as well as geranium and coleus plants for late April and early May planting. Do not plant caladiums until soil temperature reaches 70F.
- As camellia and azalea plants finish blooming, fertilize them with three pounds of azalea-camellia fertilizer per 100 square feet of bed area. Add mulch if needed in the beds.
- Fertilize roses every 4 to 6 weeks from now until September.
- Beware of close-out sales on bare-root trees and shrubs. The chance of survival is rather low on bare-root plants this late in the season. Your best bet at this time of year is to depend on container-grown or balled-and-burlapped plants for landscape use.



Tomatoes ready for planting

April

- Select and plant out large vines for use in the landscape. Suggestions: the blue, season-long blooming Skyflower (*Thunbergia grandiflora*), Wisteria—either Chinese, Japanese, or American varieties in blue, rose or white; Crossvine (*Bignonia capreolata*) in shades of tangerine, dark reddish orange with yellow highlights; (Trumpet Creeper (*Campsis radicans*) in orange-red or clear gold or Cat-Claw Vine (*Macfadyena unguis-cati*) in yellow.
- Prune spring-flowering shrubs soon after flowering. Natural shape of the plant is important to consider; avoid excessive cutting except where necessary to control size.
- Roses have high fertilizer requirements. For most soils, use a complete fertilizer for the first application just as new growth starts, then use ammonium sulfate or other high nitrogen source every 4 to 6 weeks usually just as the new growth cycle starts following a flowering cycle.
- Continue to spray rose varieties susceptible to black spot, using an appropriate fungicidal spray such as Funginex. Use every 7 to 10 days or as recommended. *(More on page 14)*

Garden Checklist for March –April *(Continued from page 13)*

By: Dr. William C. Welch, Professor & Landscape Horticulturist, Texas A&M University, College Station,

- Climbing hybrid tea roses may be pruned as soon as they complete flowering .
- Removing spent flowers, trimming back excessive growth, and applying fertilizer to an established bed can do wonders toward rejuvenating and extending the life of the planting.
- As soon as azaleas have finished flowering apply an acid type fertilizer at the rate recommended. Don't over fertilize, as azalea roots are near the surface and damage can occur. Water thoroughly after fertilizing.
- Seeds of amaranthus, celosia, cosmos, marigold, portulaca, zinnia, and other warm-season annuals can be sown directly in the beds where they are to grow. Keep seeded areas moist until seeds germinate. Thin out as soon as they are large enough to transplant. Surplus plants can be transplanted to other areas.
- It will soon be time for bagworms to attack junipers and other narrow-leafed evergreens. Light infestations may be controlled by hand picking and burning. Control measures such as Sevin dust or spray should be applied while the insects and the bags are about one-half inch in length.
- For instant color, purchase started annual plants. Select short, compact plants. Any flowers or flower buds should be pinched to give plants and opportunity to become established.
- Check new tender growth for aphids. A few can be tolerated, but large numbers should be controlled. Always follow label instructions on approved pesticides for control.



Clematis 'Roguchi'

Many flower or vegetable seeds left over after planting the garden can be saved for the next season by closing the packets with tape or paperclips and storing in a sealed glass jar in your refrigerator.

- Start weeding early in the flower garden. Early competition with small plants can delay flowering. Mulch will discourage weed growth and make those that do come through easier to pull.
- Soil purchased for use in beds, low areas, and containers should be examined closely. Often nut grass and other weeds, nematodes, and soil borne disease are brought into the yard through contaminated soil sources.

Watch newspaper and other publicity for information regarding wildflower trails and plan a trip to enjoy the beautiful natural resource. 🌸

How Big is a Megapixel?

Photography: Tips and Techniques

By John Worley

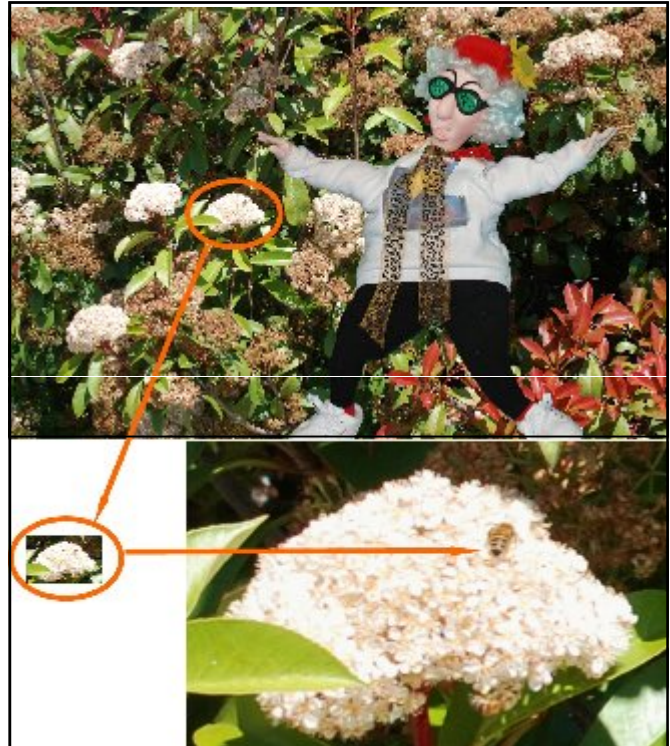
I like technology. My brain only has the analytical side. I have no innate artistic ability. I can't help you take a pretty picture, but maybe I can help you understand the technical side of photography a little. Let's look at megapixels and image resolution.

Digital pictures consist of many, very small color dots - known as pixels (short for picture elements). Most digital cameras use more than 5 MP (5,000,000 color dots) and use a resolution of 300 DPI (dots/inch, or pixels/inch). (300 DPI = 300 color "dots" in a line 1" long. A 1"x1" square would have 300x300 pixels = 90,000 pixels.)

A 4"x6" print, even at 300 DPI, only contains 2,160,000 (4"x6"x90,000 pixels/in², about 2 MP). Most photo printers use only 150 DPI or less, needing only about 1 MP for a 4"x6" print. You can crop out all but 20-40% of a 5 MP photo or 10-20% of a 10 MP photo and still have enough pixels left for a 4"x6" print. A 10 MP photo can make a 9"x12" print at 300 DPI or 18"x24" print at 150 DPI.

If you are willing crop a photo, you won't have to get so close. By using the highest resolution to take photos, your camera will hold fewer photos before you have to download them to free up camera memory. Wouldn't you rather have 500 high quality images than 5,000 low quality ones?

The opportunity does arise where you think you're taking a shot you'll want, but discover that it's the background where the real treasure lies. (See above photo.) It's the background that you may want to enlarge it for a print. (Maxine isn't really posing in front of my neighbor's photinias. I'll tell you how I did it when we cover editing.)



Using 10 MP allowed me to come back later and crop the photo to show new detail; in this case, it is the bee. The photo is optimal, even though it was taken at a distance from the subject. Or, you can start with the photo like this part of a bed in my patio and crop to just the Texas Columbines. These Columbines have "free ranged". They seed out well, but I don't mind.

In the next issue of ECHO we'll look at perspective and composition. 🌸

Thanks to ECHO Newsletter contributors: The submission deadline for the May/June 2010 issue of the **ECHO Newsletter** is April 10. Send submissions, comments, and suggestions to:

Kathleen Brooks
Greg Church
Mary Ann Hicken
Lynda Irby
Mary Nell Jackson
Sherrian Jones
Nancy Joslin
Mary Means
Theresa Merritt
Katherine Ponder
Kimberly Schofield
David Spadoni
Dr. William C. Welch
John Worley

Editor, Mary Ann Hicken at:
hgmahicken@verizon.net



CCMGA
Texas AgriLife Extension
825 N. MacDonald Street
Suite 150
McKinney, TX 75069