



Winter 2017
Volume 20 Issue 4

Over the Garden Gate

Published by the Hall County Master Gardeners

President's Corner

by Liz Dietz

2017 - A Year of Achievement

Like most of you, I look at the calendar and cannot believe it is December already. When the Board met earlier in the year, no one could have predicted that we would have ended this year in such fashion. We have managed to very successfully complete 2 Expos, a Garden Walk and the Literacy Garden at Gardens on Green. It was dedicated with Mrs. Deal as the keynote speaker.

One of the appealing features of the Master Gardeners is the opportunity to continually update and increase our knowledge base so we can better serve UGA and our community. To that end, we offered 8 different speakers at our monthly meetings plus a presentation of all projects for a total of 9 hours of CE Training.

Thanks to 2 of our HCMG's who offered classes for even more training in Solitary Bees and Sweatbox Propagation. All of this is listed in the

Members Only section of the web site under CE Training.

We continued to recognize our MG of the month and mixed it up between newer and more "seasoned" members, which was very enjoyable.

With the loss of our photographer, a pool was formed by Don Linke. Events needing a photographer were set up and people signed up as available. The work was spread out among several people without any one person bearing the full work load. This process was very successful, proving how resourceful and cooperative this group can be.

With additional help from recent MG classes, 4 dormant youth gardening programs were reactivated and 2 current programs were taken over by new people, bringing the number of active youth programs to a total of 10.

With the help of the HCMG newsletters, information from the

speakers that appeared at our Expos, articles that have appeared in the newspaper and various magazines, and content in our Facebook page, the City of Gainesville was able to maintain its certification as a Trees USA city.

I would like to extend a sincere thank you to all those who contributed to these efforts. There is so much talent within this organization willing to step up and contribute in many ways.

I would like to thank you for the opportunity to serve as your President. While we may have hit a bump in the road, with patience and perseverance, we will continue our mission of gardening and educating others.

Write for Us!

Like to write? Have something to say? Your fellow master gardeners want to hear from you!

Email Rick at rsfreeland@charter.net for details.

Inside This Issue:

President's Corner	1
Learning, Exploring, Discovering	2
Autumn Leaves	3
A Bonus of Seasonal Color	4
Out of Sight, Out of Mind	5
Green Side Up	6

HCMG Officers

President: Elizabeth Dietz
Vice President: Lori Knuteson
Secretary: Dinah Wallace
Treasurer: Beverly Brinson
President Elect: Patti Lewis
Past President: Don Linke
Members at Large: Al Pannell, Sally Wise

Editor: Rick Freeland

Please submit your ideas, news, comments and questions to

rsfreeland@charter.net

Newsletter contributors:

Liz Dietz; Hugo Kollmer; Marcia Tague; Rick Freeland

Over the Garden Gate is published quarterly by the Hall County Master Gardeners. Copyright 2017 by Hall County Master Gardeners. All rights reserved. Articles may not be reprinted without permission of the authors.

While it is always nice to relax in the garden and maybe do a little weeding or just enjoy what you have created, sometimes it's nice to be surprised by something different. I love irises, and secretly want to have an iris that will bloom in each month of the year.



This summer I was listening to the Director of the **JC Raulston Arboretum** in North Carolina, who mentioned that they were running a trial on an iris that blooms from November through April. After his talk, I asked him for the exact name of the iris and started searching for a vendor.

The real point here isn't that there is a winter- blooming iris, but how I learned of it. It was at the 2017 **Georgia Master Gardener Conference**, just down the road in Buford. We all enjoy

learning and these conferences are a great way to expand our knowledge of gardening while interacting with other Master Gardener Groups. The day before the actual conference there were workshops that shared ideas for retention, finance, and project management. While that sounds a bit "boardie," it was a great method for sharing ideas, what works and what doesn't work in different groups.

Back to the real fun. On the workshop day, the past president of the **NE Georgia Orchid Society** shared a great potting secret. As you probably already know, and I have demonstrated at home, orchids love a humid environment, but not wet roots. The past president demonstrated how he uses polystyrene pellets, (real polystyrene, not the biodegradable kind) to fill the bottom of his orchid pot. He fills it almost two-thirds full, places the orchid on

the pellets and then covers the roots with sphagnum moss. He has had great success with this method, and after three months, even my orchids are surviving.

So, what I am really suggesting is to go on an adventure.



For a nominal fee you can join a larger group of Master Gardeners – or a group focused on a certain plant, like Camellias.

The **American Camellia Society** is headquartered just south of Macon at Fort Valley, GA and they have an entire garden focused on camellias. Who can resist the beauty of camellias in bloom?

The **Georgia Native Plant Society** has a wonderful annual symposium focused on the vital need to increase the use of native plants in all our landscapes.

If you look, there is probably an organization for every

type of plant in your yard. I'm planning to add a rock garden and – you guessed it – there is a **North American Rock Garden Society**, but the local organization is near Raleigh, NC.

Bottom line: take a walk on the wild side and expand your gardening horizon by attending meetings of new organizations. Then share with us what you have learned.

Well, the beautiful colors of fall have almost disappeared and the annual task of tidying our lawns, shrub and flower beds is well underway. If you are blessed with an abundance of trees in your yard it may seem like an endless task of raking, blowing, mulching or otherwise moving these leaves, especially if you have oaks, hornbeams or beech trees in your yard. These species and a few others, have *marcescent* leaves, the term used to describe leaves that hang on long after other deciduous trees have shed theirs. These marcescent leaves will keep falling well into winter and even spring, when expanding buds push them off.

All trees shed leaves, even evergreens. However, conifers and other evergreens only give the appearance of keeping their leaves all year because they do not shed them all at once, and they keep them for more than one year. The advantage is that photosynthesis can occur longer and nutrient loss is reduced.

So, why do leaves fall? Leaf drop is simply an adaptation to allow trees to better adapt to environmental conditions. Leaf drop benefits deciduous trees by reducing water loss and frost damage while allowing the tree to develop leaves that can use sunlight more efficiently during warmer seasons.



As autumn begins, photosynthesis slows. The veins that carry nutrients and water to the leaves slowly close, forming an *abscission layer* that detaches the leaf and allows it to fall.

Abscission layers sometimes do not completely form until spring. Disease, insects or a freeze can also kill

the leaves before the abscission layer is formed and the dry, brittle leaves snap in the wind.

Marcescence (leaf retention) is more common in smaller trees and on lower branches of large trees.

There are many theories to explain this. One is that being in the shadows of larger trees

and higher branches slow the abscission process. Another claims that marcescence is a defense against browsing animals like deer. Marcescent leaves conceal buds, making it more difficult for deer to nip the twigs; plus, dry brittle leaves are not as tasty.

Scientists also theorize that marcescence is an adaptation of trees growing on dry, infertile sites, where you often find oaks and beech out-competing other species. Leaves on the ground decompose quickly and by spring many of the nutrients have leached away. Marcescent leaves fall in the spring to "feed" the trees before the next growing season, at a time they need nutrients the most.

Enjoy the holiday season, but pause to thank Dear ole Eve, the Mother of the human race, who always wore her leaves in their prim and proper place. And thank Dear ole Adam, Father of us all, who somehow knew just what to do when the leaves began to fall.

What the Heck?

Chelate

A complex organic substance holding micro-nutrients, (usually iron), in a form plants can absorb. For example, iron chelates can help cure chlorosis.

Southern gardeners are blessed to have a large selection of flowering woody ornamentals with a wide array of flowers, in a myriad of shapes, sizes and colors suitable for our home landscapes. Among these are several which go on to grace us with awesome fall color. Some of the best include:

Red Chokeberry (*Aronia arbutifolia*)

In spring this small tree bears very fragrant white blossoms. In addition to colorful fruit, liked by birds, it produces brilliant red-orange fall foliage.



Stewartia Fall Color

Stewartia (*stewartia pseudocamellia*)

This small multi stemmed tree bears beautiful white camellia shaped spring blossoms and fall foliage with festive shades of orange red and burgundy.



Stewartia Bloom

American Yellow-wood - (*Cladrastis kentukea*) -

This medium-size tree bears long panicles of fragrant white spring flowers. In the fall its foliage turns bright golden yellow.

Japanese Snowball Viburnum (*Viburnum plicatum*)

With clusters of baseball size white blossoms, this shrub makes an outstanding spring landscape specimen, while its bronze, reddish and purple fall foliage are a magnet to the eye.

Serviceberry (*Amelanchier arborea*)

Its clusters of slightly fragrant white flowers are a harbinger of spring. Cultivars such as Autumn Brilliance produce striking orange/red fall foliage and edible fruit.



Fothergilla Leaf Color

Fothergilla (*Fothergilla* spp. x *major*)

A shrub with white bottle brush shaped, honey scented, spring-time flowers with warm shades of gold and orange fall foliage.



Fothergilla Bloom

Virginia Sweetspire (*Itea virginica*)

This medium size shrub boasts fragrant spring time white blossoms and rich purple/red autumn leaves.

Oakleaf Hydrangea (*Hydrangea arbore-scens*)

Its numerous cultivars produce white blooms with pink hues. All produce spectacular fall foliage, most with

shades of red, purple and orange.



Enkianthus Fall Color

Enkianthus (*Enkianthus companulatus*)

Depending on the variety, the beautiful striped, bell shaped, flowers on this medium-size shrub range from white to red. Its fall foliage is in shades of red, orange and purple.



Enkianthus

Research soil and habitat preferences before you purchase any of these plants. None will perform well in other than well drained soil.

Mutualism: two dissimilar organisms living together in close union for the benefit of each; aka a symbiotic relationship.

We could cite many obvious examples of this in nature, like pollinators and pollen. Or plants releasing oxygen for us, while we exhale carbon dioxide for them.

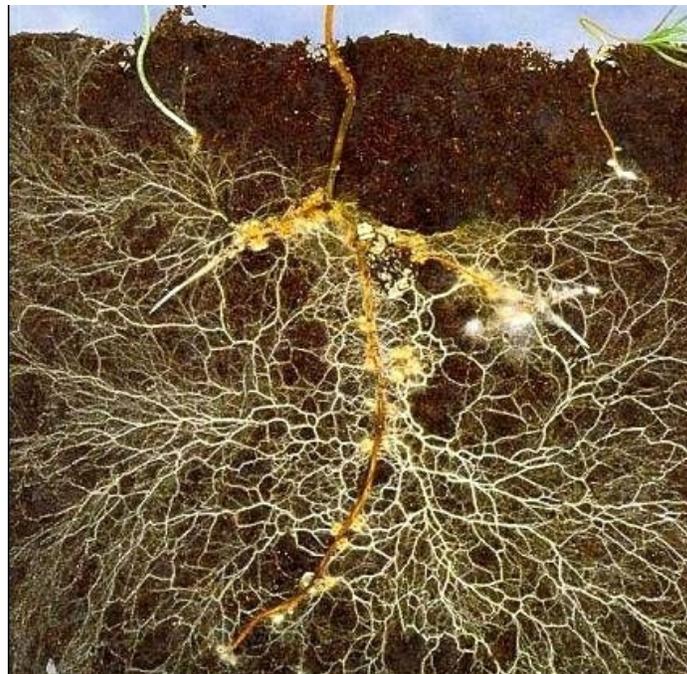
But plants are hidden partners in another little-known symbiotic relationship.

Via photosynthesis, plants produce their own food. But they have difficulty absorbing some essential nutrients like nitrogen, phosphorus, potassium, and iron through their roots. Enter: **mycorrhizal fungus!**

The *mycorrhizal hyphae*, threadlike structures of the fungus, infiltrate the soil around the roots, easing between soil particles, rocks, and crevices. They grab those elusive nutrients, and pass them back to the plant. In exchange, mycor-

rhizae receive carbs/sugars. Ten to twenty percent of the sugars that the plant produces through photosynthesis are absorbed by mycorrhizae.

This transfer of nutrients can be accomplished externally or internally.



Ectotrophic mycorrhizae form a layer on the outside of smaller roots; this type lives only on the roots of conifers and forest trees. They can link together groups of trees, acting like a “wood-wide-web”! (We botany geeks think that is really cool!)

Endotrophic mycorrhizae penetrate and

colonize the cortical cells of the roots of vascular plants. The hyphae extend out into the soil to access nutrients and water. This is the most common type, growing into the roots of green leafy plants and commercially-grown plants.

access to water during dry periods.

Fungi are already present in an established garden soil but in winter, the plant and mycorrhizae partnership still needs to be promoted. In winter leave some live plants, even weeds, for the fungi to inhabit. In other seasons, till the garden only very lightly; it's actually best to leave soil undisturbed so the clumps of mycorrhizae aren't broken up or suppressed.

Avoid pesticides, and when using fertilizer, choose one with low phosphorus since excessive phosphorus is harmful to mycorrhizae. In areas where soil has been disturbed and depleted, newly-planted trees, shrubs, and seeds treated with an inoculum of mycorrhizae will get a strong, healthy start towards mutualism.

Isn't it cool that all of this trading of resources is going on out of site on buried pathways right beneath our feet? For we who are botany geeks, the answer to that is a resounding “yes”!

This quarter marks the debut of a new editorial column in Over the Garden Gate: **Green Side Up**. Sometimes serious, sometimes silly, Green Side Up will look at horticultural and landscape issues and incidents of (hopeful) interest to Hall County Master Gardeners. In Green Side Up, you might find loads of useful knowledge—or maybe just shameless entertainment. Anyway, hope you enjoy my ramblings. *Merry Christmas!*

While I have your undivided attention, I'd like to thank those who kindly contributed to the 2017 Over the Garden Gate: Liz Dietz; Hugo Kollmer; Don Linke; Rachel Schneider; Marcia Tague; and Karin Hicks. And thank you for allowing me the privilege of being your editor. I'm honored to be a part of this fantastic group of gardening fanatics.

Pet Gardening

One of the best pets we ever had was a border collie named **Wendy**. My son Scott picked her out of a litter of about ten rambunctious pups, and for 15 years she graced us with much love and affection.

Wendy, believe it or not, was a gardener.

Border collies are smart canines, with an intelligence right up there with wolves. When they're in observation mode, they have this distinct look - an intense, nothing-will-interrupt-my-concentration-unless-a-rabbit-runs-by, stare. They home in on whatever catches their attention and really *focus*, their entire body on alert in case something might get by them.

One day I noticed Wendy giving me that unnerving stare as I was planting some hydrangeas that my wife wanted placed in front of our porch, close by an established bed of Coral Bells. She sat on her haunches (Wendy, not my wife), furry head cocked to one side, her entire being concentrating on what I was doing. You could see her cataloging my every move.

Okay, he's digging a hole (hey, I'm good at that); now he's taking that plant thingy and putting it in the hole (I can bury stuff, too!); now he's spraying it with water (another thing I can do well - hey, I can do this garden thang!).

After I finished work, I noticed Wendy sniffing around the planting

bed, and a little shiver of fear raced up my spine. What had I unleashed ?

Border Collie Cultivator

I should have guessed that Wendy would want to help. That's the nature of a border collie - they're working dogs. Unfortunately, Wendy wanted to cultivate. And prune. And she made no distinction between the two.

Wherever there was a new bed or planted area, Wendy figured she'd help out with a little judicious digging. You know, weed control, aeration, that sort of thing. She never dug deep, just extensively cultivated the soil.



Coral Bells need some weeding? Wendy was Johnny-on-the-spot. The ground around my nice bed of Coral Bells was "cultivated" to the nth degree, the poor plants pruned down to one spindly stalk sticking out of a patch of clawed ground.

I took a philosophical look at things. After all, what plant doesn't benefit from a little thinning and pruning? And loosening of the soil?

Next morning, I stepped out on the porch with my caffeine fix in hand. The sole surviving Coral Bell was gone. Apparently, Wendy decid-

ed she hadn't been thorough enough.

This went on for a while. Beds were cultivated and pruned at random intervals, though not quite as extensive in scope as the Coral Bell disaster. I'd notice clawed marks and raw earth in a portion of a bed. Sometimes, plants would mysteriously disappear, but (usually) not all of them. I'd protected the hydrangeas with wire cages, but every once in a while I'd spot Wendy sitting there, staring at the barriers with this contemplative look on her furry face.

Feline Fertilization

Meanwhile, our cat **Henry** decided to get in on the act. He headed up the fertilization division of Pet Landscaping. He was really good at placing organic fertilizer in our raised beds. Even dug the stuff in.

Henry's still with us, but Wendy has since passed on to that great sheep pasture in the sky. In hindsight, I've learned to look at it all in a positive light. That attitude (plus a 2' high decorative wire barrier I'd placed around the edge of the beds) helped me keep my blood pressure down. After all, Wendy and Henry thought they were doing us a service.

And you couldn't beat the free labor.

I'm thankful for the years we had with Wendy, our overly-enthusiastic canine gardener. But I'm really thankful that she never learned how to use wire snips.