



The Garden Gate Newsletter

December 2004 - January 2005

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John Simmonds, Judy Burton

Website:
www.co.henrico.va.us/agent
Ann Boland

Master Gardener Appreciation Reception

You are invited to attend a reception in honor of Master Gardener volunteers on **Wednesday, December 8 at 3:00pm**. If you have not sent in your RSVP, please call the extension office at 501-5160 to let us know if you are coming and if you plan to bring a guest.

Volunteers who have earned 250 hours will be recognized for their service. Members of the 2004 class who have completed their service commitment will receive their 50-hour certificates.

This will be the first opportunity to sign up to work at the Maymont Show in February and the Home Show in March. See Judy Burton for details.

Contributions for the **Henrico Christmas Mother** will also be accepted at the reception.

CVNLA Short Course

You should have received your applications by now for the CVNLA short course to be held on January 12-14, 2005. The deadline for registration is Dec. 15.

Recertification

Recertification packets will be arriving in December with the MG Training schedule for 2005 and advanced training opportunities. Classes for new Master Gardener training begin on January 26, 2005.

Plan ahead...

Remember that there will be **no association meeting** in January. **Richard Nunnally** will be the guest speaker for February's Association meeting on February 9, 2005.

President's Message

The Focus Group which met as part of the Extension Leadership Council Situation Analysis, looked at Horticulture activities in Henrico County in terms of what we are doing well, what needs to be improved, what additional things we should be doing, and who should do them. Many of the issues that were discussed are relevant to the Master Gardener Association.

The Board of Directors has started a process to evaluate the report of the Focus Group to determine what we could implement to help us better carry out our mission of Horticulture Education and improve the functioning of our Association.

In December you will receive your MG re-certification package. Included in the package will be a skills inventory questionnaire. Please take the time to fill this out and return it with your re-certification forms. We need to identify and use the talents of everyone in our organization to support our activities.

Jack

Master Gardeners Help Habitat for Humanity

With Master Gardener expertise and funding from the Thomas Jefferson Garden Club, members of our group have landscaped a Habitat for Humanity house. Carol Colby, Pat Greene and Jane Hartough were involved in purchasing plant materials and installing them. They also provided hose hardware and instructions on upkeep for the homeowner.

Party Cheese Balls

2 (8 oz) blocks extra sharp Cheddar, shredded
1 (8 oz) pack cream cheese, softened
1 (8 oz) container chive-and-onion cream cheese
2 or more tsp. Paprika
½ tsp ground red pepper (opt.)

head of broccoli to resemble a pumpkin stem and press into the top of the ball.

If desired, the mixture can be made into two smaller balls, rolled into finely chopped nuts or parsley, etc. Can be frozen.

-Peggy Lowry

Combine all ingredients. Add as much paprika as you want to get the color of a pumpkin. Cover and chill at least 4 hours. Shape into a pumpkin, make grooves if desired and just before serving, cut the stem from a

\$ Thank you to everyone who donated and bought plants at the October 13th plant sale. The association netted ninety-five dollars.

Update on MG Friendly Garden Tour

The MG Friendly Garden Tour Team is happy to report that we have made great progress. We now have five gardens on the 2005 tour! The tentative date is Sunday, June 12, 2005, from 1-6 PM. The gardens are in a fairly tight geographical area. In fact, you will only have to make three stops as we have two sets of neighbor gardens.

The FGT Team will not make the final determination of which features will be highlighted at each of the gardens until their next meeting. However, following is a list of garden hostesses with potential features:

<u>Garden Hostess</u>	<u>Garden Features to be Highlighted</u>
1. Pat Greene	steep-slope gardening, container gardening, vole cages for hostas
2. Martha Bottom (Pat's neighbor)	deep-shade gardening, composting, steps for gentle slope
3. Carol Coleby	neighborly gardening, perennials, grass/lawn, mixed veggie/flower garden
4. Sally Wittkofski (Carol's neighbor)	low-maintenance gardening (the "working man's garden"), ground covers, gardening after Isabel, peonies
5. Arline Murphy	herbs, orchids, mini-greenhouse

As you can see, we have a lot of wonderful features for our tour guests to see. We will have handouts on each of the features selected for each specific garden. We also will have a mini-lecture at each site on a different topic of interest to most gardeners.

We will need a lot of volunteer help to enable the tour to be a success. What a fun way to get in some volunteer hours for your MG Volunteer Log! Following are some of the jobs that will require volunteers:

- Prior to the tour, volunteers who can help prepare their gardens for the tour
- Prior to the tour, volunteers to help set up reception table area (table, money box, literature, handouts, water)
- On tour day, two hosts/hostesses are needed at each reception table area at each site. You can serve a portion of the five-hour tour time.
- On tour day, two veteran Master Gardeners at each site to be available for questions. You can serve a portion of the tour time.
- On tour day, volunteers to give a 10-minute mini-lecture on a specific topic at a given site. You can serve a portion of the tour time.

This garden tour's chief purpose is to educate the public, not just to look at a pretty garden. For this reason, we will definitely need some of our veteran Master Gardeners to help us with the parts requiring a more extensive background knowledge of gardening.

We are very happy to have come this far. It has been a lot of fun to be a part of getting the tour off the ground. We believe that the MG Friendly Garden Tour will increase gardening interest, expertise, and enthusiasm in our area. Please let us know how you can help! Contact Ann Dutton.

The Colors of the Season

A brief description of how leaves change color
and theories about why.

By Debbie Wilson

As I sit writing, the autumn seasonal cycle is in full “fall”. Our deciduous trees are switching into their dormant state, sharing their beautiful colors, shedding their leaves in preparation of a long winter’s sleep. Back in the spring, leaves budded and burst forth to produce food for the tree during the long growing season. Chlorophyll, the dark green pigment within each leaf, enables the process of photosynthesis to occur, producing more glucose during the day than the tree can use. Excess glucose is transformed into another carbohydrate: starch and is stored in the chloroplasts. Some of this food energy is used in dark hours. Some is used to promote growth, to begin to form buds enclosing new leaves, twigs, flowers, and seed production. When autumn arrives, deciduous trees have finished the job of seed-making. They are now entering a new stage in their lives, and their leaves signal the great change.

A decrease in hours of daylight, temperature, and the completion of seed production tell the tree that it is time for a long winter’s nap. As deciduous trees approach the end of their food-making period each autumn, the amount of chlorophyll in their leaves begins to decrease. Photosynthesis will soon come to an end. The green pigment no longer has a role to play in the tree’s life and gradually decreases. This gradual disappearance of chlorophyll explains why leaves lose their green color, but what causes the green to be replaced with yellows, oranges, and reds?

Some of the pigments are already present within the chloroplasts of a leaf’s cells. Two groups of coloring agents are present; carotenes and xanthophylls produce the vibrant yellows, gold, and the orange colors of autumn leaves. As the level of chlorophyll decreases, the carotenes and xanthophylls become more visible.

The beautiful red colors come from another source. The pigments responsible for the scarlet, rusts, and purples of autumn appear only at this time of year. They are not already present in the leaves as the other pigments are. Anthocyanin pigments paint autumn leaves in shades of red. These pigments develop in autumn leaves as a result of the shutdown of a tree’s food processing system. At the same time that the production of chlorophyll ceases, the flow of water and glucose between the leaves and the tree comes to an end. At the point where a leaf stalk joins a branch, a layer of special cells develops. This layer, called the abscission or separation layer, gradually blocks the tiny veins that carry material between the leaf and the rest of the tree. When a leaf loses its connection to the tree’s vascular system, some glucose usually

remains within its mesophyll cells. It is this trapped glucose that develops into the red anthocyanin pigments. Bright sunlight and cool nighttime temperatures are required for this chemical change to take place. Frost kills leaves. In years where there is an early frost, leaves are likely to become brown and dry rather than vividly colored.



That’s the “what”, but “why” do the leaves change colors? Textbooks have always described autumn colors as just a byproduct of dying leaves. The changing colors of leaves emerged when the level of chlorophyll was reduced and the pigments already within the leaves were finally unmasked. In other words, autumn leaves were a tree’s gray hair.

Many scientists are recognizing that autumn colors probably play an important role in the life of many trees. The reasoning begins with the production of carotenoids and anthocyanins requiring energy. This energy cannot be reclaimed by the tree because the pigments remain in the leaves as they die and fall off the tree. If the pigments did not serve a purpose, namely to help the tree survive, that would be a waste. Add to that, the knowledge that leaves start to produce a lot of new anthocyanin when autumn arrives. Why do this unless the colors serve a purpose?

Biologists and plant physiologists offer two different explanations for why natural selection has made autumn colors so widespread, despite their cost to the tree. Dr. William Hamilton, an evolutionary biologist at Oxford University, proposes that bright autumn leaves contain a message. They warn insects to leave them alone. Hamilton’s theory suggests that a visual message is sent to insects. To ward off egg-laying aphids and other insects, trees use brilliant colors to signal what will happen to their eggs – lethality of dying leaves. The theory suggests that only those trees that were under heavy attack experienced this evolutionary pressure.

The leaf-signal hypothesis has also drawn criticism. Those who disagree point to details about aphids and trees that do not fit Hamilton’s hypothesis. Bright leaves appear on trees that have no insects to warn off and by the time the leaves change all the insects that feed on foliage are gone. Another possible explanation is that fall colors serve mainly as a sunscreen. Anthocyanins, the pigments that produce red and orange colors, appear to protect autumn leaves by blocking some of the sunlight.

A Little Bit about... Holly

By Peggy Lowry



The use of holly as a decoration at Christmas goes back over 2000 years, but holly was used long before that in various Pagan religions. The Celtic people would place holly around their dwellings during the winter to shelter forest fairies from the cold; and windows and doorways were decorated with holly to keep evil spirits from entering. During the winter solstice, or Yule, the Celts decorated their homes with holly to welcome the return of the sun. The Druids wore holly when they accompanied their priests collecting mistletoe. The red holly berries were thought to represent the sacred blood of their Goddess.

In ancient Rome, Saturn was the god of agriculture; and his festival, Saturnalia, was held about the middle of December. There was general feasting and there was revelry to celebrate the winter solstice, and holly was used during the festivities for decorations and adornments to honor the god and welcome the sun's return.

When Christianity began to dominate northern Europe and the British Isles, several Pagan customs were incorporated into the Christian festivities. Prickly holly leaves were associated with the crown of thorns and the red berries symbolized the blood of Christ. In Medieval times, monks named holly "Holy Tree" because it was believed not only to ward off evil spirits but also to protect homes from lightning.

Holly extracts have been used in folk remedies for dizziness, hypertension and even cancer. Today in South America holly is used in making a popular tea-like drink called matte. The wood is used to make the black keys of pianos because of its grain-less appearance.

There are about 400 species of holly – deciduous and evergreen. Evergreen holly is ideal for temperate climates. Most hollies tolerate partial shade, dampness, and even smog; but many require warmer than zone 4 temperatures to grow. There are, however, a few hardy to zone 3. Hollies will not tolerate drought, high winds, alkaline soil or extreme cold. They are not suited for the far north, the dry southwest or the lower Pacific coast. There are at least 21 native species, 200 some varieties of English holly, and 120 some Oriental holly grown here. John Notman, a noted Philadelphia architect, designed the "natural" cemetery, Hollywood, here in Richmond. He suggested the name because of the abundance of holly trees growing on the grounds. At that time (1848), the grounds for the cemetery were just west of the city.

Most hollies require both male and female plants for cross pollination to produce the red berries. There are some, however, that are self-pollinating: Nellie Stevens, Burford and Foster to name a few. If you receive a potted holly, keep in mind that it is an outside plant and doesn't want to be indoors. Try not to keep it indoors more than five days and keep it cool and moist – not wet. Also keep it away from the fireplace and/or heaters. Cut holly just before using it and keep it in water if possible. The next best thing would be to mist the arrangement daily with water. Also, the leaves may fall if kept near ripening fruits.

When you decorate with holly, you may be honoring your Celtic heritage, and you may also be providing shelter for those small fairies and protecting your home from evil spirits.

And the Blue Ribbon goes to...

Jackie Dean

Master Gardener/Exhibit Designer Extraordinaire



Thank You
Thank You

The Extension Staff would like to thank **all** of the Henrico Master Gardeners who helped to make the First Extension Extravaganza and the First Extension BBQ Fundraiser a success for the Henrico Christmas Mother!

Wednesday, October 6

Joyce Brannon
Jackie Dean
Marty Janner
Allyson Roberts
John Simmonds
Lou Weissbecker

Judy Burton
Allen Earehart
Sherry Kerley
Claude Seal
Jim Smith
Keith Wylie

Carol Colby
Betty Gillelan
Jack Kelzer
Cynthia Seal
Lynne Still

Cole Culver
Laura Hawkrige
Paggy Lowry
Martha Sherman
June Walker

Friday, October 8

Betty Gillelan
Lynne Still

Jack Kelzer
Mary E. Vetovec

Sherry Kerley

Carol LaVigne

Henrico Master Gardeners Association

P.O. Box 27032

Richmond, VA 23273-7032

The Henrico Master Gardeners Association, and all VCE programs, services, activities, and employment opportunities are available to all people regardless of race, color, religion, sex, age national origin, handicap, or political affiliation. VCE is an equal opportunity/affirmative action employer.

Master Gardener Reminders

Board Meetings

December 1, 1:30 p.m.

January 5, 1:30 p.m.

Association Meetings

December 8, 3:00 p.m. Reception

No Association Meeting in January

Please e-mail your contribution to the newsletter

By **January 20** to

Jody Taggart j.taggart@worldnet.att.net