



OFFICERS

President
Jack Kelzer

1st Vice President
Mary E. Vetovec

2nd Vice President
Marty Janner

Treasurer
Allen Earehart

Recording Secretary
Gina Polich

Corresponding Secretary
June Walker

COMMITTEES

Master Gardener Training
Cynthia Seal

Programs
Mary E. Vetovec

Continuing Education
Marty Janner

Horticulture Helpline
Lyn Dodge
Carol O'Toole

Finance
Betty Fahed

Communications
Jeanette McKittrick
Jody Taggart

Hospitality
Peggy Lowry
Shelby Earehart

Service and Recognition
Joyce Carole Brannon

Historian
Joyce Carole Brannon

4-H Youth / Junior Master Gardeners
Sherry Kerley

Plant Clinic
Dave & Joanie Brobst

SMART Lawns
Stephanie Feaser

Special Events
John Simmonds, Judy Burton

Website
www.co.henrico.va.us/agent

The Garden Gate e-Newsletter

February – March, 2006

Association Meetings

February 8, 1:00PM

Pest and Weed Control without Chemicals

William Garlett, Master Gardener, Newport News

Bill shares his organic, non-chemical techniques for raising healthy plants without relying on chemical pesticides. Bring your questions and join us to learn more.

March 8, 1:00PM

Alternative Planting

Scott Burrell, Chief Horticulturist, Virginia Historical House

Consider trouble-free natives for landscape headaches like Leyland Cypress, red-tip photinia and Bradford Pear. Scott will give his recommendations and answer our questions.

April 12, 1:00PM

Virginia's Anniversary Gardens

Leanne DuBois, VCE-James City and New Kent Counties.

Virginia Cooperative Extension has developed the America's Anniversary Garden to help individuals, communities, and groups mark America's 400th Anniversary with a signature garden planting. Leanne will discuss her role and that of the MG in America's Anniversary Garden project. Come and find out how you can participate. Check out <http://www.ext.vt.edu/americasgarden/>.



Happy 25th Anniversary

2006 marks the 25th year of the Master Gardener Program in Henrico County. Our first class was February 2, 1981.

President's Message



One of the issues the Board of Directors has taken up over the past couple of months is to look at how the Association has been approving expenditures from our treasury, need for fund raising activities, budgeting procedures and financial audits. As a result, Betty Fahed, our Finance Committee Chairperson, was asked to develop a proposed set of written Financial Guidelines.

Working with our existing procedures, state guidelines, and reviewing the policies of other Master Gardener Associations, Betty has developed policies and procedures that have been reviewed and approved by the Board. These guidelines deal with:

- Financial audits
- Budget development and approval
- Guidelines for fund raising activities
- Required approval for budgeted items spending, special requests, and non routine spending

These written guidelines which conform to requirements of the State Master Gardener Association and Extension, help protect our officers and you should any financial issue arise with the Association.

The officers and Committee chairpersons have a copy of the guidelines and they will also be included in our Standing Rules.

Jack Kelzer

Parmesan Herb Bread

- A quick bread –

- 1 cup sour cream
- 1/3 cup milk
- 3 Tbs butter or margarine, softened
- 2 ½ cups flour
- 1 Tbs sugar
- 1 Tbs minced onion
- 1 tsp baking soda
- ½ tsp salt
- ½ cup grated Parmesan, divided
- 3 Tbs finely chopped mix of herbs such as thyme, parsley, basil, dill & rosemary
- or
- 3 Tbs herbs de provence
- 1 egg white, slightly beaten



Combine sour cream, milk and butter. In another bowl, mix flour, sugar, onion, soda, salt, 1/3 cup Parmesan and 2 Tbs herbs. Add the sour cream mixture and stir until just combined. Work dough with hands about one minute. Divide in half and shape each into a 5 inch round loaf. Place on opposite corners of a greased baking sheet. Brush tops with the egg white and sprinkle on the remaining herbs and Parmesan. Cut an X about ½ inch deep in the top of each loaf.

Bake at 350° for 35 to 40 minutes or until golden. Cool on racks.

This bread is really good with soup or stew. It can also be frozen.

-Peggy Lowry

Indoor Plant Lighting

By Debbie Wilson

Winter brings seasonal changes; predictably colder temperatures, less direct sunlight, and tender plants that need to be brought inside. This winter has brought an additional change for me. In planning to renovate our kitchen, we had to choose the type of under-counter lighting to be installed. Our old fluorescent lights have nursed my violets through many years. The violets were so happy there, but I wanted to know if new halogen lights would work as well.

If you also have indoor plants you may want to know what type of lighting is best to use. A review of the basics about light will help to evaluate the choices.

Visible light is that part of the electro-magnetic spectrum that lies between the wavelengths of ultraviolet and infrared. White light is made up of all colors. Plants absorb the waves of red and blue light and reflect the green light. Our eyes are most sensitive to the color green. Sunlight contains equal portions of all colors, but it is not the same in different parts of the world. Northern sunlight (areas north of the 40th parallel) has more blue than equatorial sunlight because of absorption of all other colors, or wavelengths of light, by the atmosphere. White light can have different “warmths”. A bit more red/yellow makes white light appear “warmer”. A bit more of blue light and it appears “cool”.

Light quality is expressed and measured in many ways: Light color can be measured in degrees Kelvin (K) and the color-rendering index of a light source can be measured and expressed as CRI. The color-rendering index (CRI) expresses the degree to which a light source renders the true color impression. The range is from 0 to 100, with a CRI of 100 meaning that an object is illuminated to look like it is supposed to. Sunlight has a CRI of 100.

Light meters are used to measure the amount of light emitted by a light source and measured at some distance from the source. Growing information for a plant will give an indication of the amount of light the plant requires, usually stated in foot-candles at the surface of the leaf.



Natural sunlight is good light, free, but hard to control. Sunlight is the cheapest way to light plants, but is unreliable and difficult to regulate because of geographical variations, weather, and seasonal changes.

Incandescent lighting is cheap, but provides a low quality light. Incandescent lights are the screw-in bulbs you use to light your home. An incandescent bulb consists of a glass bulb with a tungsten filament in a near vacuum; just a small amount of argon or krypton is present. When current flows through the filament, it heats up and glows giving off both heat and light.

A variation of the incandescent bulb is the **halogen** bulb. This improvement to incandescent bulbs has a small amount of one of the halogens (Iodine or Bromine are used) present and combines with the evaporated tungsten. The process inside the halogen bulb does not work unless the bulb jacket is at least 200 degrees Celsius. Since this makes halogens so hot, care must be taken when using them near your plants. Halogen lamps are 25-30% brighter than regular incandescent bulbs. The halogen cycle takes place in a very small capsule that is placed inside another glass capsule, which serves as the bulb's outer casing. The outer casing is hot, but not as hot as 200 degrees Celsius.

The output spectrum of incandescent light, halogen or regular, is biased heavily toward the red. Non-halogen bulbs have a color temperature of 2700K, while halogen bulbs have a color temperature of 3000K, which means they are slightly more whitish light. Both have a CRI of 100. The great disadvantage to incandescent lights is their inefficiency; you don't receive as much light compared with how much energy you use. Halogen bulbs are more efficient than incandescent bulbs by virtue of

remaining brighter longer, but the bulbs are more expensive. On average halogen bulbs are 5 to 10 times as expensive as their non-halogen counterparts and both are available anywhere. The life expectancy for halogen bulbs is about twice that of incandescent.

Halogen lamps are not typically used in horticulture, but of potential interest to growers is the low voltage bulb used in some track lighting systems. Operating as 12v, these bulbs are quite small and would be good to use as a supplemental light augmenting a fluorescent setup.

The easiest way to describe **fluorescent** lighting is that it is cheaper to use, but more expensive to install. Fluorescents emit about four times as much light per unit of electricity as incandescent lights. They come in “cool white” and “warm white” tubes, as well as hundreds of shapes, sizes, and spectral output.

Special light tubes are available for plant growth. Industrial tubes include the “cool white” and “warm white” tubes usually used in home and industrial applications. These are fine for illuminating plants, cheap to use, and don’t look terrible. Daylight tubes are the next big improvement in more natural light. They cost a bit more than “cool white” tubes (still not expensive) and are occasionally available at hardware stores.

Unlike all other fluorescent tubes meant solely for promoting plant growth, plant growth lights, like the Sylvania Gro-Lux tube, won’t be found illuminating home or office because they emit a pink light. The GE version of this tube is called “Gro-N-Sho”. These bulbs have an output spectrum with two large spikes, one in the blue, and one in the red portion of the spectrum. Almost no light is emitted in any other portion of the spectrum and this causes a purplish glow. They don’t appear very bright. The wide spectrum plant lights are brighter. Philips makes a plant light named “Agro-Lite”, which is a minor variant of the wide spectrum Gro-Lux. Wide spectrum tubes are inexpensive (perhaps less than \$10 in a lighting-supply store).



Full spectrum tubes imitate natural sunlight as closely as possible by emitting light in every spectral range. All of these tubes are designed to have an output spectrum that is similar to sunlight, or as close as chemistry can bring us. They try to imitate equatorial sunlight at noon with a color temperature of around 5000K. Examples include: “Vita-Lite” tubes by Duro-Test, “Chroma 50” by GE, “Colortone 50” by Philips, and “Designer 5000K” by Sylvania. The availability and cost of these tubes might make you think twice about using them.

Fluorescent light is the reasonable compromise between the cost and quality of light. The specialized fluorescent tubes can be used to address the special needs of indoor plants. A combination of halogen and fluorescent lighting might suit the purpose of home décor and simulation of natural sunlight for plants. Full-spectrum bulbs offer light which is the most similar to daylight. A combination of natural light and incandescent/halogen light gives plants a pleasing color. Incandescent and halogen bulbs used in tandem can provide a full spectrum of light for your plants. With lights, as with most everything else, you get what you pay for.

Getting To Know June Walker



June became a master gardener in 1989 and has volunteered on various committees, her favorite being plant clinics. June was part of the group that met for many weeks to form the Henrico Master Gardeners Association. She served as Membership chairman until that committee was combined with another. Since then she has worked in Hospitality, Horticulture Helpline and Special Events, and she is now our corresponding secretary.

June's husband, Ted, became a master gardener in 1988; and before he died in 1991, the two of them also helped with mailing soil samples handled by Extension office at that time. Ted's expertise was growing roses. What a beautiful garden!

June grew up in London, Ontario where she met Ted. His job was with George Weston, Ltd., and the company moved them to Alberta, Quebec, Massachusetts and then to Virginia in 1969. Her family consists of four children and six grandchildren. One daughter, Linda, and two sons, Jim and John live in Virginia; one daughter, Joan, lives in Ontario.

June's favorite flower is the bright red climbing rose "Dublin Bay", and her favorite tree the Pomegranate with orange chrysanthemum-like flowers. Her favorite part of gardening is planting and weeding. Her other hobbies include card games and reading – mostly mysteries and cookbooks. At present she is very busy "trying to teach good manners to my best friend, Kyla, an American Bulldog."

Horticulture Helpline Signup For 2006

Time flies! It is time to start thinking about staffing the helpline for our new year. We will begin having Master Gardeners staff the helpline on March 1st. Please let me know the dates you would like to work. I will fill the schedule on a first come first serve basis.

The shifts are Monday through Friday 8:30 – 12:30 and 12:30 – 4:30 beginning Wednesday, March 1st and ending sometime around Friday, November 17th.

Once you have agreed to the dates, it is your responsibility to find a substitute if you are unable to fulfill your obligation. Please advise me of the change so I can notify the office of who they should expect. If you have to cancel due to an emergency at the last minute, please call me and I will do my best to find a replacement for you. Also, it is important to be on time and work your entire shift.

Lyn Dodge and I will be scheduling our new class of interns for the months of April and May for the training sessions. Please indicate whether you are willing or not to help with the training.

The best way to contact me is email: cmoblue24@yahoo.com


Mailing address: 7400 Westfield Road, Richmond, VA 23226 Phone Number: 285-8733

Please let me know if you would be willing to be on the substitute list that is posted in the helpline room. I will confirm all dates that I post for you to work. Please call me if there is ever any confusion or problems. Thanks in advance for your continued hard work and dedication to the helpline.

Carol O'Toole, Helpline Coordinator

A Little Bit about...Boxwoods

By Peggy Lowry

 alled nature's oldest garden ornamental, boxwood fossils over 22 million years old have been found in Europe. Ancient Egyptians, Greeks, Romans, and Persians found boxwood essential when landscaping their formal gardens. The Romans especially enjoyed elaborate topiary gardens of privet, cedar and box. Once thought to be native to the Mediterranean, it is now thought to have come also from China and Japan.

In a Greek legend, Artemis rescued a wood nymph from the clutches of Apollo and changed her into the evergreen boxwood. Apollo then cursed the plant so that its flowers would be inconspicuous and never appeal to man. Although numerous, the flowers have no sepals, bright petals or nectar. The ancient Greeks kept perfumed unguents in tiny decorative boxes, usually made from boxwood. They were called "pyxos" – the Roman translation was "buxus" – the English, "box".

The choice compact wood of the boxwood, including roots and stems, has been used also for flutes and other woodwinds and for handles of daggers. Through the 17th century, travelers carried mini sundials made of boxwood. It has also been used for rulers, draftsmen's triangles and squares and for fine wooded blocks for printing. At one time the plant was considered a source of a rare drug used to treat syphilis, epilepsy and hysteria.

In early Christian churches the boxwood symbolized life everlasting and adorned churches on St. Paul's and St. Barnabas's days. In the Netherlands, where palms were unknown, boxwood was carried on Palm Sunday, and it decorated English churches at Easter. Among the wealthy, box was used in lining coffins, and it was planted over graves to ward off evil. And so the boxwood odor became associated with religious rituals, funerals and graves. Some find its odor offensive suggesting depression or evil; to others it suggests spiritual aspirations.

The first boxwood in America arrived around 1653 from the Netherlands and as the colonies grew, it began to appear in the gardens of the well to do. Of course, the Pilgrims wanted nothing to do with it since it served no function and was a symbol of worldly wealth. But in the southern colonies, the box "reigned" for two centuries in formal gardens in clipped hedges and arbors with parterres to rival any seen in the mother country. It enhanced plantations along the James, and some of the original species can still be seen at Gunstan Hall and in the upper gardens at Mount Vernon. Thomas Jefferson, on the other hand, associated boxwood with the formal gardens of England and would not allow them at Monticello saying that he preferred "natural landscaping." What do you see at Monticello and Poplar Forrest today? Boxwoods!



To some, the boxwood is a slow growing non productive expensive-care plant, but to others it is the aristocrat of evergreens, “central Virginia’s premiere landscape plant for its role in our history and culture.” Indeed, few plants can claim to be handed down like family heirlooms.

Paul Saunders, a grower in Nelson County, says that most people grow the two most common varieties, the English and American. These, he says, are not necessarily the best for all areas. And so boxwoods were planted at test sites, botanical gardens, and arboretums from Birmingham to Memphis and northward to Chicago. Cultivars have also been sent overseas for evaluation of plant behavior in each microenvironment. Caring for boxwood in the Richmond area, we have to contend with leaf miners, mites, psyllids, scale, canker, blight; and there is also dieback and root rot. Saunders says that in its correct environment, the box is easy to care for. However in a stressful place there are problems. It should be watered during drought, mulched correctly and fertilized. The ideal Ph is 6.5 – 7.2. When it has reached a healthy size, branches should be removed to allow light and air inside the plant reducing its mass about 20%. Except for the dwarf cultivars a box can grow into a small tree. Boxwood has been associated with the world’s most beautiful gardens and will continue to be an important plant in the gardens of those who love it.

Meeting Date Reminders

Board Meetings

February 1, 1:00 PM
March 1, 12:00PM

Association Meetings

February 8, 1:00PM
March 8, 1:00PM

Please e-mail your contribution to the newsletter
By **March 20** to Jody Taggart
jody.taggart@comcast.net