Double Rainbow

Did you know? Rainbows always have the same pattern (ROYGBIV), but the colors of a double rainbow are inverted!

Annual Plant Sale Saturday, May 2 8am-1pm
2 Locations: La Plata and Waldorf Farmers Markets
Marlene Smith, Master Gardener Intern, will begin a new series of horticulture articles for the Compost. She enjoys research and writing and her first article for “Horticulture Corner” is on pages 6-7. Please contact her if you have a topic suggestion for future issues. Thanks, Marlene, for volunteering to be a regular feature writer for the newsletter!

As you read this, the weather is warming and April showers are giving way to May flowers. The Plant Sale is coming up soon along with a lot of other MG projects.

The 2015 Basic Training Course finished successfully at the end of March. Thanks to everyone who helped out with the class –especially for those who came out on those unusually cold winter nights! There are now 20 new MG Interns and 15 new MGs. I am encouraged by the energy, enthusiasm and commitment of those new to the program and those with lots of experience as a MG.

If you are a MG, please continue to introduce yourself to and welcome the new MG Interns in the different projects and activities. If you are a MG Intern, I encourage you to volunteer for the many different projects going on this time of year. If you have a question, concern or idea, feel free to contact me or a MG.

Thank you for all your service to our community!

Article by Luke Gustafson, CCMG Coordinator

Educational exhibit at the Waldorf West library on display April 1 - May 2. Information features GIEI, composting, vegetable garden timeframes, soil sample bags and instructions, Bay-Wise, etc. Flyers are on display announcing the upcoming Plant Sale and training events. Also provided are signup sheets for horticulture inquiries and subscription for the HGIC email newsletter. For more information, contact Terry Shelton Thir.

The Master Gardener website has a fresh new look!

Check it out at http://www.extension.umd.edu/mg
The La Plata Star Memorial Garden

MGs work in conjunction with the Town of La Plata and Melwood to keep this public pocket garden in pristine condition. Please stop by and see the garden at 3 Firehouse St. The jasmine is just coming into bloom and the miniature succulent garden wintered over beautifully.

Article and Photos by MG Mary Beth Chandler

MGs Patti Faulkner, Sherie Zimmer, and Mary Beth Chandler preparing the garden for the Summer season

MG Patti Faulkner cleaning the miniature succulent garden planter

Plant Sale “Digging” Party

Several turned out on April 13th to dig and pot perennials from MG Jessica Milstead’s yard for the upcoming Plant Sale! Photos provided by MG Mary Beth Chandler.

MGs Rose Markham, Intern Nancy Bowie, Jessica Milstead and Harriet Beck

MGs Harriet Beck and Intern Nancy Bowie working in the yard
Celebrate La Plata Day

Saturday, April 25 was a chilly damp day; however, four hardy Master Gardeners were able to participate (Neal Johnson, Sally Hopp, Harriet Beck and Terry Shelton Thir)—one even participated in Christmas in April that morning before coming to join us. Sorry, Interns, you missed a good opportunity to learn and earn hours, but it's not too late. We usually participate in the La Plata Fall Event, so you will have a second chance.

We had over 50 kids plant either green beans or peanuts in cups to take home. In addition to reminding people about our upcoming events, such as, the Plant Sale, plant clinics, and the compost and rain barrel workshops, we had several people inquire about becoming Master Gardeners.

One gentleman came up with a question about his rose bushes. Something was eating them but he said it was not Japanese beetles. Without examining the bushes, we were at a loss to advise him so we obtained contact information for a future site visit or other follow-up.

Our new Bay-Wise Certification procedures did not get much of a work out. We only had two people express interest in getting certified and neither were in a position to schedule a visit. Hopefully, we will get more at the Plant Sale.

There were enough attending Master Gardeners that everyone got a chance to enjoy the live music, hospital bed race and magic and raptor shows as well as visit other exhibitors and sample the food and wares for sale. Some even brought grandchildren with them as there were plenty of child friendly activities.

The Mayor of La Plata, Roy Hale, spent quite a bit of time at our booth learning about our programs and Bay-Wise. We are hopeful that we can certify the Town Hall and his residence. A local organic farmer wanted to know how her family could get more involved with the GIEI program. Lots of children enjoyed planting seeds in cups and learning how to take care of their plant. It was a fun chilly day.

Article and Photos by Terry Shelton Thir, CCMG Steering Committee Chairman
Charles County Master Gardeners were invited to participate in Mom's Organic Market's “Save the Dandelions!” event on Saturday, March 28, at their Waldorf location. Eight enthusiastic volunteers braved the colder than average, windy March day to share information with customers. Volunteers included Master Gardeners Terry Shelton Thir, Rose Markham, Cornelius Johnson; and Andre Newsome; along with new Interns Marlene Smith, Emily Leedy, Ellen St. Clair, and Autumn Kelley. We answered customer questions, shared information on upcoming events (Plant Sale, rain barrel workshop, compost bin workshop and woodland gardening workshop), signed individuals up for the HGIC newsletter, obtained names of individuals interested in future MG Basic Training classes, and distributed literature on a variety of topics. We also enjoyed the displays set up by MOM’s, which included sampling of two “dandy-lion” recipes:

**Dandelion Bowl**

- 1 bunch dandelion greens
- 1 baby bok choy
- Your favorite nut, roughly chopped
- Your favorite dried fruit
- Chopped olives
- Bruschetta mix
- Nutritional yeast (mixed in, or on top)
- Quinoa (cooked in broth)
- Coconut oil
- Salt & Pepper to taste

Finely chop greens and place them in bowl. Add nuts, dried fruit, chopped olives, bruschetta, and nutritional yeast. Put coconut oil on top. Pour hot Quinoa over mixture and combine. Salt, pepper to taste.

**Cran-delion Kale Salad**

- 1 bunch kale
- 2 bunches of dandelion greens
- 1 cup dried cranberries
- 1/2 red onion
- 2 tbl extra virgin olive oil
- 1 tbl apple cider vinegar
- 1 tsp honey
- 2 cloves garlic, chopped

Chop greens and onion into bite sized pieces; toss in large bowl. Mix olive oil, vinegar, garlic and honey together for dressing. Add dressing of greens and toss in dried cranberries. Enjoy!

MOM's launched the “Save the Dandelions!” campaign last year to reduce the use of lawn chemicals and bring awareness to their impact on the Chesapeake Watershed. Lawn care chemicals don’t just end up on lawns--they end up in our waterways and ultimately wreak havoc on our ecosystems and personal health. According to Mom’s website, “Considering that there are more acres of lawn than the top 8 U.S. farmland crops combined, it's more important than ever to think critically about lawn care and the systemic effects of a chemically dependent yard.

Reference: [http://www.momsorganicmarket.com/content/save-dandelions-5](http://www.momsorganicmarket.com/content/save-dandelions-5)
“Year of the Vines”

Each year the Maryland Native Plant Society [www.mdflora.org](http://www.mdflora.org) selects a group of plants to highlight, and 2015 is the “Year of the Vines”. According to the USDA, a vine is a climbing or twining plant with long stems, and can be either woody or herbaceous (1). Woody vines are also known as lianas. By definition, vines are plants that are unable to support themselves; to grow upwards, they require other plants or structures for support. The advantage to using other plants for support is that vines can invest resources into growing a large leaf area for photosynthesis without investing much into stem materials. A disadvantage is that when the support falls down, the vine will also fall. (2) If you build an arbor, fence, or trellis, a vine will give it life, soften the structure, and enhance the sense of space. (3)

In 1865, Charles Darwin was one of the first to publish on the many different mechanisms that vines use to climb objects (4). Vines have many different methods by which they can climb trees, trellises, and even walls or rock faces, and the categories of climbing mechanism may vary by author. One classification includes the general categories of root climbers, adhesive tendrils, tendrils, stem twiners, and petiole climbers (2): The U.S. Fish and Wildlife Service provides the following chart of native vines for the Maryland Coastal Plain (5):

### VINE

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>V</th>
<th>M</th>
<th>D</th>
<th>Su</th>
<th>PS</th>
<th>Sh</th>
<th>Height</th>
<th>Color</th>
<th>Bloom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bignonia capreolata</td>
<td>crossvine</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>30-45'</td>
<td>O, R, Y</td>
<td>May-Jun</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campsis radicans</td>
<td>trumpet creeper</td>
<td>●</td>
<td>●</td>
<td></td>
<td>30' +</td>
<td>O</td>
<td>Jul-Sep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celastrus scandens</td>
<td>American bittersweet</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>to 45'</td>
<td>G</td>
<td>May-Jun</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clematis virginiana</td>
<td>virgin's bower</td>
<td>●</td>
<td>●</td>
<td></td>
<td>6-12'</td>
<td>W</td>
<td>Jul-Sep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lonicera sempervirens</td>
<td>coral honeysuckle</td>
<td>●</td>
<td>●</td>
<td></td>
<td>10-20'</td>
<td>R*</td>
<td>Apr-Jul</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parthenocissus quinquefolia</td>
<td>Virginia creeper</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>to 45'</td>
<td>G, W</td>
<td>Jun-Aug</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passiflora incarnata</td>
<td>passionflower, maypops</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>W, P</td>
<td>Jun-Sep</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Soil Moisture:
- W = wet
- M = moist
- D = Dry

### Sunlight:
- Su = full sun
- PS = part shade
- Sh = full shade

### Flower Color (simplified, all shades):
- B = brown
- R = red
- O = orange
- W = white
- P = pink
- G = green
- Y = yellow
- Pu = purple
- Bl = blue

* denotes evergreen or semi-evergreen foliage

In addition, the Maryland Native Plant Society provides a comprehensive list of *Native Vines found in Maryland*, along with a list of *Introduced Vines found in Maryland on their website* (6).
### “Year of the Vines” (continued)

<table>
<thead>
<tr>
<th>Category</th>
<th>Mechanism</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root climbers</td>
<td>Use adhesive adventitious roots to climb trees or rock faces. These roots can often look like bunches of hairs along the liana stems. These species grow close to the substrate they are attached to and sometimes form lateral branches that grow out and away from the main stem of the liana.</td>
<td>Poison ivy (<em>Toxicodendron radicans</em>), trumpet creeper (<em>Campsis radicans</em>), climbing hydrangea (<em>Hydrangea anomala ssp. petiolaris</em>), woodvamp (<em>Decumaria barbara</em>), and the evergreens English ivy (<em>Hedera helix</em>) and wintercreeper (<em>Euonymus fortunei</em>).</td>
</tr>
<tr>
<td>Adhesive tendrils</td>
<td>Like root climbers, lianas that have adhesive tendrils adhere to the tree or surface that they are climbing. However, it is not the roots that are doing the climbing in this case, but modified tendrils that have small adhesive pads at the tips.</td>
<td>Virginia creeper (<em>Parthenocissus quinquefolia</em>), which is one of the most common lianas in the forests of the Eastern United States; its relative, Boston or Japanese ivy (<em>P. tricuspidata</em>); and the showy-flowered crossvine (<em>Bignonia capreolata</em>), a species native to the southeastern and south central United States.</td>
</tr>
<tr>
<td>Tendrils</td>
<td>Use structures that are formed through modifications of the stem, leaves, leaf tips, or stipules (outgrowths at the base of a leaf). Tendrils coil around small objects such as twigs, allowing the liana to climb.</td>
<td>Grapes (<em>Vitis</em> spp.) and porcelainberry (<em>Ampelopsis brevipedunculata</em>), another member of the grape family (<em>Vitaceae</em>). Greenbrier (<em>Smilax rotundifolia</em>) and other <em>Smilax</em> species</td>
</tr>
<tr>
<td>Stem twiners</td>
<td>Use their stems to climb up objects by twining around them. They can also form somewhat self-supporting columns when many stems entwine.</td>
<td>Bittersweets (<em>Celastrus</em> spp.), vine honeysuckles (<em>Lonicera</em> spp.), wisterias (<em>Wisteria</em> spp.), chocolate vine (<em>Akebia quinata</em>), and supple-jack (<em>Berchemia scandens</em>), a lesser known native liana from the southeastern United States. Another species, the aromatic Chinese magnolia vine (<em>Schisandra chinensis</em>), is a stem twiner from one of the more ancient groups of flowering plants.</td>
</tr>
<tr>
<td>Petioles</td>
<td>Use their petioles (the small stalks at the base of leaves) to twine around objects in a manner similar to the tendril climbers.</td>
<td>In temperate regions, clematis (<em>Clematis</em> spp.) is the most prominent petiole climber. There are hundreds of <em>Clematis</em> taxa including showy large-flowered hybrids as well as small-flowered species such as the white-flowered <em>C. virginiana</em>, <em>C. terniflora</em>, and <em>C. vitalba</em> that bloom in late summer or early fall.</td>
</tr>
</tbody>
</table>

References:

1) [https://plants.usda.gov/growth_habits_def.html](https://plants.usda.gov/growth_habits_def.html)
4) [http://darwin-online.org.uk/content/frameset?pageseq=1&itemID=F1733&viewtype=text](http://darwin-online.org.uk/content/frameset?pageseq=1&itemID=F1733&viewtype=text)
Spring is Finally Here!!

Magnolia pink “Ann”

Cherry Blossoms in DC 2015

Photos provided by Terry Shelton Thir,
CCMG Steering Committee Chairman
My husband found the book on a table at Costco in the spring of 2014, and he thought that as a new Master Gardener Intern, I would like it. The copyright, listed as 1991, made me turn it down at first. I had never heard of the book, but I had heard of the author, Michael Pollan, who wrote *The Botany of Desire*. The quoted reviews on the book jacket from the *New York Times*, *Boston Globe*, and *Washington Post Book World* were enticing. Henry Mitchell, whose columns and books I had read before he died, wrote a glowing tribute. The sentence that clinched it was printed on the back cover: “Chosen by the American Horticultural Society as one of the seventy-five greatest books ever written about gardening, *Second Nature* has become a manifesto for rethinking our relationship with nature.” With that kind of acknowledgement, I didn’t care if the book was published over 22 years ago; I was hooked.

As I read, words from every page exploded in my brain. My own landscape aesthetic does not conform to my neighbors’ so I found Pollan’s words alleviated my yard self-consciousness. Both Pollan’s grandfather and father taught him traditional and nontraditional ways to view their gardens. I laughed out loud at the image of his father cutting the grass in swirls, leaving paths between the tall weeds to resemble cursive writing. Neighbors’ reactions showed they did not appreciate these creative expressions. Later, Pollan’s growing frustration with a woodchuck escalates to the point that he firebombs the den. The woodchuck lives and moves away, solving the problem. The section about “Roses” was clearly suggestive as Pollan writes about the sensuality of the scent and seductiveness of old roses’ forms. I was positively blushing with this unexpected eroticism. Who would have thought that *Fifty Shades of Grey* could be found in the garden? According to Pollan, his treatise about the history and use of fences discloses American ideas about democracy. Gardening as a political act! In all chapters, Pollan contrasts the romantic “Idea of a Garden” and the realistic practices required to achieve or abandon that American ideal.

Do I recommend this book? A resounding YES! However, not everyone who reads this book will find it easy or enjoyable reading. However, new and experienced gardeners, who want to question their own theories and practices, should read it. I was challenged to examine my gardening beliefs and to understand overall historical perspectives about American attitudes and practices. Some of the material was dated, especially about composting and non-native plants. And, Pollan makes mistakes, but he admits them so readily, it was easy to forgive his failings and admire his honesty. Pollan presents his personal stories and experiences to illustrate his ideas whether they are comical, humiliating, and/or instructive. Regardless of the results in his garden, Pollan’s ideas enlightened mine. He made me reflect. Now I want to find some of the other top 74 greatest books written about gardening and read them, too.

*Review by MG Kathy Jenkins*
More than 60 Master Gardener’s, Interns and guests attended our annual graduation and service recognition event that was held on Tuesday, March 31 at the Colonial Charles Clubhouse in St. Charles, MD. Terry Shelton Thir, Chair, CCMG Steering Committee and Luke Gustafson, MG Coordinator served as host of the event. Our special guest, Deborah Hall, Acting County Administrator, gave brief remarks to the group and she certainly “got us.” She shared some facts about gardeners versus non-gardeners, for example, “gardeners prefer to play in their yard or garden rather than go shopping.” When shopping we are looking at plants, gardening tools and anything related to our passion of gardening. Chris Seubert, Area Extension Director for Calvert, Charles and St. Mary’s Counties, also shared a few remarks. Terry recognized the former Steering Committee (SC) Officers, Jessica Milstead, Carol Teets, Gale Kladitis, Cindi Barnhart, Cornelious Johnson, Pauline Spurlock, and Terry Shelton Thir for their volunteer leadership. The current SC was also introduced; Terry Shelton Thir, SC Chair, Rose Markham, Vice-Chair, Theresa Nelson, Secretary, Cornelious Johnson, Treasurer, Pauline Spurlock, Record Keeper, Janet McGrane and Carol Teets, members at large. She stated that those individual are the backbone of our organization. Terry encouraged recent graduates and Interns to set their goals to serve as an officer in the future.

After enjoying another amazing gourmet spread of food donated by the group the ceremonies began. To add to the ambience of the evening, Mother Nature presented us with a double rainbow!! (on front page)

**2014 Graduates:** This year, 15 Interns became Master Gardeners. We are proud of the 1024 hours our former Interns earned in 2014 and the leadership role many have achieved. We look forward to their continued enthusiasm and support.

Special recognition was given to the graduates who earned more than the minimum 40 hours of volunteer requirements: Bettina Bailem 70 hours, Harriet Beck 92 hours, Brent Burdick 110 hours, Jane Groat 131 hours, Ellen Gustafson 57 hours, Kathleen Jenkins 89 hours, Angela Mackie-Smith 59 hours, Sandra Reissig 144 hours, and Lynne Wheeler 49 hours.

**Article and Photos on page 11 by Terry Shelton Thir, CCMG Steering Committee Chair**
Oh What A Night! Graduation and Longevity Award Program

Class of 2015 Interns (left to right) Back row: Darnell Curtis, Harry Frauenfelder IV, Linda Ivko, Kevin Laws, Christopher Rooney and Vicki Marckel. Middle row: James Corby, Tracey Alston, Autumn Kelley, Nancy Bowie, Martha Champion, Emily Leedy, Donna Stewart-Greene and Millie Santana-Stewart. Front row: Marlene Smith, Ellen St. Clair, Pamela Sarvis, Jane Tyson and Wanda Jones. Not pictured: Jennifer Godlewski

Newly certified Master Gardeners (left to right): Bettina Bailem, Karla Costello, Jane Groat, Lynne Wheeler, Kathleen Jenkins, Mildred Havrilla, Angela Mackie-Smith, Ellen Gustafson, André Newsome and Sandra Reissig. Not pictured: Harriet Beck, Brent Burdick, George Miles, Tracy Musto, Rhonda Radford
Insects and Diseases to Watch: Fall Cankerworm

The past two seasons there have been high populations of fall cankerworm in Southern Maryland. This native insect feeds on the leaves of hardwood trees. In late April to May, the fall cankerworm can defoliate trees, “rain” down feces and land on cars and porches when they descend via silk strand.

Lifecycle

In the fall, the flightless female moths climb up hardwood trees to lay their eggs. Come springtime, the eggs hatch and the larvae begin feeding on the leaves, especially those of ash, maple and oak. The larvae become darker in color with each successive instar. The developed larvae descend to the ground where they form a cocoon in which the pupae develop. In the late fall the moths emerge from the cocoons to mate and complete their lifecycle.

Management

Small specimen trees can be sprayed with an insecticide such as Bacillus thuringiensis (Bt) or spinosad. Insecticides are most effective on the younger larvae. For large trees there is not much that can be done to protect against the insect since there is no practical way to reach the canopy with a spray. In the fall, sticky barriers placed around the trunk of the trees can prevent females from crawling up the trunks to lay eggs. However, they can be time consuming to maintain and may still have damage in the spring since larvae can blow in from neighboring trees. Most defoliated trees regrow leaves later in the season but repeated years of defoliation can severely weaken trees. High populations typically do not last for more than a few years in a row as natural predators and diseases typically keep this insect under control.
Insects and Diseases to Watch: Fire Blight

Last year was a bad year for fire blight throughout Maryland. It affects members of the family Rosaceae especially apple and pear. Other species that are occasionally damaged include Amelanchier, cotoneaster, hawthorn and quince.

Lifecycle

The disease is caused by the bacterium Erwinia amylovora. It spreads and infects under wet conditions when temperatures are 65-85 °F. Pollinators and water (i.e. splashing rain) can transfer it between trees and from flower to flower in the springtime. It most readily infects new, tender growth and spreads down from the branch tips. Brown leaves on branch tips, curled “shepherd’s crook” branch tips and bacterial oozing are common signs of the disease. The bacterium can over winter on cankers from the previous season and spread to infect new tissue. On very susceptible varieties such as apples it can kill entire limbs and eventually enter the trunk.

Management

Although commercial orchardists use antibiotic sprays like Streptomycin this is typically not feasible or advisable in the home landscape. The best approach is by planting varieties that are least susceptible. University of Alabama Extension has a publication that lists fire blight susceptibility of common cultivars. Avoid over fertilization which promotes excessive succulent growth. Prune out infected portions during dry weather by cutting 8-12 inches below the visible symptoms. Do not cut back to healthy tissue but rather leave an “ugly stub”. Wait until dormant to prune out the ugly stub. Avoid over fertilization which promotes excessive succulent growth. Dead leaves can remain attached even after the rest of the leaves drop in autumn. If the infection enters main branches or the trunk, consider removing the tree.
Pesticide Strategy: the Good, the Bad, and the Ugly

Webinar: Feb. 6, 2015  Presenter: Dr. Kaci Buhl, National Pesticide Information Center
Sponsored: Alabama Cooperative Extension and the University of Georgia Center for Urban Agriculture
Summarized by: Susan Brewer, Charles County Master Gardener

When using insecticides, do an inventory.

- Leave labels attached to product. If label separate from product, attach it with a rubber band for storage. If unable to ID product, take it to a hazardous waste collection in your area.
- NEVER put mixed pesticide in milk jug or other food container. Many deaths a year are from people mistaking pesticide for food.
- Discard any bulging or bowed containers. Do not store containers in extreme temperatures as this may degrade the product.
- Inspect personal protective gear for cracks, holes or torn seams.
- If using a respirator, the cartridge must be changed once a year.

Plan attack.

- How much of pest attack can be tolerated?
- Replace plants that are a problem year after year.
- See if you can get ahead of pests by barriers or exclusion i.e. row covers.
- Read up on last year’s biggest pests to find most vulnerable life stage.
- To lessen need for pesticides, orient rows to take advantage of prevailing winds to evaporate early morning dew which fosters many problems.

Selecting Pesticides.

- Must read the label prior to buying.
- Pesticide must have site of application listed on label (i.e. tomatoes not just vegetables).
- Look for toxicity level: caution means low toxicity; warming means medium toxicity level; and danger means very toxic.
- Consider pest specificity i.e. insecticidal soap very useful for soft bodied insects like aphids or whiteflies. Use broad spectrum insecticides very sparingly. Often these kill predators as well as pests and pests rebound faster than predators.
- If a product is used multiple times, pests often become resistant to it.
- Buy only what you will need this season so storage will not be a problem.
- If using product on edibles, look for the PHI (Product harvest interval) number. This is the time you need to wait until the edible is safe to harvest.
- Read environmental hazard statements to know how they affect bees, birds, pets, etc.

Using pesticides.

- Put poison control number in your cell phone 1-800-222-1222.
- Secure access to water like a hose. Mix and load insecticide in a well ventilated area.
- Keep kitty litter in this area for spills.
- The day before using the insecticide, spray target area with plain water to see how many gallons you need to mix up.
Survey scene.
Check for air intake for your home. Close windows and doors, turn off air conditioning, pick up toys, cover bird baths and pet bowls. Avoid using pesticides over hardscape areas or areas sloping down to water source.

Preparing to apply.
Minimum protective gear MUST include long pants, long sleeved shirt, socks and shoes. Note: shorts, tank top and flip flops are an invitation to the emergency room.
Gloves should be non absorptive to avoid burns on hands.
If you walk on treated area, use shoes that are not used in the house again for safety.
Make sure children or pets cannot access the area where mixing, loading or applying is taking place.
Remember: dry ounces require a scale to measure while fluid ounces need a measuring cup.
Use rate is specified on label: more is illegal and less is ineffective.
Position sprayer up wind to avoid inhaling spray—don’t apply above head where spray will settle on you.

After application.
Wash gloves.
No smoking, eating or using the bathroom until you have cleaned up and changed clothes. Put dirty clothes in separate basket from other laundry.
Shower even though you don’t think your skin has had contact with pesticide.

Storage.
Don’t store with food, near a well or near protective gear.
If storing on shelves, store powders on top shelf, liquids in middle and trays on bottom in case of spills.

Did you know?
If veggie or fruit listed on pesticide label it often does NOT mean you may use it on ALL veggies or fruit.
Trace amounts of herbicide can hurt plants. Use separate sprayer for this.
Landscape ties treated with creosote can harm plants.
Mothballs give off toxic gas and are illegal to use in a garden setting. Animals, birds and people can become very ill from them.
Pool chemicals are pesticides and can release a noxious gas.
If you use a fogger in your house or garden, make sure all ignition sources are turned off to prevent an explosion.
Website for more information: http://npic.orst.edu or 1-800-858-7378.
Recently my property was Bay-Wise certified after weeks of false starts and delays on my part. Prior to my certification, I had encouraged others to have their yards certified. I had even assisted in the certification of others peoples’ properties. Why was I so reluctant to complete this task for my own yard?

Even I didn’t know the answer at first. I had become a Bay-Wise certifier, and I believed in and practiced the Bay-Wise Principles. In the Bay-Wise training class, students were asked to complete a Bay-Wise Yardstick to see how many practices we could identify that we had incorporated into our own landscapes. At a demonstration landscape students completed yardsticks to put their training into practice. During a summer Master Gardener general meeting, everyone in attendance completed a yardstick. Each time I finished the exercise, my results showed that I had applied knowledge to my landscape to receive certification. But still I hesitated.

Somewhere between each yardstick exercise, I developed a dread of having other Master Gardeners/Bay-Wise certifiers visit my yard to observe my own gardening practices. That anxiety grew into the kind of dread one feels before visiting the dentist, knowing full well a cavity is lurking somewhere in a tooth.

I tried to understand my anxiety. All the Master Gardeners were people I liked. None of them were judgmental about other people’s landscapes and gardening techniques. If there were corrections to be made, the resulting solutions would be delivered with care and sensitivity. So the problem had to be in my own mind.

Eventually, I realized what caused my hesitation. The previous landscapes that I had visited for training and certifications were beautiful. They were the kinds of landscapes photographed for gardening magazines with glossy photos of settings that the reader would covet for her own yard. My yard was not like any of those photos. My aesthetic was not very tidy and traditional. I must confess: I was ashamed of my own yard.

My yard has trees - lots of sweet gum and Eastern red cedars. I love those tall gum trees with their deep taproots that allow them to stand up to heavy winds. I love those trees for the cooling shade they provide on the hottest summer days. I love that they are native in origin. On the other hand, I do not love the prickly seedpods that litter the ground underneath. The other trees, Eastern red cedars, draw cedar waxwings and other birds during their winter migrations. However, the surrounding ground under the cedars is often nearly barren, except for the money plant that self seeds abundantly in certain sections. Also, I do not love the how the grass around the trees, or lack of grass, grows. My lawn is really a collection of weeds and less attractive plants that only create the effect of a lawn if they are all mowed the same height.

Native plants have always fascinated me. Since my Master Gardener and Bay-Wise trainings, I have really come to appreciate the value of native plants for benefits in the landscape and for the local insects and animals. When I looked at my yard, I saw a few natives that I had incorporated since I had gained my newfound knowledge, but I also saw big box store plants that did not really fit in the design of my forest garden. Yes, I had also learned that my kind of landscape was called a forest garden.

When I looked around my front, side, and back yards, I saw practical, but ugly wire cages protecting shrubs from deer. I saw decimated plants eaten by deer and other critters; overgrown herb, vegetable, and flowerbeds; weeds pushing through the bases of plants that I had overlooked during my last weeding.
And the invasive plants! Some I inherited when I bought the property, and some I introduced in my ignorance. I am duty bound to confess a few of both kinds: daylilies, vinca minor, Asian honeysuckle, and Japanese stilt grass. Fortunately, I had been able to pull all the English ivy that I had never planted, but found curling around tree stumps. Although it feels good to confess my sins, it doesn’t relieve my guilt. In other words, my property would never be photographed for a monthly magazine with glossy photos for others to ogle and covet.

The day of the certification, the Bay-Wise certifiers arrived: Rose, Pauline, and Terry, all wonderful Master Gardeners. I was in hands of good people.

What did they see? First they saw my two rain barrels for watering between rainfalls. Then they saw the natives that had volunteered, or I had planted: spice bush, black haw viburnum, sweet pepper plant, milk weed, bee balm, cat’s paws, native honey suckle, Virginia sweetspire, red bud, native dogwood, and multiple varieties of fern. I could go on, but I won’t. They noted that I compost garden and kitchen waste and grasscycle during mowings. They saw how I continually use all those sweet gum leaves for mulch. They observed how I do not use pesticides and encourage the use of beneficial insects to rid my garden of pests. They saw how I kept brush piles for birds, kept the bird baths clean, and provided cover for other small animals. They gave me some suggestions about ways to remove the invasive plants and even admired some of my plantings. We joked that I would not lose points for the tacky fall decorations in the front yard. The certification was not only painless, but also fun! We shared information with each other that gardeners love to do.

After an hour and a half of observation, interview, and demonstration, the resulting inches/points from the yardstick were totaled. I PASSED well above the minimum 36 inches! I was overcome with pride that my pitiful landscape measured up to the standards, not just by my interpretation, but also by Bay-Wise experts whom I respect.

So the moral of the story is: get your property Bay-Wise certified! Be a good role model for your neighbors while you help clean the pollution in the Chesapeake Bay. If I can live through the certification process successfully so can you. And if you are really anxious, ask for me to be on your certifying team since I will know the mental worries you may be harboring.
Mosquitoes are the deadliest animal in the world because they transmit vector diseases. A vector disease is one which they pick up from another living organism and then transfer it to humans or animals. Mosquitoes are found in every region of the world except for Antarctica.

Mosquitoes have 4 life stages: egg, larva, pupa and adult. For the egg, larva and pupa stages, mosquitoes must have water. There are 2 varieties of mosquitoes which affect us the most. Culex pipiens and Culex quinquefasciatus are house mosquitoes. They are the brown mosquitoes that come out at dawn and dusk. The aedes species are black and white color, active during the day and are generally ankle biters.

The female mosquito can lay eggs singly or in rafts (clusters). They lay 200-300 eggs at a time. They like water that is stagnant and has some biological material in it i.e. algae, dirt, grass. Larvae hang upside down in the water with tubes extending to the surface. If soap or oil is put on the surface of the stagnant water at this stage it effectively suffocates the larvae. This is the easiest stage to manage and eradication is the most effective.

It is easy to determine the sex of the insects. The male has a feathery antenna and does not bite. The female has an unadorned antenna and does bite.

Mosquitoes locate hosts in a variety of ways. They can detect CO₂, lactic acid and Octenol, visual cues and heat and humidity. They are attracted to dark clothes, motion and sweating. When biting, they inject saliva into the host which prevents clotting and often causes an allergic reaction.

Dangers of mosquitoes are well documented. If no repellent is used, it is possible for them to remove large quantities of blood. Secondary infections at the site of the bite are common. They can carry 520 different types of diseases. The 3 diseases that are the most dangerous are West Nile, Malaria and Chikunguny. In addition, they carry heartworms which are deadly to pets.

Four D’s are used for prevention:
- Drain standing water
- Dress in long sleeves and pants
- Stay indoors during dawn and dusk
- Use DEET or other repellants when going outdoors.

At this point a discussion ensued about the safety of DEET. The speaker quoted an EPA study that showed that when DEET was used according to its label, no adverse side effects were found. There were no links between DEET and death or DEET causing or enhancing medical conditions. There was some evidence of youth epileptics who were reported having a seizure within 24 hours of using DEET but there was no proof that the seizure was caused by the DEET or just a regular occurrence from the epilepsy.

The CDC has approved 3 insecticides for human use to repel insects: DEET, picaradin, and Oil of lemon eucalyptus. In addition, the EPA lists several others: IR 3535(which is found in Oil of Olay insect repellants), catnip oil, 2-undecanone, citronella and p-methane 3, 8-diol.

The EPA has a website where you can input what type of insect you want to repel and for how long and they make recommendations. The speaker can be accessed directly at MEKECK@AG.TAMU.EDU.
May
2  Composting Demonstration and Shred Event (partnership with county govt), 11am-2pm, Charles Co. Government Building, 200 Baltimore St. La Plata
2  8am-1pm; Annual Plant Sale, La Plata Farmer's Market and Waldorf Farmer's Market
5, 12  6-9pm; The Woods in Your Backyard, Extension Office, $35, go to http://extension.umd.edu/charles-county/home-gardening/events for more information
6  12:30-4pm; Wild Native Beans and Peas, Shad Landing Park, Snow Hill, Worcester County, $25, registration ends 4/29, wildnativebeansshadlanding.eventbrite.com
8  12:30-4pm; Wild Native Beans and Peas, Anne Arundel Extension Office, Gambrills, $25, registration ends 5/1, wildnativebeansannearundel.eventbrite.com
16  9am-1pm, Plant Clinic at Waldorf Farmers' Market
16  1-3pm, Herb Gardening, Potomac Library, Contact Pat Biles, Open to public
23, 30  8am-3pm, Bay-Wise Advanced Training, 4-H Center, College Park, $50, contact Esther Mitchell estherm@umd.edu
June 6  10am; Membership Meeting Extension Office Open to all MGs
27  10am-3pm, Ornamental Plant Diseases, College of Southern MD, La Plata, $35, registration ends 5/20, ornamentalplantdiseaseslaplata.eventbrite.com

June
3  6:30-8pm, Garden Pests & Diseases, La Plata Library, Contact Luke Gustafson Open to public
4  8am-4:30pm, MG Annual Training Day, U of MD, College Park, mgatc2015.eventbrite.com
6  8am-3pm, Bay-Wise Advanced Training, 4-H Center, College Park
16  Ask a MG Practicum, College of Southern MD, La Plata (State advanced training, details & registration forthcoming)
20  9am-1pm, Plant Clinic at Waldorf Farmers' Market
23  10am; Membership Meeting Extension Office Open to all MGs

July
28  10am; Membership Meeting Extension Office Open to all MGs
18  9am-1pm, Plant Clinic at Waldorf Farmers' Market

August
15  9am-1pm, Plant Clinic at Waldorf Farmers' Market
25  10am; Membership Meeting Extension Office Open to all MGs

Check out all these dates and more at the ONLINE CALENDAR
Submit articles, photos, reports, events, and other items for publication to Deborah Determan at CompostSubmissions@yahoo.com by July 15, 2015 for the Summer 2015 newsletter. If you send a photo, please include a brief description of the activity and names of persons included in the photo, as well as the photographer's name. If you send a photo of a plant, please include the scientific name, if known.

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