



# Trumpet Vine

Knowledge for the Community from Loudoun County Master Gardeners

*Fall 2014*

Volume X, Issue 4

[www.loudouncountymastergardeners.org](http://www.loudouncountymastergardeners.org)

## LOUDOUN COUNTY MASTER GARDENER LECTURE SERIES

FREE AND OPEN TO THE PUBLIC, 7PM  
RUST LIBRARY,  
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LEESBURG

Oct. 2. *The Joy of Gardening*  
with Marianne Wilburn,  
newspaper columnist and  
blogger and LoCo gardener.

Nov. 6. *Holiday Floral Design*  
with Kim Wright, NVCC  
Loudoun Campus floral design  
instructor.

No lecture in December.

Jan. 8. *Journey Through  
Hallowed Ground: The Living  
Legacy Tree Planting Project*  
with Peter Hart, JTHG  
volunteer and certified  
arborist.

For more information, please  
visit our web site at  
[loudouncountymastergardeners.org](http://loudouncountymastergardeners.org)

Visit us on Facebook:  
Master Gardeners of Loudoun  
County, Virginia.

## Fall Gardening – Looking Ahead

Fall is an excellent time to plant trees, shrubs, and perennials. Gaps in your garden are evident, memories of successes and failures are fresh. Planting in the fall allows root systems to get established and give plants an advantage over those planted in the spring especially when the summer is very hot and dry.

In this fall issue we reflect on the season, suggest strategies for your garden, seek inspiration and consider big projects. It's time to plant, separate or transplant, and consider adding to your garden.



Remember to clean up your vegetable garden but delay cleaning up your ornamental beds, maintaining habitat and food for animals during the winter. The ornamental bed clean-up is best done in early spring.

Fall is definitely in the air, cool nights and sunny warm days. While it's not hot, be aware that we have had very little rain. Make sure you are watering your perennials and any trees and shrubs that have been planted in the past year.

And always remember Master Gardeners are here to assist you throughout the year with all your gardening questions. We are available Monday through Friday mornings at the Help Desk. Drop in or contact us by phone or email. (See the bottom of each page in this newsletter for contact information!)

## **Like to Garden? Join the Loudoun County Cooperative Extension Master Gardeners**

If you want to learn from gardening experts and meet like-minded garden enthusiasts, all while giving back to the community in the process, then the Loudoun County Cooperative Extension Master Gardener Program is for you. No experience necessary, but enthusiasm is required!

A great way to learn about the program is to come to our Open House on November 6, 7p.m., at 30 Catoctin Circle, S.E., in Leesburg. Can't wait that long to learn more? Please keep on reading to find out what a "year in the life" of a first year Master Gardener is really like.

Already know you want to join? Classes start January, 2015. Find out more details and apply today at <http://loudouncountymastergardeners.org/become-a-master-gardener/> or call 703-771-5150.

So what will the experience be like for Master Gardeners who join the program in 2015? The following describes my experience as a member of the Class of 2014. I hope you find it insightful!

During the months of February and March when the snow was flying (remember that winter?), the Class of 2014 Master Gardener Trainees attended classes two mornings each week. We heard from experts in their fields on botany, soils and fertilizers, plant disease diagnosis, tree identification, ornamental garden plants and vegetable gardening. Additional training occurred with off-site visits to practice hands-on plant propagation and woody plant pruning. We also learned how to interpret results of our own personal soil samples that were sent to Virginia Tech for analysis.

This classroom portion of the training provided in-depth information, but just as importantly, we began to get acquainted with our fellow classmates and current Master Gardeners over snacks, tea and coffee during the breaks. It's wonderful to find a group of people whose eyes don't glaze over when you are raving about your favorite hydrangeas.



**Interns Mary Stern and David Hubbuch in the veggie garden removing spent green bean plants and preparing the beds for a fall planting of cool season veggies.**

After completing the classroom portion as Trainees in early April, we officially graduated to Intern status and, just as it implies, were welcomed to volunteer and serve beside tenured Master Gardeners to complete our training. This is the hands-on training phase that focused mainly in two areas: The Help Desk and the Demonstration Garden. At the Help Desk, Master Gardeners help Loudoun residents who call, email or come by in person to ask all sorts of gardening questions: "My camellias are losing their leaves—help!" "What pesticide do I spray on my pear and apple trees at this time of the year?" The tenured Master Gardener walked me through the process for handling email requests, researching questions both online and with the resource library, and patiently answered all my questions.

At our Demonstration Garden at Ida Lee Park, interns volunteer side-by-side with tenured Master Gardeners to maintain this amazing Loudoun County resource. It contains a beautiful ornamental garden as well as a productive vegetable garden. All of the produce is donated as it is harvested to Interfaith Relief Food

Pantry—Loudoun's emergency food bank for those in need. One of the other trainees remarked on how much planning goes into organizing not only the garden but the tasks needed to maintain it. As our class of interns worked side-by-side weeding, mulching, pruning, planting and harvesting, our friendships deepened as we discovered even more common interests.



Master Gardener Eric Kephart explains fall turf management of the grass plots at the Demo Garden. Interns then weeded, dethatched and overseeded existing plots and prepared and amended the soil in one plot for fall planting of a new type of grass. Interns: Ling Lay, Janet Andrus, Mary Stern, Gail Lataille and Lindsey Marcellin

Other volunteer hours were spent exploring opportunities to serve our community via specialized teams such as Grass Roots, Children's Education, Gardening Symposium, Training, Garden-To-Table and Communications to name a few. There are many opportunities to serve and learn along the side of the highly motivated, knowledgeable, gracious and humorous tenured Master Gardeners—their passion is remarkable.

My personal highlight reel as a Master Gardener intern includes visits to homeowners to sample soil as a Grass Roots team member, working as a team to plan the 2015 Symposium, learning to compost at

the Demo Garden, educating the community by answering their questions at the Help Desk or at Garden Clinics and learning all about Monarch caterpillars dining preferences: milkweed. But, as I reflect on this last 6 months, the real highlight is the fun I had and friendships I formed with the

diverse and talented 2014 intern class.

So if the program sounds like something right up your alley, please join us at the Open House, November 6 at 7p.m., or even better, apply today for the Class of 2015 at <http://loudouncountymastergardeners.org/>.

*Nancy Kelly, Master Gardener Intern*

## Save the Date – 2015 Symposium

The Loudoun County Master Gardener 2015 Symposium will be a one day event — March 21<sup>st</sup>. We have planned speakers you won't want to miss. Two of the four speakers are:

**David Culp**, author of the *Layered Garden*, will be speaking on that topic. David mastered the design technique of layering — interplanting many different species in the same area so that as one plant passes its peak, another takes over.

**Barbara Pleasant** an award winning garden writer and blogger has written extensively on vegetable gardening.

Stay tuned for more information about the symposium.

## Rid Your Vegetable Garden of Perennial Weeds

*Did weeds get the best of you in the vegetable garden this year? Are you planning a new vegetable garden next year?* Although the vegetable season is winding down, now is the time to plan a strategy for perennial weed control.

Unfortunately there are no steps that will eradicate weeds for all although a few timely tips can certainly assist in minimizing your problems. It is vital you do battle each year! Once perennial weeds have infested a vegetable garden, diligence must be used to minimize the problem because they will be extremely difficult to eradicate. However, successive years should find you focusing less on weeds and more on your vegetables.

*First* some quick information about weeds. Weeds are mostly categorized as annuals (bad) or perennials (worse). Perennial weeds return for 3 or more years, spread by above or below-ground stems, runners or rhizomes in addition to seed. Frost will kill the above ground foliage but plant stems and runners below the ground have prepared for cold weather by storing plenty of reserve energy. Perennial weeds common in a vegetable garden include Bermuda grass, bindweed, ground ivy, quack grass and nutsedge. Annual weeds, which are more common in the vegetable garden, last 1 year or less and include prickly lettuce, common purslane, redroot pigweed, crabgrass and common lambs-quarters. Annual weeds are all spread by immense seed production.

Getting started involves getting the garden cleaned up first! Remove old vegetable plant debris and pull out or cut down weeds *carefully*, especially those which have gone to seed. Make sure to also remove all the miscellaneous items of a hard fought season to include plastic mulches and landscape fabric.

Once cleared, begin to minimize perennial weed problems by tilling the garden soil to a depth of 7 inches. *Although tilling can be controversial as it does disturb your most valuable asset, your soil, it is the best way to provide good long term control over perennial weeds.* Beware! The first pass and any subsequent passes of the tiller will merely break up underground rhizomes and stems which will sprout even more weeds. The real effort starts with removing each new set of seedlings when they are 2 inches tall. Eventually the stores of energy will be exhausted eliminating the weed problems. Continue to rake, hoe or till newly sprouted weeds which are more than 2 inches tall thru out the remainder of September and most of October *if you are planning to grow a winter cover crop in the garden bed.* In late October, seed the cover crop at twice the usual rate. Suggestions for a late planting of a cover crop are few this late in the season but winter rye or forage radish can be seeded as late as the end of October. If you are not planting a cover crop then continue to rake or hoe out any new seedlings larger than 2 inches until the ground freezes. Mulch the bed heavily with weed-free straw, quality compost, shredded leaves or other weed free mulch until springtime. The following sources can assist you with weed identification as well as other research based advice for weed prevention in the vegetable garden.

General overview of perennial weeds in the vegetable garden [http://pubs.ext.vt.edu/456/456-018/Section\\_2\\_Home\\_Vegetables-4.pdf](http://pubs.ext.vt.edu/456/456-018/Section_2_Home_Vegetables-4.pdf)

Information concerning a wide range of weed control options to include cover crop recommendations <http://www.gardening.cornell.edu/pests/pdfs/weedcontrol.pdf>

Specific advice for perennial and annual vegetables <https://www.extension.org/pages/18549/bring-existing-weeds-under-control-before-planting-weed-sensitive-crops#.VBR7epRdWSo>

Weed identification <http://harnett.ces.ncsu.edu/files/library/43/weed%20id%207-20-09.pdf>

**Denise Palmer, Master Gardener**

## Reflections on our 2014 Demo Garden Vegetables

The garden season has almost 'officially' ended, yet the tasks and the thoughts go on beyond a closing date.

It is early September and there are still vegetables ripening. Tomatoes, watermelons and a few zucchini are still growing. It is so different from Septembers in the past few years. (Last year was hot- hot with a lot of bad bugs.) Stink bugs plagued us for several years; harlequin bugs and bean beetles have been maddening. Japanese beetles were present for their whole 2 month adult life cycle.. The good news is I have only seen 3 stink bugs this year, and they weren't in the veggie garden. What we have had throughout the DG are assassin bugs. And they are signs of a healthy garden.



This season the tomatoes are heartier and more prolific than in the last few years. Our heirlooms-Brandywine and Cherokee purple - are doing better than I have ever seen them. We even have a Cherokee purple growing in our new experiment this year- the Straw Bale Garden. We had a tomato testing in late August and these 2 heirlooms were featured. In a ranking of 5, the Demo Garden (DG) tomatoes took the first 4 spots with the 5<sup>th</sup> coming from a MG's home garden. Fresh tomatoes, cheese, crackers and homemade tomato jelly!!

The Straw Bale Garden (SBG) has been the most fun demonstration, and visitors from all ages are interested in them. The season had already started when we decided to do this, so we had a place for all the plants that we didn't have room for in the ground like kale, peppers, eggplant, herbs, a yellow crookneck squash, and the tomato. We plan to have the SBG again in 2015, and we will have a more organized plan which will include planting seeds.

For planting potatoes, my idea this year was to plant the seed potato in a shallower trench, and mulch with straw instead of surrounding the plants with soil. This is an old time method I've heard of for years, but had never tried. I don't think we'll try it again. I'm not sure if the straw stayed too wet, or why, but there wasn't a very large harvest.

Another planting trial we did was to plant 4 different season types - early, mid, late - all at the same time instead of 2 different plantings. We ended up harvesting everything at once. Definitely 2 plantings next year and we'll go back to our standard way of planting potatoes.



. We planted a bed of sweet potatoes for the first time in 3 years. In the past we had critter problems as in voles and groundhogs, so we buried fencing that

was about 2' tall around the inside edge of the bed to thwart the digging and getting into the fenced area. This year, there was something eating the vines, so we laid row cover over them. In the end, the harvest wasn't spectacular. We learned we should plant only one kind, and it will be Georgia Jet. We also realized we need to pay a little more attention to them.

There was a good crop of bush beans this year- a lot of harvest. We went to growing strictly bush beans several years ago because of the bean beetles. Beans are self-pollinating, so they can be covered through the season. As pretty as bamboo bean teepees are, they are beetle magnets.

The pepper plants produced a great amount. The plants had a shaky start, and although the plants themselves aren't as large as they usually have been, they are loaded with fruit. And the blueberry bushes were loaded this year, as were the raspberries and the blackberries. The raspberries are enjoying a lot of sunshine this year, as an apple tree that was shading them was removed last year.

Another removal from the garden was the grape vines along the western fence line in the vegetable area. Although they finally had a decent crop last year, they were hard to deal with. They needed to be sprayed for insects and fungus frequently. And the mildew would spread around to other veggies. After they were removed, 2 veggie team members dug out the roots, which extended up being 10-15' under the veggie beds. Taking them out allowed us to take the cold frame out, plant some rhubarb crowns, place the straw bale garden and plant a lot of flowers.

There are 2 beds with new growth at this writing. We have lettuces, turnips, radishes, arugula and spinach. And one bed has 20 heads of cabbage growing. Garlic will be planted in October.



We are starting to gather soil from each bed and the blueberry area, to send to Virginia Tech to be tested. We do this every 3<sup>rd</sup> year. Then we plant cover crops to protect the beds during the winter. Late August we have a crop rotation meeting, and after we decide what and where the crops will be planted, we decide on what cover crops to plant in each bed. Some of them include winter rye, oats, field peas and crimson clover.

I can reflect on the garden for pages. I'll finish by saying thank you to the 2014 class of interns for their curiosity, enthusiasm and hard work. It has been a good year. Every class has put their mark on the DG and no one has been forgotten. To date this season, the veggie garden has donated 1,154 pounds of fresh produce to Interfaith Relief, and we're not through yet!!

We, the LoCo Extension Master Gardeners, are incredibly lucky to have this area at Ida Lee Park in Leesburg to create, demonstrate, educate and maintain. And I know the public loves it, because they continually visit, ask questions and tell us!

***Normalee Martin, LCMG***

## Versatile Viburnums for Vibrant Autumn Viewing



Spring



Summer



Autumn



Winter

Viburnums are regarded as versatile by gardeners, horticulturists, and landscapers because they are among few choice shrubs with multi-season interest that also thrive across a wide range of planting conditions. Whatever the soil pH, fertility or moisture level, and whatever exposure, temperature, or hardiness zone (USDA zones 2-9) there is a viburnum to fill that planting situation.

With over 150 species that may be shrubs or small trees, viburnums include desirable natives that provide a suitable choice for those who prefer native plants in their landscapes. Most have attractive foliage of different shapes and textures and also fragrant two-toned flowers of various shapes that turn into colorful berries for birds and wildlife. Viburnums may be evergreen, semi-evergreen, or deciduous. They are generally deer/pest/disease-resistant, low maintenance, reliably hardy, and would make a stunning specimen plant, serve as anchor to a border, and be as effective as a privacy hedge. Thus, when stumped on what shrub to add to your landscape, start choosing among **VIBURNUMS**.

After the fragrant or vase-worthy flowers in spring and berries for birds in the summer, viburnums display vibrant fall colors, sometimes with lingering berries. Here are some of the choices available and suitable in our area:



**Blackhaw Viburnum (*V. prunifolium*)**

Purple, rich red burgundy leaves in fall. White flowers in spring (not fragrant) followed by edible blue-black drupes or berries that may persist into winter. Upright, multi-stemmed, deciduous, and among rare shrubs that can thrive in dry shade. Grows to 15 feet. **NATIVE**.



Photo © Jeff B. Franklin

Featured here are viburnums native to Virginia or similar U.S. regions, but also shown here are the highly fragrant species usually from Asia (*V. bodnatense*, *burkwoodii*, *carlcephalum*, *carlesii*, *judii*). Viburnums that are evergreen or semi-evergreen are *V. davidii*, *V. lantanaphyllum* or *x rhytidophylloides*, and *V. 'Pragense'*.



**Arrowwood Viburnum (*V. dentatum*)**



Yellow to orange to red and reddish-purple in fall. Creamy lacecap white flowers (not fragrant) turn into bluish berry clusters. Upright, rounded, and grows 12-15 feet. Can tolerate wet soils. NATIVE.

**Possumhaw or Smooth Witherod Viburnum (*V. nudum*):** Glossy leaves turn rich burgundy or wine color in fall. Showy, creamy-white, slightly fragrant flowers become gorgeous edible berries that change colors (variety 'Brandywine' is a mix of bright pink, blue, and purple-black at the same time). Grows 5-15 feet. NATIVE.



**Korean Spice Viburnum (*V. carlesii*)**



Very fragrant, pleasantly sweet/spicy. Pink buds turn into white-pink flowers that become red then black berries with reddish, burgundy, or purplish leaves as backdrop in autumn. Rounded and dense habit. Grows to 6 feet.



### American Cranberry Bush (*V. trilobum*)

Maple-like leaves turn yellow and reddish purple in autumn. Snowy white lacecap flowers turn into red berries that may persist into winter. Grows 6-12 feet. NATIVE

**TRIVIA NOTE:** Latin names are used to ensure that those looking for exact plants find the right ones. Plants may have several common names, or one common name may apply to several plants, but the Latin name for a plant is reliably unique to each plant. Scientific Latin plant names start with the genus followed by the species that may be followed by the cultivar in single quotes.

There is a lot more to this versatile genus, but this showcase should be a good starting point for seeking and discovery. To those looking at multi-season shrubs for new plantings in their landscapes—after all, autumn is good shrub-planting season—here is an idea: Viburnums for Virginia!

Maria Daniels, Master Gardener

## Spicebush



Berries on the spicebush, *Lindera benzoin*, are ripening. All parts of this native shrub are strongly aromatic. A spicy, citrusy smell is immediately apparent when the leaves are rubbed, or the twigs or berries are scratched or broken, making this plant very deer resistant. But birds love the berries and the leaves are food for the spicebush butterfly larvae.

Seeds germinate freely if the berries are planted without letting the seeds dry out. These are fast growing understory shrubs. Male and female plants are required for berry production.

## The Banded Woolly Bear Caterpillar – Can It Really Predict Upcoming Winter Weather?

As fall approaches, we will begin to observe banded woolly bear caterpillars wandering about



**Banded Woolly bear Caterpillar**  
*entnemdept.ufl.edu*

independently, feeding on a wide range of plants such as dandelion, clover, and grasses. Their size averages about 1 inch in length, and they are bristly to the touch. They are easily recognized by their band of reddish-brown bristles in the center, bordered by black bands at each end. Folklore claims that if the black bands are longer than the center band, the winter will be harsh. Therefore, a widening center band predicts winter will be mild. Science has had difficulty confirming the accuracy of the woolly bear forecasts. Among a group of woolly bears, the size of the center bands can vary due to the age of the caterpillar. It seems the center band

tends to widen as the caterpillar matures. With the winter we just had, I wish I had paid better attention to these little wonders last fall, but plan to observe them and gather my own data this year.

Woolly bears will search for a protected place to spend the winter as a full grown caterpillar. During the winter it can literally freeze solid. It survives being frozen by producing a cryoprotectant in its tissues. Since woolly bears live as far north as the Arctic this is a handy capability and the Arctic woolly bears spend a significant percentage of their life frozen. In spring, they will emerge from their winter abode and briefly resume feeding before pupating in a cocoon made from silk and their own bristles. Two weeks later, the beautiful Isabella Tiger Moth will emerge.



**Isabella Tiger Moth**  
*naturalhistory.crowspath.org*

The woolly bear caterpillar is celebrated with the largest one-day festival in Ohio each October, in the town of Vermilion on Lake Erie. Looks to me as though Punxsutawney Phil may have a little competition!

*Karen Olgren. Master Gardener*

## Asters and Goldenrod: Fall Color and Much More

By the time fall arrives you want to sit back and enjoy flowers that need little or no special care and still provide the pollinators with much needed pollen and nectar before winter settles in – tough, durable plants that provide dependable color and boost the habitat value of your garden. You need to look no farther than the top two best bets to **attract butterflies and moths** in the US mid-Atlantic region according to the website *Bringing Nature Home*, <http://www.bringingnaturehome.net/what-to-plant.html>—goldenrod and asters.



Goldenrod or *Solidago* supports 115 butterfly and moth species and it's a wonderful pollen and nectar source for bees and other insects. You have dozens of species to choose from ranging from sun to shade, dry to wet, salty seaside and 8 inches to over 6 feet in height. Some are clumping and others spread through rhizomes. Yellow goldenrod goes well with the blues and purples of asters, sedum, Joe pye weed, and ironweed. *Solidago sphacelata*

'Golden Fleece' Dwarf goldenrod is an excellent short garden plant.

**Goldenrod does not cause allergies;** ragweed is the culprit. Goldenrod has heavy, sticky pollen that requires insects to spread it. Bees, butterflies, beetles, wasps, flies and spiders abound on goldenrod. Birds eat its seeds. Flies lay their eggs in the stem which then swells and forms a gall. Birds will break open the gall to get to the insects.



Goldenrod photos by John Eppler

*Interesting historical note:* During World War II when rubber was in short supply, Thomas Edison created a process to extract rubber from goldenrod. The tires on the Model T given to him by his friend Henry Ford were made from goldenrod. Then Ford enlisted George Washington Carver to try to perfect the goldenrod rubber but it proved to be too weak for industrial use.



**Asters** are true fall bloomers with some species blooming into November. They support 112 butterfly and moth species and supply nectar and pollen for a very wide variety of insects. There are approximately 60 species native to the mid-Atlantic area. There's an aster for every garden, sunny, shady, dry or wet. Cultivated asters range from 9" to 6 ft. in height. Flower size range from ¼" in diameter to 2½". Flower colors are all shades of blue, violet and purple, plus white.

Asters have had their classification changed. Only European and Asian asters have remained in the genus *Aster*. American native asters are primarily in the genus *Symphyotrichum* and *Eurybia*. Luckily the common name remains "Aster."



Both Asters and goldenrod display photoperiodism, that is, they grow and bloom when the days start to get shorter. Tall golden rod and tall asters can be kept at a reasonable height by pruning them back before the beginning of July.

*Carol Ivory, Master Gardener*

## A Mediterranean Garden in Waterford

Kathy Middleton and her husband Dave are the current owners of the Pink House in Waterford, Virginia. Formerly a bed and breakfast, the Pink House is a quintessential Waterford house right in the middle of the village. Over the years, Kathy has created such a stunning garden that, frequently, she and Dave will find people sitting on their patio picnicking and wandering happily among the plants, as they think it's a park. This happens often and actually makes Kathy and Dave laugh. I feel lucky to have caught Kathy between travels and new grandbabies to interview her for the *Trumpet Vine*.



**Kathy, how long have you been in Waterford?**

We bought the property in 2005. It took us four years to finish the house, and we started the garden renovation at the same time. One of the primary reasons we bought the house was because the property has lots of outdoor spaces and very, very good soil, which has obviously been worked for over 200 years. We actually finished renovating the house fifteen minutes before our daughter's wedding in the fall of 2008. The garden is still a work in progress, but the basic plantings are completed and weeds are easy to keep at a minimum.

**Your garden is so beautiful, who was your gardening inspiration?**

I watched my mother work in her beautiful four-acre garden in California. She had over half an acre of classic tea roses, adding many David Austin roses through the years. She kept records and books on all of her plants. She has lived in the same house for over 70 years!

We've also lived in France and Italy and I love European gardens. I taught myself French and Italian by reading cookbooks and gardening books.

**The garden is situated on a rather steep hill, what are the biggest challenges?**

The biggest challenge was cleaning out the garden, as it had been untended for a few years. The key was to create access. First thing we did was to build two staircases; one of French limestone, which I imported from France and the other is a big boulder staircase. Then we terraced the garden. We're on 1/2 an acre, and that includes the house but the garden looks much larger.





**I always thought I was seeing at least an acre. What is your gardening philosophy?**

“Organized Chaos” is my goal. I want a garden that changes week after week with an ever-changing palette of both color and texture. I think one should have a vision of what you ultimately want. Your garden should make you very happy. Believe it or not, I find weeding therapeutic, and if a plant doesn’t work then move on to something else.

**How did you decide what types of plants to put in your garden and what works best for you? And just how many plants do you have here?**

The soil really lends itself to the simple process of gathering seeds and redistributing them in the fall for spring and summer blooms. We’ve planted approximately 30,000 bulbs over the last nine years, tulips, narcissus, wood hyacinths, allium and thousands of Casa Blanca lilies. We also have hundreds of Japanese anemones, white phlox, lavender and thousands of iris line the garden paths in the Provence Style.

I plant in masses and now after ten years, have very few weeds. I collect the seeds from my mother’s hollyhocks in California, larkspur seeds from my aunt. The coreopsis, blackberry lilies and poppy plants are from seeds dropped by birds. I then gather their seeds and keep spreading them, rather than allowing them to just reseed themselves. Because the garden is basically established, I’ve only had to water once this summer.

The Oriental poppies, lilacs and peonies were here from the previous owner. She also had a lovely small aromatic English white violet, which I’ve spread over the years to create a white chromatic blanket.

**How do you plant 30,000 bulbs on less than 1/2 an acre?**

I dig trenches, circles and ovals and fill with bulbs.

**What else?**

Over the years, I’ve brought 18 olive trees and ten Meyer lemon trees from California, stuffed in my carry-on bags. In the winter, I bring them all in to the sun room. In addition, we have plantings of arborvitae which all add to the Mediterranean look. I try to keep the arborvitae trimmed in the Italian style.

The hydrangeas, which cover the hill and fill the big pots out front, are all from cuttings taken from my garden in McLean in 2004. The Koehne hollies, which are native to Virginia, are being trained as a raised hedge across the front of the property. These hollies were purchased as small shoots fifteen years ago.



**Thank you Kathy, for sharing your beautiful garden and your information with us. I am totally inspired.**

*Schuyler Richardson. Loudoun County Master Gardener Intern*

*\*All photos by Kathy Middleton*

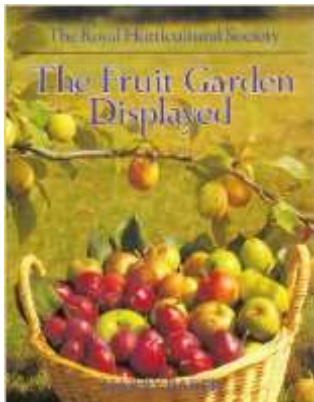
## **Espalier – Living Garden Sculpture**

Does it ever seem there just isn't enough room in our gardens to grow all the things we would like? I bet if you look around, you might spy a bare fence, side of your home, garage or shed (be aware of dripping water from overhangs) or maybe even a nice narrow stretch of sunny lawn, and oh the things you can do with a little space! As long as the site receives at least 6 full hours of sun a day, preferably more, any of these locations would be prime candidates for growing something that requires a minimum of space, is functional and beautiful even in winter! I am talking about a very old way of growing plants, typically fruit trees, known as *Espalier* (pronounced is-'pal-yər, or is-pal-yā).



Originating in Europe or perhaps as far back as the Middle Ages or even ancient Egypt, Espalier became the preferred way of growing and training woody plants, especially fruit trees, in two dimensions - vertical and horizontal. By planting fruit trees against sunny walls, this microclimate provided the warmth and protection necessary for the blossoms and fruit to mature and ripen using very little garden space. The trees were trained to grow along wires attached to walls thus causing them to come into fruit production faster and in greater abundance as the trees no longer directed energy into vertical growth, but into producing flowers and fruit.

So how does one go about creating such beauty in our landscape? I found videos on YouTube that documented the process of building the structures/fences to train the trees, but 'The Fruit Garden Displayed' by The Royal Horticultural Society is what really piqued my interest. With beautiful examples and detailed instructions, it shows how to achieve something as ornamental as this fan shaped cherry tree:



The American Horticultural Society also has an excellent book called 'Pruning and Training' by Christopher Brickell and David Joyce, which covers ornamental shrubs, roses and climbing plants in addition to fruit trees.

This is how we got started:

SITE PREP. In August 2010, it was time for us to get started. A 250' overgrown shrubby fence line was the site. After clearing the growth, setting the posts and preparing the soil, in the span of 4 years it was transformed into an attractive ornamental border with espaliered pear, peach and apple trees and grapes.



Now that summer is behind us, autumn is a great time to begin the process of creating a living sculpture of your own. You can do it! But to be successful, you must have or create the most ideal site possible. If conditions are less than ideal, consider growing espaliered dwarf fruit trees in containers and put them right there on your sunny porch or deck!

If you think you'd like to create a living sculpture yourself, here are some things to consider:

- \* Does the site get a **minimum** 6 hours of full sun? 8+ hours is best.
- \* Is the site somewhat sheltered (strong winds can be damaging to the tree)?
- \* Does the soil drain well?
- \* Has a soil test been done? (pH in the 6.2 to 6.8 range is best)
- \* Selecting disease resistant cultivars is a huge consideration!
- \* Rootstock (the roots the tree is grafted on) will determine the size (smaller is better) and vigor of a tree and can also provide additional disease resistance.
- \* Age of tree. Planting maiden whips is the best age of the tree to start with although if the young tree comes with some side branches, known as feathers, that is fine as they will be trimmed off.



Photo courtesy of  
[www.thisoldhouse.com](http://www.thisoldhouse.com)

With a bit of research, perhaps referencing the abovementioned books, site prep, time and patience you can grow espaliered fruit trees and enjoy home grown fruits for your family just like George Washington did at Mt. Vernon and Pierre DuPont at Longwood.



Apple espalier at Mt. Vernon  
Photo courtesy of  
<http://www.mountvernon.org/the-estate-gardens>



Apricot espalier in greenhouse  
Longwood Gardens  
August, 2014

*Joanne Patton, Loudoun County Master Gardener Intern*

## Designing Water Gardens into Your Life

Let's say that you like the cool, refreshing sound of splashing water and want to create your very own water garden. What now? How to begin? This article, the second in the Water Garden series, takes a look at how to fit your new water garden into the overall landscape and how to design the construction of your pond.

But first: building a water garden requires going back to the basics of landscaping. Landscape design, crucial in any type of gardening, applies especially to water gardens, given their role as focal points of interest. These elements and principles of design are: scale, balance, unity, rhythm, simplicity, accent, repetition, harmony, space dividers, accents and transitions, and, dominance and contrast.

### Pick your style first and stick with it

The most immediate and important question to answer when designing your pond is whether the water garden should have a formal appearance or if you want it to look like a pond that nature created. Either approach can lead to a beautiful, eye-catching water garden. If, for example, your garden landscape is dominated by straight stone walls, hedges and border plants, and pathways that evenly bisect the garden into symmetrical sections, an irregularly shaped water garden outlined with varying heights of dry stacked stones will most likely clash with the overall formal landscape. Similarly, a rectangular, square or circular pond bordered with smooth, symmetrical flagstones will not visually fit easily into a garden full of curvilinear paths, irregularly shaped garden borders, a natural forest border and a meandering brook. Follow the general rule of thumb: formal, linear water gardens look better in formal garden landscapes while informal, curvilinear, irregular water gardens are more harmonious with natural landscape settings.



Figure 1: Informal water garden

But the cardinal rule is to never mix the two styles—formal and informal-- within a single water garden. If you do, your pond will not look right in any setting. (It would be like pairing antique Georgian furniture from the 1700s with Art Deco furniture in the same room and hoping that it looks good together.) An irregularly shaped pond with a cascading waterfall and dry-stack stone border that would otherwise look beautiful would appear strange if the statues surrounding the water garden consist of marble Greek figurines pouring water out of bronze urns. A better choice would be to place bronze herons in the pond with bronze lotus flowers as the water fountains. It is so tempting to try to have it all by mixing different styles, but resist—it doesn't work.

Figure 1 shows an informal, naturalistic water garden complete with an irregular rock border and bog plants, like the cattails on the perimeter of the pond. This design works well with the property, which is a farm in rural Loudoun County. The water garden is harmonious with the overall landscape, right down to the pond's stone border, constructed from stones dug up from the surrounding farmland.

In contrast, Figure 2 shows a formal, circular pond that is surrounded by landscaped trees and shrubs. The water garden serves as a focal point for the circular garden and walkways.

### **Location, location, location**

Finding the right location for your pond is important too. Try to site the water garden where you will easily see and hear the pond. Yep, that's right—hear the pond. In addition to the sound of water splashing down a waterfall or fountain, frogs and insects attracted to the pond will provide a nightly serenade. You'll also hear fish breaking the water.

Try to locate the water garden near an area where you like to hang out—so that you get the full benefit of enjoying a water garden. Nothing is quite as pleasing as having breakfast out in the garden beside the pond, or locating your party's drinks and refreshments by the water garden as twilight sets in.

Shade and sunlight are also factors to consider. Fish must be protected from direct sunlight and require about 60-70% of the surface to be covered from sun. But the shade that fish need should be provided by plants living in the water garden, not the trees around it. In fact, it's good practice to locate your pond in a sunny spot away from trees because the organic matter from falling leaves isn't good for the pond's health. Similarly, you want to avoid tree roots when digging the hole for your water garden.



**Figure 2: Formal water garden**

### **Size matters**

Maintenance is usually the biggest factor in deciding what size water garden to have. Every year, someone needs to drain the pond, clean out the organic matter, divide and fertilize the water plants, and check on the working condition of pumps and hoses. The larger the pond, the greater the manual and yearly effort to keep it clean.

There's also the small matter of fish. How many fish do you want to start with and what kind? If you love koi ponds, remember that koi do not stop growing in captivity, no matter what size the pond. The koi you buy today will be much bigger in five years. On the other hand, koi often do not reproduce in captivity, so the number of fish may remain near constant. Other ornamental fish, such as comets and shubunkin, stop growing when they reach a certain size-ratio with the pond. However, they usually reproduce in large numbers every year if the pond is healthy and can quickly put a strain on your pond's capacity.

When calculating size, remember this rule of thumb: for each 1" of fish in the pond, the pond should contain 5-8 gallons of water. This formula becomes even more refined when mixing different types of fish (e.g. koi require more gallons of water per inch) and should also factor in the amount of surface water (because surface water is how oxygen enters into the water garden). When in doubt, err on the side of having fewer fish for a healthier pond.

### **It's your choice—fiberglass, liner, concrete, and even tile**

Historically, water gardens were made from concrete, whether curvilinear or linear style. Today's water gardeners tend to skip concrete, which is relatively expensive, and instead opt for either a preformed fiberglass pond or a liner pond. All of these building materials can be used for any type of water garden.

Concrete has the advantage of being very soundly constructed, without much risk of leaks or damage. But concrete is a more permanent option than other choices. If for any reason you decide to eliminate the water garden from your landscape, taking out concrete is a more complex undertaking than removing other types of pond liners.

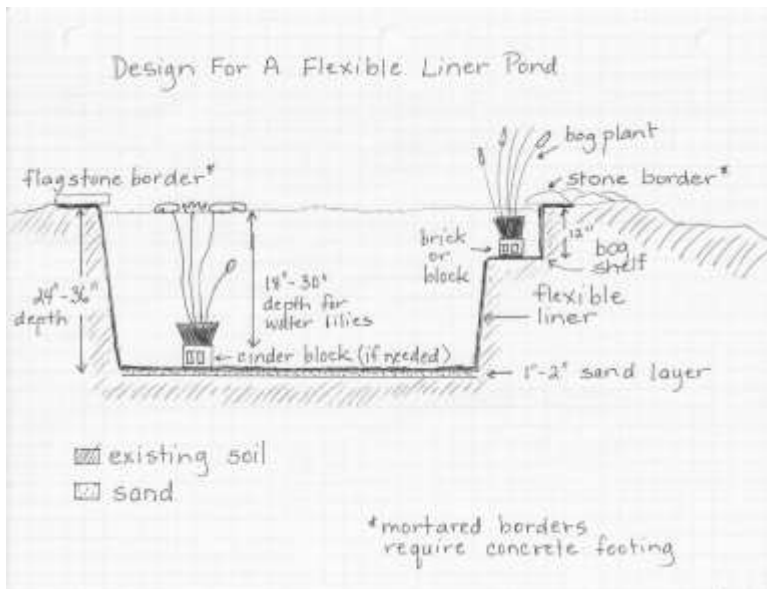
Preformed fiberglass comes in many sizes, shapes, styles and depths—and can even have a preformed waterfall built into the structure. If you don't find a shape you prefer, it's also possible to order a specific shape. For example, one Loudoun County gardener ordered the circular fiberglass pond shell to go in the formal garden in the previous photo.

Another popular style is a butyl rubber liner pond. This type can take on any design you wish, whether a free-form, curvilinear shape that you lay out with your garden hose, or a formal shape that is carefully designed as a rectangle, oval or square. This type of liner can also be easily adapted to support multiple depths and allows the gardener to construct shelves for bog plants however they wish. For example, you may not want a bog shelf that completely circles the perimeter because that makes it more difficult to get in and out of the pond for maintenance. A liner pond basically molds and shapes itself to however the hole is dug. One small risk is that the liner could be punctured by a sharp stone, so it's important to remove any sharp objects from the soil and install a protective 1-2" layer of sand under the liner before filling. While patch kits are available for sealing leaks in liners, this is the last thing you want to have to do!

Although you don't often see tile ponds, this is another interesting choice of building materials. In fact, this author recently saw a beautiful tile pond at the Mercer Williams house in Savannah (and regrets greatly not taking a photo of it). The tile border colors and the deep color of the water provided a beautiful backdrop for the many-hued fish. Interestingly, this pond was curved on one side and straight on the remaining three sides, and looked like a formal water fountain. It fit beautifully into the garden and landscape of this perfectly restored home—and the tile provided a more exotic look than most water gardens achieve. Of course, the expense of constructing a tile pond would be greater than a fiberglass or liner pond.

### Design your pond so it will be built to last

We humans are most familiar with water gardens from eye level—either looking down upon them from a deck or standing and sitting beside them at water's edge. A good pond design must focus on aesthetics. But what lies beneath the water matters more to the overall health of the pond than the mere surface. And this is also where plants come in; the health of the water garden greatly depends on water lilies and lotuses that sit at the bottom of the pond, providing shade on the surface; bog plants like irises, rushes and cattails that live on the shelf; and submerged plants that live on raised surfaces from the bottom, unseen from above but filling the crucial job of oxygenating the water, and don't forget some hard working snails and tadpoles who constantly clean the surfaces.



**Figure 3: Designing a Healthy Pond**

No matter what style, size or material you choose a healthy pond that is built to last needs to have a similar design approach to Figure 3. By following this “blueprint” your fish will be most likely to have the oxygen they need, the shelter and protection required to keep them safe from the sun and predators and the depth needed to over-winter (with the help of a floating heater).

Stay tuned—the next article is about building your water garden.

*Connie Moore, Master Gardener Intern*

## **Accommodating the Birds in the Fall**

Here are five helpful tips that are sure to have all the neighborhood birds “tweeting” about your yard this season:

1. **Provide running water.** Birds require water year-round. The sound of running water in a birdbath or pond will be heard by birds from some distance, draw them in for a drink, and possibly a quick dip as well.
2. **Clean out birdhouses.** Make necessary repairs to birdhouses in preparation for species that roost during fall and winter. In many areas, bluebirds, chickadees, nuthatches and winter wrens may take up nightly residence in birdhouses to keep warm and safe.
3. **Create brush piles.** Save your fall clippings of branches and twigs. Then, pile them in a corner of the yard to create cover for birds that prefer habitat on the ground—such as dark-eyed juncos, tree sparrows and white-throated sparrows.
4. **Increase the number of feeders.** In the cooler days of fall, birds increase their food consumption and will continue to do so as the temperature drops.
5. **Plant evergreens.** Planted near feeders and birdbaths, evergreens are perfect for providing cover for birds after deciduous trees lose their leaves.

David Mizejewski  
National Wildlife Federation  
Naturalist, Media  
Spokesperson, Author

## Peonies!

### Herbaceous Peonies

When we think of peonies, herbaceous peonies are the ones which immediately come to mind. Mainstays of the spring garden from May through early June (depending on the weather) they can be counted on, year after year, to give us a lovely show for very little effort. They are extremely long-lived; there are records of some plants growing and blooming for 100 years and more. And they are deer resistant!

#### Growth habit

Herbaceous peonies, as their names implies, emerge from the ground each spring, bloom, and then die back to the ground in the fall, to reemerge the following spring. Some produce many side buds and have an extended bloom period. Many others produce only one bloom per stem; while equally beautiful, the bloom period of these hybrids is shorter. Most range from 24" to 42" tall and three to four feet wide.

#### Bloom time

There is no definitive bloom-time classification system for peonies. Some growers classify their peonies as early, midseason, and late. Others subdivide these classifications into very early, early, midseason, late midseason, late, and very late. As a result, although there is general agreement as to bloom timing, the terms used to describe that timing can make it difficult to compare varieties from one grower or supplier to another. The Heartland Peony Society has posted bloom sequence data for 440 cultivars on its website at [http://www.peonies.org/bloom\\_dates\\_sorted.html](http://www.peonies.org/bloom_dates_sorted.html). While this is only a few of the many hundreds of peonies available in commerce (and the 2800+ which have been registered), it is a start and useful if you are trying to establish a sequence of bloom in your garden or grow peonies that bloom more or less simultaneously.



'Roselette' (single) Photo courtesy  
Hollingsworth Peonies

Theoretically you could have herbaceous peonies in bloom for approximately seven weeks in the spring, beginning with the species and fernleaf peonies. Practically speaking, this is difficult to do. While temperatures during the first four to five weeks of the season may be quite suitable for lovely, long-lasting blossoms, by the end of the peony season we frequently have a day or two of August-like weather. Exposed to such temperatures, the buds of late midseason, late, or very late peonies won't open. It is much better to concentrate on peonies which bloom earlier in the season.

#### Bloom classification

Peony blooms are classified as one of five different types: single, Japanese, semi-double, double, and bomb. There are technical descriptions for each type (which you will find in peony catalogs), but illustrations of each type usually are sufficient for the average purchaser to get the idea.



Single



Japanese



Semi-double



Bomb



Double (Full Double)

Illustrations courtesy of Adelman Peony Gardens

Each of these types has its own unique beauty. As a rule of thumb, single, Japanese, semi-doubles, and newer hybrids tend to require staking less often than older varieties or bombs and doubles. If you don't want to

stake or support herbaceous peonies, look one for one of these types and for language in the catalog description which mentions that the peony has strong stems. Supporting peonies with well-designed peony stakes, hoops, or supports, however, isn't difficult or time consuming.

### Fragrance

Some peonies are fragrant; others are not; and still others have a very light fragrance. In addition, fragrance can vary by time of day, heat, humidity, and age of the flowers. If fragrance is important to you, select peonies which specifically mention this in their catalog descriptions.

### Culture

**Soil:** Herbaceous peonies are happy in well-drained, well-aerated average-to-fertile garden soil. They prefer a pH range of 6.0-7.0 but will tolerate a wider range. The soil should be cleared of rocks and there should be no competing roots from shrubs or trees. They will grow well in clay soil provided it is well drained. If drainage is a problem, the beds should be raised. Adding compost to the soil is always useful, regardless of what kind of soil you have. Basically, however, if the soil is suitable for tomatoes, it is suitable for peonies. Avoid planting peonies in any soil where peonies have previously grown. Do not plant peonies in any soil which has been or will ever be treated with dichlobenil (a pre-emergent herbicide which is persistent in the soil).

**Siting:** Herbaceous peonies prefer a lot of light, at least half a day (or six hours) of direct sun each day. Pick a site where there is good air circulation and the plants can remain permanently. While peonies can be moved in the fall (I have done it), it's hard work!

**Purchasing:** It's best to order 3-to-5 eye bare root peonies from reputable growers for fall delivery. Peonies make most of their root growth in the fall and this is the ideal time to plant them, before root growth starts. While spring is the ideal time to order to have the best selection, August or September isn't too late. They will be delivered at the appropriate planting time (October for our area). The American Peony Society has a list of suppliers on its website at <http://www.americanpeonysociety.org/links/buy-peonies> as does the Heartland Peony Society at <http://www.peonies.org/sources.html>. As to potted peonies — you really don't want to buy these. In the spring it's tempting when you're at the nursery to do so, but not only is spring the absolutely worst time to plant peonies, you have no idea how the plants have been handled. Potted plants can be root bound and are difficult to remove from the pots without damaging the roots, yet they should not remain in the pots all summer — leaving the gardener in a quandary.



'Carnation Bouquet' (double) Photo courtesy Adelman Peony Gardens



Peony root showing eyes. Photo courtesy A & D Nursery

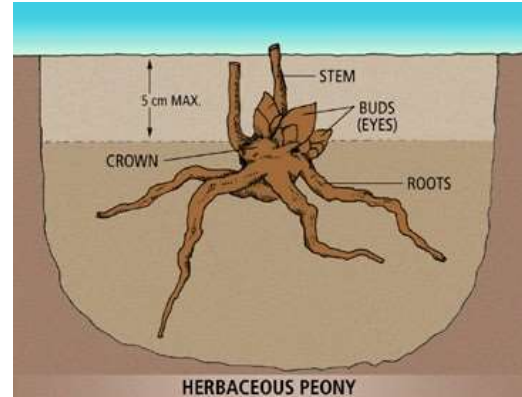
**Planting:** Dig a hole 24 inches deep and 24 inches wide, regardless of how small the root you're planting may be. Mix ½ cup of bone meal or a little bulb fertilizer or slow-release 5-10-10 (follow package directions) into the soil at the bottom of the hole and cover it with a few inches of unfertilized soil (so the roots won't come in direct contact with the fertilizer). Note: If you have dogs or raccoons around, bone meal may possibly be attractive to them and they may dig up your plant.

If the root has dried out, soak it in water for about six hours before you plant. Position the roots so that the white, pink, or red eyes (buds) face upward and are no more than two inches below the soil surface; remember, it's easier to add more soil if you don't plant deep enough than it is to dig up the peony and replant it! Spread the roots evenly throughout the hole; fill the hole with dirt, firm the soil, water the plant, label it, and you're done.

Plant peonies at least three feet apart, preferably four. Crowding prevents each plant from showing off its individual beauty; it also reduces air circulation around each plant and can contribute to the spread of diseases.

If you are tempted to grow a peony in a pot, keep in mind that a peony's root run can be as much as 18" deep by four feet in diameter. You're going to need a really *big* pot. And even then the peony may not thrive.

The first year after planting you'll have only a few stems about 6-10 inches tall. The second year you will have more stems, and perhaps a bloom or two, which may not look like the peony you ordered. The third year the peony will have settled in; you'll have still more stems and blooms, and the blooms will be typical for that cultivar.



Crown is 5 cm (1.9 inches) below the soil surface.  
Illustration courtesy Pivoines Capano

**Watering:** Established herbaceous peonies are drought tolerant although in severe droughts, they may go dormant; the next year's bloom may not be as abundant as usual. Ideally they should receive about one inch of rainfall a week. If not, supplemental deep watering in the morning is useful around the drip line (not at the stems). Don't overwater; it can lead to root rot.

**Fertilizing:** If you have prepared the soil properly before planting, you shouldn't have to fertilize your peonies for at least a year, if then. I have never fertilized most of my peonies, some of which I've had for ten years. Let the plants tell you when they're hungry. If the plant is blooming well and looks healthy, don't fertilize. Over fertilizing is far worse than not fertilizing at all. If you feel you must fertilize, it's essential to use a low nitrogen fertilizer; high nitrogen fertilizers will give you gorgeous foliage – but you'll have fewer blooms. Any good bulb fertilizer (or slow-release 5-10-10 or 10-20-20) will do the job.

Different growers have different recommendations for timing of fertilizer applications. A few fertilize every other year while most others fertilize every year. But they all agree on a few basic facts, specifically: Use a low nitrogen fertilizer, apply with a very light hand (following package directions, but *never* more than ¼ cup *maximum* per peony) around the drip line of the plant (not next to the stems), scratch lightly into the soil, being careful not to damage any latent buds, and water in. All of the growers who fertilize annually recommend a spring fertilizer application either when the new stems emerge from the soil or just after bloom; some fertilize just after bloom; and some divide the application, giving ½ dose in the spring and the other ½ dose around August.



'Do Tell' (Japanese) Photo  
courtesy Peony Meadows

**Weeding:** Weeds can be deterred by keeping a light layer of pine bark mulch in the peony beds, but *never* over the crown and side buds. If weeding is needed, do it by hand.

**Deadheading:** Deadheading after bloom keeps the plants tidy looking. Cut the spent bloom off just above the first leaf. If you don't deadhead, many peonies will readily set seed. If you want to try breeding, experimenting can be a lot of fun. For those who want to give it a try, there's an excellent article about breeding at [http://www.pivoinescapano.com/en\\_html/peonybreeding.htm](http://www.pivoinescapano.com/en_html/peonybreeding.htm). And there's a particularly good article on growing both herbaceous and tree peonies from seed, with lots of photographs, at <http://crickethillgarden.wordpress.com/2011/08/03/starting-peonies-from-seed/>. It does take 3-7 years to bring a seed-grown peony to bloom, so you'll have to be patient!

**Fall care:** Cut stems back in the fall to about one inch or slightly less above the ground. Don't pull them off; you can damage the roots. Peony debris can harbor spores for botrytis, throw the leaves and stems away;

don't compost them. During the plant's first winter, mulch *lightly* after the ground has frozen with three to four inches of a loose mulch such as wheat or oat straw. In the spring when tulips bloom gently rake the mulch off the crown (I use my fingers, not a gardening tool); be careful not to damage any emerging stems.

**Pests and diseases:** Peonies are bothered by few pests and diseases. The most commonly encountered is *Botrytis paeoniae*, which can be a problem in damp, rainy weather. Regular inspection and removal of young shoots with rotted bases, wilted leaves, or blasted buds will go far in preventing the spread of botrytis. If necessary, there are fungicides which will control it, although I've never had to use them. Ants, which are attracted to the sugary excretions of the buds, are completely harmless; and they are not necessary for the buds to open (contrary to the popular old wives tale).

The Missouri Botanical Garden has an excellent guide to diseases and problems, with photographs, at <http://www.missouribotanicalgarden.org/Portals/0/Gardening/Gardening%20Help/Visual%20Guides/Peony%20Problems.pdf>. Another excellent reference is the Penn State chart of peony diseases, with remedies, at <http://extension.psu.edu/pests/plant-diseases/all-fact-sheets/peony-diseases>.

General troubleshooting questions, such as lack of bloom, buds not opening, etc., are addressed by the American Peony Society at <http://www.americanpeonysociety.org/q-a/faq> and the Heartland Peony Society at <http://www.peonies.org/cgi-bin/faqindex.cgi>.

**About dogs:** The new spring stems of peonies are fragile as they emerge from the soil and are easily damaged by a misplaced dog's paw. They also can be damaged by urine if your dog decides one of your peonies is his favorite spot. If your peonies are attractive to dogs; you may have to surround the bed with a barrier, such as thorny miniature roses, to make it less attractive. (This has been a problem with two of my peonies.)

**Cutting:** Peonies make great cut flowers, but you shouldn't cut any flowers until the plant is three years old. Then cut no more than 1/3 of the flowers from any particular plant, leaving at least three sets of leaves on the remaining stem. Peonies should be cut in the morning, before the heat of the day. Cut when the bud feels like a soft, fresh marshmallow if gently squeezed between the fingers or when the first petal moves away from the bud. (If cut too early, when the bud is too firm and feels like a marble, it may not open; cut too late and vase life will be shortened.) The buds will open in 24 hours in a vase. Strip off any leaves that will be below the water surface and place immediately in cool water for a few hours. Recut the stems as you arrange. Floral preservatives will extend the life of the arrangement, as will changing the water each day.



'Ursa Minor' (bomb) Photo courtesy  
Khelm Song Sparrow Farm & Nursery

You can also cut peonies in advance of an occasion, refrigerate the blooms, and arrange them up to three weeks later. Simply cut as above, inspect the buds for any fungus spots which may cause mold in storage, strip off the leaves, wrap in a thin layer of newspaper or paper towels to protect the buds from condensation, place dry in a 2-gallon plastic zipper bag, seal tightly (frost-free refrigerators suck the moisture out of buds not sealed in plastic), and lay flat on a shelf in the refrigerator. When you are ready to use them, remove from the refrigerator, cut off the stem ends, place the buds in a bucket of warm water, and watch them open over the next 12-24 hours! They won't last as long in an arrangement as freshly cut peonies, but they'll be lovely for several days.

If you are captivated by peonies, you may want to join the American Peony Society. For more information about the APS, go to <http://www.americanpeonysociety.org/>. Their web site contains links to regional societies throughout the United States, including the Mid Atlantic Peony Society.

**Lina Burton, Master Gardener**

## The Glorious Hickory (*Carya*) Trees

Did you know there are many different types of hickory trees native to Virginia? The bitternut, pignut, red, shagbark (western VA), sand (southeast VA) and mockernut hickory. Each with varying compound leaflets and slightly different nut shapes, but all with forest attributes, wildlife value and spectacular fall foliage.

In Virginia, there are three main forest types; oak-hickory, loblolly-shortleaf pine and mixed oak-pine (VA DoF). Of those, the oak-hickory forest plays a major role at 61% of the entire forest areas. The high percentage of oak and hickory is mainly due to the nuts both oaks and hickories produce that fall to the ground for wildlife to scatter around. Next time you are walking in the woods, take some time to look up and see the varieties!

Hickories have good ‘bones’. The branches are thick and strong all the way to the tip so there are great places for building nests. Thick foliage also allows some cover from the weather and possible predators. Mockernut hickories provide cavities for animals to live in, such as woodpeckers, black rat snakes, raccoons, Carolina chickadees, and more. Another benefit, as with all trees, is the high value in erosion control.



Photo: J. Sharman, Vitalitree, Bugwood.org

The nuts are eaten by a wide variety of wildlife: squirrels, chipmunks, black bears, foxes, rabbits, mice and others. The bitternut hickory produces a nut that is bitter (thus its name) which is not a favorite to eat but when there is not much else around, it will be food for wildlife.

The leaves are a spectacular sight in the fall. As pictured left, the shagbark hickory exudes a calming yellow color in the fall.

Other Fun Facts about hickory trees:

- Shagbark hickory nuts were a big part of the Native American diets.
- Bitternut hickory leaves are high in calcium.
- Mockernut hickory trees can live to be 500.
- Pignut hickory is named such because settlers' hogs loved to eat the nuts.

So go out for a walk this fall and look up to see the splendor!

***Barb Bailey, LCMG & Tree Steward***

## A New Plant for Your Garden?



We all know the benevolent definition of a weed — a plant growing in the wrong place. That “wrong place” can range from a particular section of your garden, to this entire continent — think garlic mustard or ailanthus.

Some “weeds” present a pleasant surprise when researched more closely. Lambsquarters, *Chenopodium album*, is a very useful plant that you may want to find a place for in your garden. We know it as a rapidly growing summer annual weed that can reach three feet tall or more. Caterpillars of Painted Ladies, Silver-spotted Skippers and 37 other native moths and butterflies eat the leaves of lambsquarters and hide underneath for protection. Meadow voles, chipmunks, squirrels, and birds

eat the seeds. And we can eat lambsquarters too!

Lambsquarters is also known as goosefoot and fat hen. *Chenopodium* means goosefoot (the shape of the leaves resemble a goose’s foot) and other members of the goosefoot family include spinach, table beets, sugar beets and quinoa. Humans worldwide have been eating lambsquarters for thousands of years. It has high nutrient value and tastes similar to spinach. The greens can be used in place of spinach in omelets, smoothies, salads or steamed and served with butter.

Each plant produces tens of thousands of black seeds (gluten free). These are high in protein, vitamin A, calcium, phosphorus, and potassium and can be ground into flour for breads and cakes. Pioneers added the seeds to breads, pancakes, muffins and cookies. Lambsquarters can also be used as feed (both the leaves and the seeds) for chickens and other poultry.

*Caution:* Lambsquarters contains oxalic acid and should not be eaten in large quantities over a long period. The pollen is windborne and can contribute to allergies.

### Lambsquarters and Beans

adapted from *The Vegetarian Times*, July 1997

1 pound fresh lambsquarters or spinach, bigger stems removed  
 1 tablespoon olive oil  
 3 cloves garlic, minced  
 3 leeks, finely chopped  
 1 cup canned pinto beans, rinsed and drained  
 1 teaspoon chili powder  
 salt and pepper to taste

Rinse greens several times to make sure that all sand and grit are removed. Steam greens in tightly covered pot until wilted. Drain greens and finely chop them. In large skillet, heat oil over medium heat. Add garlic/leeks and cook, stirring frequently, until leeks are soft, 2 to 3 minutes. Stir in greens, beans and chili powder. Cover and cook over low heat for 5 minutes or until heated through. Season with salt and pepper and serve. Makes 6 servings.

*Carol Ivory. Master Gardener*

## Notes from the Help Desk:

### Q: Where can I find native plant lists?

**A:** Fall is a great time to plant trees and shrubs, so why not introduce some natives into your landscape? Native plants are species that occur in the region in which they evolved and possess certain traits that make them uniquely adapted to local conditions, and often surpass non-natives in ruggedness and resistance to drought, insects and disease. See more information on our website: <http://loudouncountymastergardeners.org/gardening-advice/native-plants/>.

Native plant lists:

- Lady Bird Johnson Wildflower center: [http://www.wildflower.org/collections/collection.php?collection=usfws\\_ches](http://www.wildflower.org/collections/collection.php?collection=usfws_ches)
- U.S. Fish & Wildlife Service: <http://www.nps.gov/plants/pubs/chesapeake/>
- VA Dept. of Conservation & Recreation: [http://www.dcr.virginia.gov/natural\\_heritage/nativeplants.shtml](http://www.dcr.virginia.gov/natural_heritage/nativeplants.shtml)
- Green Springs Gardens Native Plant Information: <http://www.fairfaxcounty.gov/parks/greenspring/gardening.htm>
- USDA plant database (to verify a specific plant): <http://plants.usda.gov/java/>

Native Plant Nurseries: <http://vnps.org/conservation/plant-nurseries/>

### Q: I have noticed bagworms in my arborvitae, what can I do?

**A:** Bagworms are commonly found on arborvitae, cedar, fir, pine, honey locust and other landscape trees. Some think they only attack evergreens but that is not the case. They are destructive worms that encase themselves in a bag that looks just like it is part of the tree, therefore, making them hard to detect until your tree is seriously defoliated. They are easier to see on a Japanese maple!

If you don't have a serious infestation, the best way to manage them is to pick them off and destroy them. You will have to part the limbs and really look deep into the tree. Pull them off at the attachment to the limb and step on them. When they are over ½ inch long, which is when you can actually spot them, pesticides are not usually effective so you should pull them off as best you can.

The best time to spray is when the worms are smaller and not as encased in their "bag" for protection. They are harder to see at ½ inch long but you know they are there from seeing them the previous year. Apply pesticide early to mid-June here in Loudoun and surrounding counties. There are many different sprays and mixtures you can apply. Neem oil, Bt, Pyrethrins, Malathion to name a few - contact our help desk for more details. And always remember to read the label before applying any pesticides.



**Barb Bailey, LCMG**

## ***The Living Landscape: Designing for Beauty and Biodiversity in the Garden*** (Timber Press)

*"No matter how much any individual garden may seem like a separate place, a refuge, or an island, it is in truth part of the larger landscape, and that in turn is made of many layers. The layering of the larger landscape varies over place and time, and is profoundly influenced by the life within it.*

*Some landscapes have more layers than others, and some layers are more apparent than others. The richness of life in any given landscape is generally linked to the richness and intricacy in its layering."*

The new book ***The Living Landscape*** is a wonderful collaboration between two of our most insightful dignitaries in the sustainability movement: **Rick Darke** and **Doug Tallamy**. Rick Darke is a botanist, landscape designer/consultant, lecturer, award-winning author, and gifted photographer. He served for 20 years on the staff of Longwood Gardens in Kennett Square, PA, ten of those as Curator of Plants. Doug Tallamy is an award-winning author and lecturer as well, and a professor in the Department of Entomology and Wildlife Ecology at the University of Delaware in Newark. The authors are neighbors in Pennsylvania's countryside.

This book is written with the focus on the Mid-Atlantic states—what a gift to those of us in the region! The five chapter titles provide an excellent summary of the topics covered in the resource:

1. Layers in Wild Landscapes
2. The Community of Living Organisms: Why Interrelationships Matter More Than Numbers
3. The Ecological Functions of Gardens: What Landscapes Do
4. The Art of Observation
5. Applying Layers to the Home Garden

Naturally occurring layers in the wild—*literal vertical layers*—are the tree canopy, understory trees, shrubs, herbaceous plants, and the ground layer. There are then horizontal (lateral) layers, what the authors refer to as the Dynamic edge, the Wet edge, Wetlands, and Meadows and Grasslands. They are all necessary for the health of the environment and the creatures that live there, including humans. Through their discussions, Darke and Tallamy share how we can create those critical layers in our own environments.

A majority of the book is written by Darke, and Darke's photographs are spectacular; they alone tell a story. They show in colorful wonder how established living layers increase biodiversity and enrichment of our world. Tallamy's gentle wisdom, as he shared in his seminal book ***Bringing Nature Home***, reinforces the need to consider diverse plant communities to support species other than our own.

I had the pleasure of attending a lecture by Mr. Darke in June at George Washington University, where he highlighted one of the primary messages put forth in their book: **relationships**. After soliciting definitions from attendees of "What is a 'native'?" he pointed out "the typical definition is all about us and all about place and time, but not about *relationship*. That is a deep failure. In fact, the thing that makes any of us 'native' is the nature of our relationships, whether you are a human being, a plant, or an animal."

Another point that stuck with me, in this coming season where many of us buy truckloads of mulch and neaten our beds for the winter: *don't*. Leave the plants for protective cover and their seeds for food for our fellow critters. The fairly recent obsession with mulch as a ground cover—to make everything look even and tidy—really needs to stop. Cover the soil with plants instead and only mulch plant bases that need protection.

*"Mulch is not an element of design."* (Adele Ashkar, Director, GWU Landscape Design program)



Photo credit: GW Today

***Edye Clark, Master Gardener/Tree Steward***