



LOUDOUN COUNTY MASTER GARDENER MONTHLY MEETINGS

FREE AND OPEN TO THE PUBLIC
UNLESS NOTED, MEETINGS ARE HELD AT
THE VIRGINIA COOPERATIVE EXTENSION
OFFICE, 30B CATOCTIN CIRCLE SE,
LEESBURG, AT 7PM

July 8th: *Square Foot Gardening* with Linna Ferguson, Linna is an everyday person who is passionate about eating locally and raising her own food. Her passion is to show anyone that they can grow their own healthy food. Linna has been growing her own food for over 10 years and her focus is to show people CREATIVE ways to grow food in their back yards.

August 5. *Welcome to Banshee Reeks* with Ron Circe. Ron has worked as a research scientist for the USGS for 20 yrs; owned wetlands ecology consulting companies in TX and VA. He has been an adjunct professor at Shenandoah University, Old Dominion, George Mason and VA Tech. He has been the manager for Banshee Reeks Nature Preserve since 2000.

September 2: *Urban Farming* with Tyler Brown. Tyler is the Project Manager of Real Food Farm, an urban agriculture project in Baltimore. The Farm sells produce for local institutions and communities using low-cost, plastic greenhouses. The project takes unused land, builds a model for production-scale agriculture in the cit, and provides fresh food and job skills for Baltimoreans

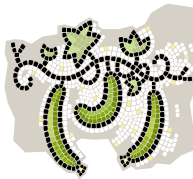
Trumpet Vine

Knowledge for the Community from Loudoun County Master Gardeners

Summer 2010

Volume VI, Issue 3 www.loudouncountymastergardeners.org

Garden to Table Summer Gardening Seminar at the Demonstration Garden at Ida Lee June 19 at Noon



Join our Garden to Table team for timely information to help with your summer vegetable gardening. We will talk about successful harvesting of your summer crops. We will also help get you started with your Fall garden, from choosing the appropriate cool season vegetables for the mid-Atlantic region to preparing your soil for your next plantings.

Also, the Garden to Table team will be providing gardening information weekly through out the growing season by email. We will tell you what the Master Gardeners are doing in the Demonstration garden at Ida Lee and how you can apply this to your own vegetable and/or ornamental garden. If you are interested in receiving this email please contact us at <http://www.loudouncountymastergardeners.org> and we will send this information to you weekly.

Shape Your Veggies!

Something fun to experiment with is using some type of form to shape your veggies as they grow. Epcot Center at Disney World grows pumpkins in the shape of Mickey Mouse ears. Check out a photo at <http://www.inhabitat.com/2007/07/26/mickey-mouse-sustainable-farming/>.

You can order clear plastic forms online at <http://www.leevalley.com/gifts/page.aspx?c=2&p=51543&cat=4,104,53213&ap=3>.

You can also use items that you may have around the house such as milk cartons or plastic beverage containers. You could purchase clear acrylic boxes at the discount store that have a lid to grow square veggies. Just remember you will need an opening for the stem.

Try this and have some fun with your family and friends serving them up odd-shaped veggies.

2010 Introductions for the Summer

Looking for some color for your garden during the long hot days of summer? Below are some new 2010 introductions that bloom during the summer and some into fall. I lost several Leyland cypress in my back yard and now have a 10' strip along the back to work with so, check out 'Empress Wu', I think she will look great under the canopy of the remaining trees. And the 'Golden Zebra', well, let's just say you will find that in my garden as soon as I can order it!



I'm not much on orange flower, but this might change my mind. The vigorous 3' tall stalks of **Echinacea 'Hot Papaya'** are topped through the summer with an amazing display of lightly fragrant, bright orange pom-poms, surrounded by a row of single drooping petals. As with all echinaceas, well-drained soils in winter are essential for good

survival.

Achillea Summer Berries F2 Hybrid - look at the glorious colors this cottage yarrow offers! I could only find this offered as seeds but it flowers the first year! Reaching 30", it makes an excellent cut or dried flower and for those of you that love your bees and butterflies - Summer Berries will draw them into your garden. A hardy perennial, for best blooms, give it full sun and enjoy!



And speaking of color - wow!

Heuchera 'Golden Zebra' has a striking combination of bright yellow and dark red on feathery foliage. This is an ideal plant to use along the front edge of your beds as it has a tight, compact growth, reaching just 10" high and 15" wide. Give it part to full shade and just wait for the comments from your garden visitors when they get a look at it.

Hosta 'Empress Wu' - I couldn't believe my eyes when they landed

on this picture. Really? A Hosta that reaches 4' tall with just its foliage? And 5' wide? 'Empress Wu' is billed as one of the largest Hosta. What a great plant for those looking for a tropical feel to add to a shade garden! She has a light lavender bloom in July that will add to her height. Shade and moist soil round out the requirements for the jewel.



Master Gardener Becky Phillips

Explore the Indigos



What do you call a plant that loves poor clay soil, is deer and insect resistant, hardy, drought tolerant, long-lived, well behaved and has four-season interest? The false indigo, *baptisia*— perennial plant of the year. This native plant was mentioned in the spring issue of the Trumpet Vine, but really deserves more attention.

One look at the flower tells you this is a member of the legume family and it fixes its own nitrogen. It actually thrives in poor soil so don't waste your good compost on this plant! *Baptisia australis*, pictured here, has a deep blue flower and stays in bloom for a month or more. Other colors include white, yellow, purple and burgundy. The plant pictured at the bottom is *Baptisia sphaerocarpa* or 'Screaming Yellow.' Pollinators—bees and butterflies—are attracted to *baptisia*. Baptisias hybridize readily if they are grown in the same vicinity with each other. So you may create your own cultivars over time



Indigos come up quickly in the spring and tall spikes of flowers bloom above the foliage in May or June. Then they continue to grow new gray/green leaves keeping the plant looking fresh throughout the summer. Later in the summer the leaves darken with a silvery dusting. In the winter, attractive black seed pods remain on the stalks and can be used in arrangements. Indian children used the dried pods with loose seeds as rattles. Mature indigos are usually about three feet high and equally wide. A mature clump looks like a shrub. Indigos do best in full sun, they are not shade tolerant.



Indigos develop long tap roots. This allows them to be drought tolerant once they are established. It may also explain why they are slow to mature and don't bloom until their second year. This is one case where it's better to purchase a larger, more mature plant. The tap root also makes it difficult to transplant an established plant.

If a fresh leaf is crushed or stem broken the sap turns a slate blue color when exposed to the air. The Cherokee and early settlers used it as a source of *blue* dye. A common name, **false indigo**, indicates that the plant is not the true indigo, *Indigofera tinctoria*, that was imported from India for use as blue dye.

Indigos are also appropriate for the herb garden. Some Indian tribes used it for medicinal purposes. The Osage made eyewash from the plant. The Cherokees would make a tea from it. A hot tea was taken as a purgative and a cold tea to prevent vomiting. A pulverized root or hot tea was held over a sore tooth to relieve the pain. Recent German research indicates some *baptisia* species may act as stimulants to the human immune system.

Propagate indigos from seed, which should be soaked in hot water for a day or two until they swell; then they will germinate in about 20 days. Seeds planted in fall or early winter do not need pretreatment to germinate. It also is possible to divide the root by carefully cutting it with a sharp knife and then watering the transplants frequently. Once established, indigos will remain healthy for several years; they won't get weedy or aggressive. They are a tough but well-behaved native that will give your garden four-season interest.

Master Gardener Carol Ivory

The Double Life of Plants

Ever wonder if that pesky weed in your yard has a purpose besides annoying the heck out of you? Well, a couple of weeks ago while searching to id a weed in her garden a fellow MG came across some fascinating information. What she considered a major weed in her yard was considered a valuable herb to many others. So that begged the question.....what other plants that the homeowner considers weeds have another life where they are considered a prized possession?



The plant my fellow MG was looking for is; **Mugwort: *Artemisia vulgaris***. It is found on the VT website in the Weed ID Guide with the following description “A Perennial weed with persistent rhizomes that may be spread or transported by cultivation equipment, or also in burlaped nursery stock infested with rhizomes. Found throughout the eastern United States.” Yet if you go to the *Alternative Nature's Online Herbal* you will read about all its wonderful properties and how it's one of the author's favorite herbs and he has a HEDGE of it dividing parts of his garden! Several websites point

to its dream inducing properties, use in the making of beer and use in conjunction with acupuncture!

Many of us have heard about Dandelion wine but for the most part, **Dandelions** are a thorn in the side for many a gardener. Yet when you check out University of Maryland Medical Center's site you find it is regarded as amazingly versatile. Uses listed include diuretic, antiviral, appetite stimulant, digestive aid, gastrointestinal health; promote liver detoxification, and improve the immune system. You can add the leaves/flowers to your salad for a rich source of several vitamins and antioxidants. Both leaves and roots are available fresh or dried and in a variety of forms, including tinctures, liquid extract, teas, tablets, and capsules.



Lambsquarter - again quoting VT Weed ID Guide: “summer annual to 3 1/2 feet in height capable of producing thousands of seeds.” Thousands of seeds!!! This is the stuff that strikes terror in the gardener - especially when you find this oh so common weed in your yard. But according to the website www.veggiegardeningtips.com it is a delicious herb to be eagerly cultivated - you can even BUY seeds for your garden. Wikipedia goes so far to rank it as “far, far, more nutritious” than spinach, a close cousin of lambsquarters.

I could go on for pages listing other plants that fit the gardeners adage; “One man's weed is another man's rose”; but I will leave that for you to do some rainy afternoon

when you can't be out in the garden. Then maybe you'll think twice about pulling up that “weed”. Enjoy!

Gardening for the Climate

Carbon is constantly cycling from the air into plants and soil, and back into air. Global warming is largely a result of an imbalance in this carbon cycle, due to the release of vast quantities of ancient carbon that have been burned as fossil fuel. CO₂ and other heat trapping gases act as a blanket, trapping heat and altering weather patterns around the world.

Summers are getting hotter and winters generally not as cold. This means that hardiness zones are shifting, making planning your garden more challenging. Climate change is also projected to increase the frequency and severity of extreme weather and to benefit some pests and weeds. (e.g. poison ivy)

Gardeners can do more than simply try to adapt to the changes—they can make choices in their gardens that don't add to the problem. The following are 5 steps that you can take.

Step 1: Minimize Carbon-Emitting Inputs – The kinds of tools and chemicals you use can affect the amount of heat-trapping gasses your garden absorbs or emits. Gasoline-powered tools are obvious CO₂ emitters. but the synthetic fertilizers and pesticides require large amounts of energy to manufacture and consequently are responsible for significant amounts CO₂ emission. Herbicides are the highest generators of carbon emissions among pesticides, and glyphosate (Roundup) is among the most carbon-intensive of the herbicides.

Step 2: Don't Leave Garden Soil Naked – Bare soil is vulnerable to erosion, weeds and carbon loss. Use cover crops whenever possible to protect and build your soil during the winter and other non-growing months.

Step 3: Plant Trees and Shrubs – All plants absorb CO₂ through their leaves, storing the carbon in their tissues. But trees and shrubs because they are large, woody and long-lived can store larger quantities of carbon than other plants, for longer periods of time. Urban and suburban trees can also prevent CO₂ emissions because they can shade building in the summer and buffer them from cold winter winds, reducing the need for cooling and heating.

Step 4: Expand Recycling in the Garden – Landfills produce methane gas which is 23 times more potent than CO₂. Help reduce the growth of landfills by turning leaves, grass, woody clippings, dead plants and non-meat or dairy kitchen waste into mulch or compost. Composting takes place in the presence of oxygen, minimizing the production of methane.

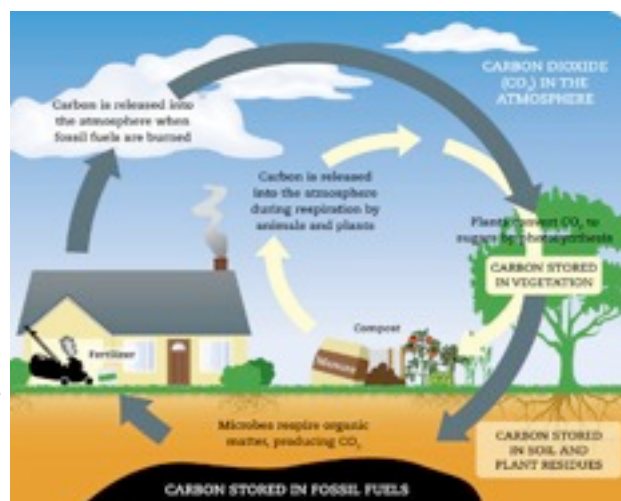
Step 5: Think Long and Hard About Your Lawn – Reduce the size of your lawn and then minimize watering, fertilize carefully and leave grass clippings on the lawn, mow high and choose the right grass.

As a gardener you can lead the way in your own landscape.

Condensed from the *Climate-Friendly Gardener*, Union of Concerned Scientists,
http://www.ucsusa.org/food_and_agriculture/what_you_can_do/the-climate-friendly-gardener.html

Master Gardener Carol Ivory

Ed Note: The Loudoun County Master Gardener Program does not have an official stance on the topic of Global Warming, however, all gardeners can benefit from the information provided in this article.



How You Shop for Trees at your Local Big Box Store

It's so easy to be seduced by all the lovely flowers and varieties at your local Big Box store. It's hard to resist the impulse to load up your cart with one of everything and hope to find room for it all in your limited garden. And the sale prices!! But the wise gardener comes with a game plan so you don't waste your time and your money by choosing unwisely.

First, do your homework so you know generally what you are looking for. Most likely you will not be able to find the specific cultivar you desire, this is after all a Big Box store and these stores do not carry many exotic or unusual plants. Just the basics, Ma'am! But know, for example that you are looking for a spring flowering shrub, medium height, for full sun. Buyers for the Big Box stores are usually aware of which varieties are popular in their area and stock accordingly. The clerks, however, often cannot do much more than help you load your purchases and are usually unable to answer your questions.

Once you have zeroed in on your choice of plant it's your task to choose the healthiest one you can find. You will need to examine the leaves, stems, trunk, branches, and even the roots. As long as you are careful you will not harm the plants, but if you are unsure ask for permission or help. Get a good look at the overall look of the plant. Is it wilted? Are the leaves discolored? All the leaves except for the new growth should be the same color; a yellow tinge, or brown edges or tips indicate root damage from improper watering or fertilizing. The branching should be balanced, which is crucial for deciduous and fruit trees as well as evergreens. Plants that make new stems at the base should show evidence of new shoots at the soil line. Leaves should be firm and pliable. Branches and twigs should be pliable as well. If you can snap off a twig that indicates that that part of the plant is dead. Leaves should be spaced evenly along the branches. Leaf color should be uniform. Check that upright trees and evergreens have a central leader. You can check to see if a plant is

dormant or dead by gently scraping a small patch on a branch with your thumbnail. It should be green, not gray or beige.

Never, *never* buy a plant with noticeable insect or disease problems, intending to nurse it back to health. You may regret the time spent and may even spread the problem to your garden. Check the undersides of the leaves and the growing tips. Fungal disease or rust looks like black blotches, red or yellow spots, or holes surrounded by a bulls eye discoloration. Little bumps or a sticky honeydew may signal a scale infestation. Spider mites spin tiny webs on leaves and twigs.



Late blight on tomato plant

Now time to check the roots. Trees and shrubs are sold as either balled and burlap (known as B & B) or as container-grown plants. One positive aspect of container-grown plants is that the roots have never been disturbed, as are the roots of B & B plants. B & B trees and shrubs were initially grown in a field, dug up and root pruned, re-planted and allowed to

grow feeder roots, then dug up again with a root ball and wrapped in burlap. The root pruning allows feeder roots to grow within the small root ball. Container-grown plants were started as small seeds or cuttings and transplanted into increasing larger pots as they became larger. For both types of plants, look to see if the top of the plant is in proportion to the root ball. This may be difficult to do with B & B trees. For container-grown plants check if the roots are coming out of the bottom of the container and are dried out. Gently lift the plant out of the container to see if it is pot-bound, which means that very little soil is visible and the roots are circling inside of the pot. If you do buy a plant that is pot-bound you will need to gently tease the roots apart and spread them out when installing the plant in your garden. Some gardeners even slash the roots to encourage new roots to develop. Poke the roots with your finger; they should be firm, not mushy or dried out. The soil should smell earthy and there should be lots of tiny feeder roots. Often an overgrown plant in a small pot is just popped into a larger pot with soil added, without getting the roots to spread out.



B & B plants generally have a compact root system with lots of little feeder roots and are usually not root-bound, but the porous burlap makes the roots prone to drying out. Gently move the trunk of a tree back and forth; the whole root ball should move and not wobble loosely like a sloppy stick shift. Make sure there are no cracks in the soil ball which indicates that the roots were damaged due to rough handling.

Lastly, take care in transporting your carefully selected tree or shrub home. Don't drop the container or manhandle the root ball as that will destroy the fine feeder roots. Don't bend a sapling into an enclosed car; once you break a central leader the tree will not develop its desired shape. You may need to wrap the top branches of a tree so they are not battered by the wind. If possible have the planting hole prepared ahead of time so that your new plant is installed as soon as possible. It will need frequent watering for its first growing season and slow drip 'alligator bags' (shown at right) are often recommended for trees. You may want to apply a very diluted liquid fertilizer which encourages new roots to develop.



In summary, you must look, touch, and sniff to choose the healthiest plant. Don't be tempted to buy an inferior plant just because it's on sale. With careful shopping you can purchase a healthy tree or shrub from your local Big Box store.

Master Gardener Linda Ward

Vermicomposting: Bees Aren't the Only Busy Garden Helpers!



Vermicomposting is the use of worms to change household waste into nutrient rich compost. Not just any worm can be used to eat trash. The kinds of worms that are designed to spin trash into garden treasure are the red wigglers (angle worms, at left). They can be purchased from several online retailers. Some of the advantages to worm composting are:

- There are fewer things better for gardens or container plants than the nutrient rich castings (excrement) of the worms.
- You can make use of waste that was destined for the landfill.
- A small indoor box or a large composting area outside can be used.

These worms are HUNGRY! They eat their own weight every day. By starting with about one pound (or 1,000 hungry critters) they'll breed quickly in the right conditions (doubling population every month). They will keep breeding until they have reached capacity in population in the size container in which they are housed.

Housing

Don't just dump these guys in the garden, or they'll die. Other than that, worms aren't picky about their accommodations. You can get as fancy or humble as you want! There are many online retailers that sell fun and fancy composters or, you can construct a wood box with a tarp cover (avoid black, worms are sensitive to heat). Either way the worms will be happy campers as long as they have a cover and stay moist.

Feeding

To set up a new colony you can give them moistened newspaper (avoid the glossy sheets), cardboard, leaves, grass, aged manure, peat moss, sawdust, coffee (and filters), eggshells, or kitchen scraps. They aren't finicky. The general rule is that if it came from the earth, then they'll eat it. But avoid dairy and meat products. They can attract unwanted critters and cause unpleasant odors.

Harvesting

If you have a fun and fancy composter, then directions are provided for their harvesting. But, for those of us with a humbly constructed box and tarp set ups, harvesting is easy. When it is time to harvest push all of the current "stuff" to one side. Start fresh bedding and feeding on the opposite side. The worms will make their way to the fresh bedding in a few weeks time, and the garden gold can be harvested!

Vermicomposting is gaining popularity. Be a part of this earth friendly trend today!

Master Gardener Nicole Anderson

Native Turf Grasses in the Demonstration Garden

A year ago, the Demonstration Garden at Ida Lee Park in Leesburg undertook to plant examples of turf grasses local homeowners might use in their suburban yards. Initially those included three cool weather grasses (tall fescue, fine fescue, and Kentucky blue grass), two warm weather grasses (Bermuda and zoysia), and two “native” grasses (blue grama and buffalo). The word native is in quotes because, while these grasses are native to the U.S., they are not native to Northern Virginia. No grasses are - which is the principal reason why homeowners have such difficulty with lawns in this area.



Buffalo (shown at left) and blue grama are warm weather grasses native to the Great Plains, from Montana all the way south to Texas. Both have characteristics that recommend them as turf grasses. They are hardy, draught resistant, and require little fertilizer. Both have been cited as environmentally-friendly substitutes for the turf grasses usually used in this area - especially for home owners seeking to create a meadow in lieu of a conventional lawn. Big box stores do not yet carry the seed, but commercial suppliers offer it via the Internet.

Encouraged by these prospects, last spring the Demo Garden planted an eight-by-eight-foot plot of each grass.

The task did not initially appear daunting. According to our research, neither grass required anything special in the way of soil preparation. Both would tolerate a wide range of pH levels, and both would germinate within 7-10 days under “favorable conditions.” The only caution that we noticed in most references was the prospect of “cool season weed invasion.” We blithely planted the buffalo and blue grama seed that Debbie, our agent, had obtained for us from Virginia Tech. At that point, planting prairie grass didn’t look much more difficult than Kentucky 31.

Wrong. Although we provided the new seed beds ample watering, nothing happened. The seeds just sat there and stared back at us, quite content to remain idle in the cool spring weather. Then weeds began to appear. We did not pull them for fear of disturbing the grass seed. We waited. The weeds proliferated but the grass seed just sat there, sleepy in the cool spring weather. Then it hit us. These were warm weather grasses and it was still April! Closer research indicated that 70-degree temperatures were needed for germination. We were confronted by the “cool season weed invasion” that our research had warned us about.

That same research had suggested a solution for that problem: after preparing the seed bed, water and fertilize it to encourage the weed seeds to sprout. When they do, zap them with Round Up, then wait three or four weeks to plant the native grass seed. Of course, the

Demo Garden is organic so the use of Round Up is not acceptable. Likewise, using a post-emergent 2,4-D based herbicide such as Weed-B-Gone is off limits. That left only one alternative if we were to save the grasses: hand weeding.

For the first year, we did that. We carefully pulled weeds, trying not to up root the grasses. It didn't work for the buffalo grass. A vigorous stand of sedge did it in. The blue grama was more fortunate. It did get established and survived the heat of summer with little



watering. By fall its 8-to-10 inch height had made it quite competitive with most weeds. Unfortunately, the blue grama tends to be tufted (see image at right), with an inch or two between tufts. That allows room for weeds, so the following spring we experienced a repetition of the dreaded "cool season weed invasion." By May the blue grama tufts - still dormant in the cool spring weather - were hardly visible among the weeds. Back to hand weeding!

Pulling weeds is tedious. Given the effort that went into weeding our little eight-by-eight plot, we speculated that few Harry Homeowners would be willing to do so after putting in eight hard hours on the job. Maybe blue grama was not really suitable for suburban Loudoun County. We consulted with Debbie and she passed final judgment. Solarize it! The equivalent of horticultural euthanasia!

In May, we carried out the sentence. We turned over the bed, wet it down thoroughly, and then covered it with clear plastic sheets. The summer sun will raise soil temperatures beneath the plastic adequately to kill weed seeds, and the next grass we plant there will be free of that problem, at least initially.

I think our experience with native grasses indicates they would not now prove an acceptable substitute for turf grasses for most suburban homeowners. As warm weather grasses, they would be brown through much of the year. Plus their texture and growth habits don't fit most homeowners' current expectations for a "carpet of green." And then there is that dreaded prospect of "cool season weed invasion." But popular tastes will change as the imperatives of prudent ecology become evident. Their low maintenance and low irrigation advantages may yet make buffalo and blue grama - or some future hybrid of them - turf grasses of choice in Northern Virginia.

Master Gardener Jim Kelly

To Weed or Not to Weed...is that really the question?

Ah the garden weeds that plague us during the long warm summer months when we want to sit back, relax and enjoy our treasures. What is that weed? How to get rid of it? If you are itching to find out what it is, here are some excellent research sites: <http://weedid.aces.uiuc.edu/>, <http://www.ppws.vt.edu/weedindex.htm> and <http://njaes.rutgers.edu/weeds/thumbnail.asp>. If you need help identifying any plant, just drop off a sample at our Help Desk.

For weed elimination, the best organic control is to pull them out by the roots using any type of weeding tool. This way you don't harm any ornamentals with a spray that may be around the pesky soil nutrient stealer. It is also important to apply 2 to 3 inches of mulch to your garden so the sun won't reach weed seeds and let them sprout in the first place.

Here are some common weeds you may encounter during the flowering season.



Pictures courtesy of Virginia Tech Weed ID Guide

Happy Weeding!

Master Gardener Barb Bailey

How Valuable Is Your Tree?

You probably have at least one tree that you really care about. The sight of it gives you pleasure, you appreciate the shade, the rustle of the leaves are soothing, looking at the tree might lower your blood pressure and you are sure it adds value to your property.



Now a free online tool, the National Tree Benefit Calculator, <http://www.treebenefits.com/calculator/>, gives you an understanding of the environmental and economic value that your trees provide on an annual basis. Enter your zip code so that the tool can take into account your climatic conditions, select the species from a drop down list (you can choose from broadleaf, evergreen, conifer and small unknown if you don't know the species) enter the diameter of the trunk at chest level and the land-use type of the location (single family residential, multifamily residential, commercial, etc). Given this information the Tree Benefit Calculator produces six pages of information specific to

the tree species and size:

- Overall Benefits – A pie chart summarizes savings for stormwater, property value, electricity, natural gas, air quality and CO₂. It also projects the savings of the tree when it grows 5 more inches.
- Stormwater – How many gallons will this tree intercept in a year? A 24 inch white oak will reduce annual runoff by 7,970 gallons. Trees reduce runoff by:
 - Intercepting and holding rain on leaves, branches and bark
 - Increasing infiltration and storage of rainwater through the tree's root system
 - Reducing soil erosion by slowing rainfall before it strikes the soil
- Property Value - Real estate agents have long known that trees can increase the "curb appeal" of properties thereby increasing sale prices. Research has verified this by showing that home buyers are willing to pay more for properties with trees. This model uses a tree's Leaf Surface Area (LSA) to determine increases in property values.
- Energy - Strategically placed trees can increase home energy efficiency. A 24 inch Southern Red Oak will conserve 229 Kilowatt / hours of electricity for cooling and reduce consumption of oil or natural gas by 7 therms each year.
- Air quality – A graph displays the value of 8 pollutants that this tree either absorbs or allows a reduction in production. We now know that the suburban trees can mitigate the health effects of pollution by:
 - Absorbing pollutants like ozone, nitrogen dioxide and sulfur dioxide through leaves
 - Intercepting particulate matter like dust, ash and smoke
 - Releasing oxygen through photosynthesis
 - Lowering air temperatures which reduces the production of ozone
 - Reducing energy use and subsequent pollutant emissions from power plants
- CO₂ - Trees sequester CO₂ in their roots, trunks, stems and leaves while they grow, and in wood products after they are harvested. A 24 inch Red Maple will reduce atmospheric carbon by 1,052 pounds annually.

You can use this program to determine the best tree for your environmental need or simply to quantify the value of your favorite tree.

Master Gardener Carol Ivory

And Speaking of Trees ... the Native Redbud

You may have been out in your garden cursing as you've pulled hundreds of "tourist" seedlings from your precious garden beds. Many of the seedlings we find in our beds come from non-native invasives such as Chinese Sumac (Tree of Heaven, *Ailanthus altissima*), Privet (*Ligustrum sinense*), White or Common Mulberry (*Morus alba*), to name a few. However, there are some volunteer seedlings that you may choose to keep. The Eastern



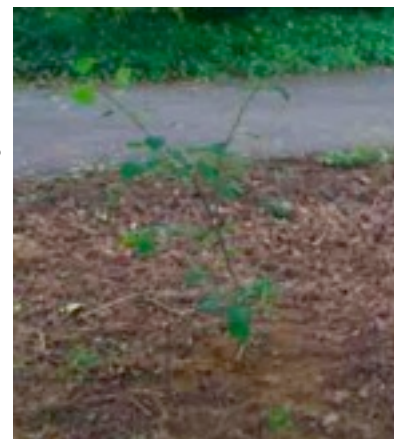
Redbud (*Cercis canadensis*), is one worthy of determining if it is the "right plant in the right place". Shown at left, the new branches have a reddish smooth bark while the aged bark is mottled grey. The tree sports early spring light purple flowers (which are edible, by the way) on bare branches. The seed pods (also

edible when early and green) mature in late summer and may be messy over a patio or deck. This large shrub/small tree has a wonderful spreading form, growing up to 30 feet, but generally staying around 15 - 20 feet. This is a native forest edge tree - they need sun to bloom but don't like too much of it.



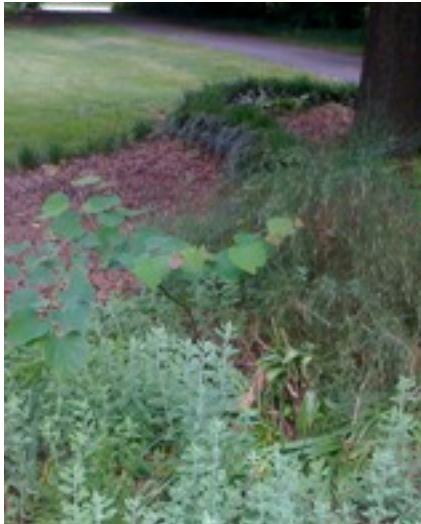
Why write this article now? It seems that the last few years have been ideal for Redbud germination. Generally, these seeds can remain dormant for years and require scarification (scratching, passing through an animal's digestive tract). Of late, I've found some seedlings which have grown seemingly over night into respectable specimens. At left is a tiny seedling. Note the distinctive heart shaped leaves which makes it very easy to spot a Redbud. So - Move them? Leave them where they are? Or, axe them?

Moving - Last year, I found a two and half foot redbud sneaking its way in the back of one of my flower beds. As it was not near any special plant, I decided I had room to dig, plus a better place for it. Guess what? That little bugger had a LONG tap root! Apparently, they spend their first couple of years developing the taproot before creating a shallow root system. I persevered, and dug the thing out (2 feet of taproot), and moved it to what I thought was a good location (see right) - at the base of my drive amongst maples and an ornamental plum. Turns out, after a little research, it has too much shade which will affect the bloom of the tree. However, the shape is wonderful, and all that hard work will not go



to waste. The tree is doing well in the shade for now and moving it again would likely kill it. Lesson? If you move a seedling, move it EARLY!

Leaving Where It Is: Location Location Location! If your Redbud Invader is located in an area that could use a little height, and color boost, and would not mind a little shade, then consider leaving it. Is it too close to another tree? Not good,

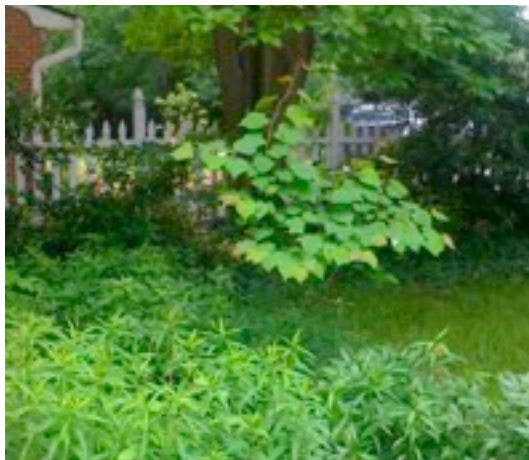


as they will compete for space and water. The Redbud at the left is close enough to the tree that it is leaning to grow towards the light. This will not make a nice specimen though everything else about the area is fine. It will be too hard to move with the roots of the adjacent tree. It will have to be

axed. The tree to the right (in the same bed, other side as the photo at left) seems to be in a perfect place. Though it is about the same distance from its neighboring tree, the sun is afternoon vs



morning, so it is getting plenty without reaching. This volunteer has been in the bed for only one year. Yes - one year. It must be in a great spot! The Tulip Poplar it is near is over 60 feet tall, with the lowest branches above the second story of the house, so this tree will continue to have plenty of space to grow and thrive - and enough sun to bloom with shade to be protected. Wow - it's amazing what happens when something is in the right location!

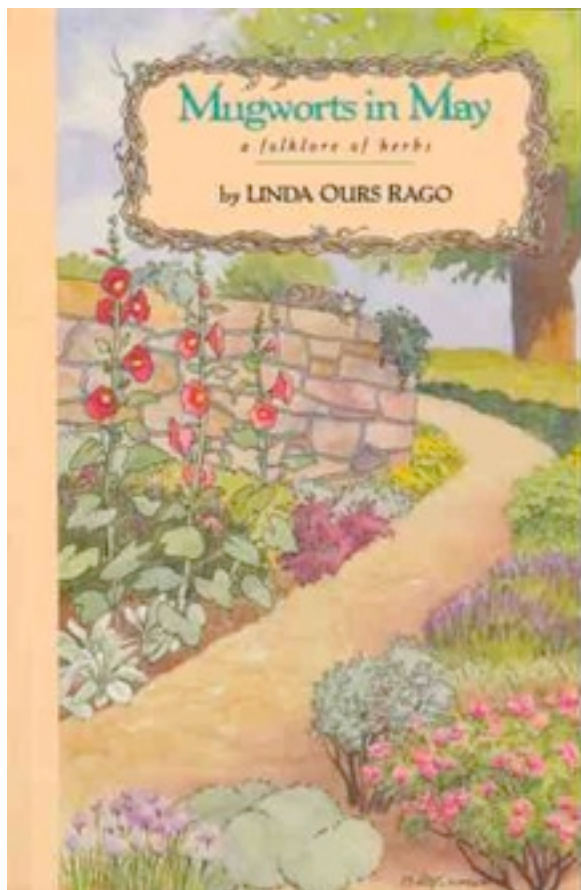


Will it shade some sun loving perennials? Not good. At the left is a little friend who popped up in my Peony Garden (which becomes a summer Phlox bed). Well, peony and phlox don't mind a little shade - but powdery mildew can become an issue with both. This one is a tough call - note how this Redbud will help screen the neighbor's driveway and parking area. I think I may be keeping this one.

If you really want to see a wonderful showing of Redbuds, mark your calendars and drive down Route 15 next May, between Leesburg and Gilberts Corner (Route 50), and you will see Redbuds in all of their native glory! Later in the spring, the Redbuds are not at their peak, but the native Serviceberry glowing in the forests make a stunning contrast. This is a fine time of year to visit Oatlands Plantation, just minutes south of Leesburg, in the heart of Redbud Central.

Master Gardener Linda Shotton

Book Review - Light Reading for the Summer



Having become a Master Gardener in PA, when I first moved back to VA I looked into becoming one here. Imagine my disappointment when the classes were being held during the workday! So I turned to the adult education opportunities and ended up taking a six week course on herbs. It was taught by Linda Ours Rago, the author of this issue's review.

Over the course of the six weeks I learned much about herb gardening how to and what plants. But what was of the most fun was the fascinating folklore Linda had to tell us, much of which is included in her delightful little book; *Mugworts in May*, a folklore of herbs.

With over eight pages of Bibliography, using sources from as far back as the 1600s, Linda shares a wealth of information. Chapters cover herbal charms for a diverse range of subjects, a wise woman's garden and a compendium of magical herbs. The illustrations are from woodcuts dating back to the eight century and add a charming touch to the book.

While the chapters on the charms are enchanting and fun to read; who can resist smiling at the

following poem:

Nut for a slut
Plum for a glum
Bramble for she who is a ramble
Gorse for whores

- traditional insults said when May Day greenery is hung at someone's door

My favorite chapter was on the wise woman's garden. Oh how I wish I had the land, time and money to recreate her garden.

Though not widely available I did find it at West VA Book Company for \$4.00. Not a bad price for a couple hours of entertainment.

Master Gardener Becky Phillips

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