



Trumpet Vine

Knowledge for the Community from Loudoun County Master Gardeners

Summer 2013

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LOUDOUN COUNTY MASTER GARDENER LECTURE SERIES

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*July 11. Green lawns, the bridge
between HOAs and protecting
the watershed with Tim Ohlweiler*

*Aug. 8. Collecting and
Organizing Seeds /
Composting with Michael
Neese*

*Sept. 5. The Meadow Project
with Catherine Zimmerman*

*Oct. 3. What's That Tree? Tips
for Winter Tree ID with Debbie
Dillion*

*Nov. 7. Holiday Arranging with
Kim Wright*

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County, Virginia.

Summer in Bloom

A long cool spring and no shortage of rain have set us up for a bountiful summer. Fingers crossed we don't have extreme heat or the rains stop entirely.

In our gardening fantasy we have conquered the weeds with newspaper and mulch, driven out the bad bugs with our use of integrated pest management (IPM) and invited bees, butterflies and golden finches into our gardens with our variety of native plants. Our vegetables are thriving in our raised no-till garden beds—clusters of small green tomatoes are growing on the vines and little peppers are visible. Now it's time to sit back with our iced tea and a garnish of fresh mint from the pot on our deck and just enjoy our gardens.



But we know that is fantasy. We still need to deal with pests, prune and deadhead plants, monitor the vegetables and cope with heat and drought.

This issue of the Trumpet Vine celebrates our favorite summer flowers and reminds us of our stewardship of the environment. Enjoy articles on companion planting, summer substitutes, native trees, our Demo Garden Heritage plot, sharpening your blades and more. Take some time out from weeding, get that glass of iced tea, sit outside and enjoy our publication while viewing your summer splendor.

And always remember we are here to assist you with all your gardening questions. Our contact information is to the left and we are available at Saturday Plant Clinics (Leesburg Farmer's Mkt, Sterling Lowe's and Purcellville So. States) as well as our Mon. - Fri. morning Help Desk.

Grass Roots Program

“Grass Roots” is a program offered by Virginia Cooperative Extension Master Gardeners in Loudoun County. The mission of the Grass Roots program is to help Loudoun County homeowners maintain a vigorous, attractive lawn without risk to the environment through the use of excessive fertilizer or chemicals. To accomplish this we:

- Conduct **home visits** where we take soil samples, measure lawn area and make observations on the condition of the lawn
- Provide analysis, advice and action plans to homeowners with a **Nutrient Management Plan**
- Educate Loudoun homeowners on the **best management practices** for creating a beautiful lawn without endangering pollinators and polluting ground water

Consider these facts about lawns and the use of chemicals:

- Homeowners use up to 10 times more chemical pesticides per acre on their lawns than farmers use on crops. - *U.S. Fish and Wildlife Service*
- 96 percent of all fish analyzed in major rivers and streams contained residues of one or more pesticides at detectable levels. - *U.S. Geological Survey*
- Phosphorous run-off from lawn fertilizer causes algae blooms which take up oxygen in the water that is vital to fish and other animals
- Nationwide, landscape irrigation is estimated to account for nearly one-third of all residential water use, totaling nearly 9 billion gallons per day. - *WaterSense, EPA Partnership Program*

In 2012 the Grass Roots Program handled approximately 75 home visits. So far this year, the program has already received close to 70 requests.



If you are interested in learning more sustainable ways to care for your lawn, contact the Loudoun County Master Gardeners' Help Desk at (703)771-5150 or simply email your request to loudounmg@vt.edu. Just ask about our “Grass Roots Program”. You will be asked to provide your name, home address, telephone number and email address, after which one of our team members will contact you to set up an appointment for a home visit. During this visit, two Master Gardeners will collect soil samples, measure your yard and answer any questions that you may have about your yard. The soil sample will then be sent to Virginia Tech's soil lab for analysis. Based on the results from that

soil analysis, the Master Gardeners will provide you with a report customized for your lawn, with advice on how and when to apply any recommended amendments. This will ensure that your lawn will not be a source of additional pollution to our local watershed.

There is a \$20 charge for this service. About two thirds goes to pay for the soil test and the rest pays for the test probes and measuring devices tools we use to perform this service. Please allow approximately 4-6 weeks for final report to be sent.

Jennie Grossi, Master Gardener

Companion Planting

All of us who garden use “companion” plants whether we know it or not. If you have a perennial bed that includes bushes, trees and flowers you have combined different plant species that interact with each other in several ways. Some plants attract beneficial insects that are predators of insects that can damage your plants. Other plants release chemicals through their root systems that inhibit or improve the growth and flavor of their neighbors. Plants can be used as lures to provide a trap crop for harmful insects to attack so that they are less likely to damage the plants you plan to harvest from or just admire. Crops in the same botanical family share cultural needs and often have problems from similar pests, and can benefit from being neighbors. In addition, plants with similar needs for nutrients and amounts of sun and water do well together. Gardening using companions is a space saver and is a big help for small gardens.



Nasturtium and squash

Beneficial insects are priceless to your success in the garden. Plantings that attract and provide cover and habitat for beneficials are not only useful; they are beautiful in their own right. The Tachinid Fly is a worthwhile insect to attract, acting as a parasitoid. They are attracted to Queen Anne’s lace and most herbs. You will find their white eggs appearing on many garden pests such as caterpillars, cabbage moths, cutworms, Colorado potato beetle, stink bugs, squash bugs and cucumber beetles. Nasturtium plants also attract predatory insects and assist with repelling cucumber beetles.

The onion plant family is known for deterring many pests such as carrot rust fly, Colorado potato beetle, Japanese beetle and aphids. So plant onions, leeks, garlic and chives throughout your garden amongst your other plantings for this to be effective. Note: plants in this family *should not be planted next to asparagus* because they can acquire asparagus rust from these neighbors.

Making good use of your space and cutting down on weeds makes a lot of sense. A good combination is okra (tall), pepper (medium) and lettuce (short) together in a bed. By the time your okra plants are full grown, the peppers will find the shade from them is perfect for keeping the fruit from sun scald. And summer lettuces will benefit from the cooling shade the other plants provide.

Another good combination is to plant alternating rows of potatoes and bush beans. By planting these together you can greatly reduce the number of Colorado potato beetles and Mexican bean beetles. It is unclear if these plants confuse the two pests or just that it somehow repels them.

Providing a good habitat for beneficials is as important as providing food for them. Planting petunias and German chamomile among your onions, leeks and garlic will keep the weeds down while providing a perfect home for small spiders and ground beetles. It is worthwhile to attract these insects because they are slug predators, and no one has use for slugs in their garden!

Finally we have trap crops. These crops are designed to be ‘thrown away’, allowing the pests to attack these plants instead of the crops you hope to harvest. A good example is to plant four o’clock flowers anywhere Japanese beetles are a problem. The leaves are toxic to the beetles and the flowers are attractive. Another good trap combination is the nasturtium and mustard. They both contain mustard oil and aphids and flea beetles are attracted to lay their eggs on them. The key is to remove the trap crop and ‘throw it away’ before any eggs hatch.

The following are resources that you may find useful: [Beginner's Guide to Companion Planting: Organic Gardening](#), [List of Companion Plants](#), “Great Gardening Companions” by Sally Jean Cunningham and “Carrots Love Tomatoes” by Louise Riotte

Sally Hewitt, Master Gardener

The Heritage Vegetable Garden at the Demo Garden

Did you know that in addition to the regular vegetable beds in the Demo Garden, there is also space devoted to demonstrating heritage vegetable varieties? Since 2007 and the introduction of the Heritage garden, the MGs have moved steadily forward in time beginning with the early 18th century. This season our focus will be on the late 19th century. The late 19th century marked a time of incredible technological and industrial innovation. Coca-Cola, zippers, gasoline powered tractors and mousetraps made their debut. In addition, water could now be pumped from wells with the help of windmills allowing greater swaths of land to be put into agricultural use to include larger areas of vegetables. Barbed wire meant that land could now effectively be fenced to keep in animals.

Despite the advances of the time regarding tools, seeds and techniques, the late 19th century continued to see a declining interest in the family vegetable garden. People were increasingly drawn to cities for employment, ushering in the major move to vegetable or truck markets where families purchased many of their vegetables.

Recreating a garden from the late 1800's has meant some methods or tools used *then* cannot be demonstrated in our garden *today* i.e. most pesticides. Common items on hand to ward off insects and disease were ashes, soot, tobacco-dust, lime and salt peter. Some of these items are now considered caustic and not allowed in an organic garden of today. Also many insects which infest vegetable plants today are 20th century newcomers – the gardeners of old did not have to deal with them. *However*, we can thank the late 1800's gardeners for developing some very popular varieties of vegetables still recognized today such as the Detroit Dark Red Beet, iceberg lettuce and the Brandywine tomato.



Heritage garden flowers

So what is growing in our Heritage garden this year to represent the late 19th century? Oakleaf, Red Deer Tongue and Black Seeded Simpson lettuces, White Icicle and Cincinnati Market radishes, Strawberry spinach, Rhubarb Swiss Chard, Sutton's Harbinger green peas, Paris Market carrots, White Wonder cucumbers, Prescott Fond Blanc and Queen Anne's Pocket melons, broom corn, sweet peas, Painted Lady runner beans, Bull Nose peppers and Arkansas Traveler tomatoes.



Garden with wattle fence

Our Heritage garden layout resembles the kitchen gardens of the 18th & 19th century with mixed plantings of herbs, companion plants and vegetables located throughout the various beds. Ornamental plantings of boxwood, thyme, species tulips, native poppies and larkspur are featured in the middle section. Small vegetable beds are located on all sides of the split rail fencing. This year a wattle fence of willow saplings was built on one side to keep out small animals and to mark the vegetable beds. Traditionally alder, willow and hazel wood were used to build wattle fences but they can be built from any type of green saplings - weaving them while they are still green and flexible. Willow saplings are the best as they remain flexible for months allowing

you "to get to building when a free moment arises."

If you are interested in knowing more about heritage vegetables and their beginnings in Virginia, I recommend the book "Vegetable Gardening the Colonial Williamsburg Way" by Wesley Greene.

Denise Palmer, Master Gardener

Controlling Weeds

Weeds, weeds, weeds - any gardener's enemy. They consume the resources we want for our plants (fertilizer and moisture), harbor plant diseases and pests, and ruin the beauty of our gardens.

Your local home improvement store probably offers several varieties of commercial weed barriers made of cloth or plastic. However, Master Gardeners have learned through personal experience about the dilemmas of these landscape barriers:

- Weed blades grow through them. Because the root is below the barrier, weeding becomes a much harder task and the expensive barrier gets torn up when trying to weed.
- Landscape fabric only allows water to flow through it for a limited time. By the 2nd year, the "pores" get clogged with silt. Not only do your plants suffer, but the soil becomes hard as a rock because it's lacking in organisms.

In short, the commercial weed barriers cause more harm to the earth than the weeds do to our garden.

Using newspaper as a weed barrier controls them and saves hours of time doing garden maintenance. Newspapers are now printed with soy-based ink so there is no danger to your plants or the environment. And it's easy:

1. Surround your plants with 6-8 pieces of newspaper (a section of paper is usually a good layer), leaving enough of an opening around the stem for the plant to grow to its mature size. If there's any wind, moisten the newspaper to keep it in place.
2. Cover the paper with a couple inches of your favorite mulch. Instant, inexpensive weed control!



The newspaper barrier lasts for quite a few years. As the paper disintegrates, nutrients are put back into the soil. If you need to move a plant or add new ones, the newspaper is easy to cut. Your friends and neighbors probably have newspapers they'd like for you to recycle. To control weeds in areas that you do not have plants (like a garden path), use cardboard instead of newspaper.

Controlling weeds with newspaper is good for your plants, good for the earth, and good for your wallet!



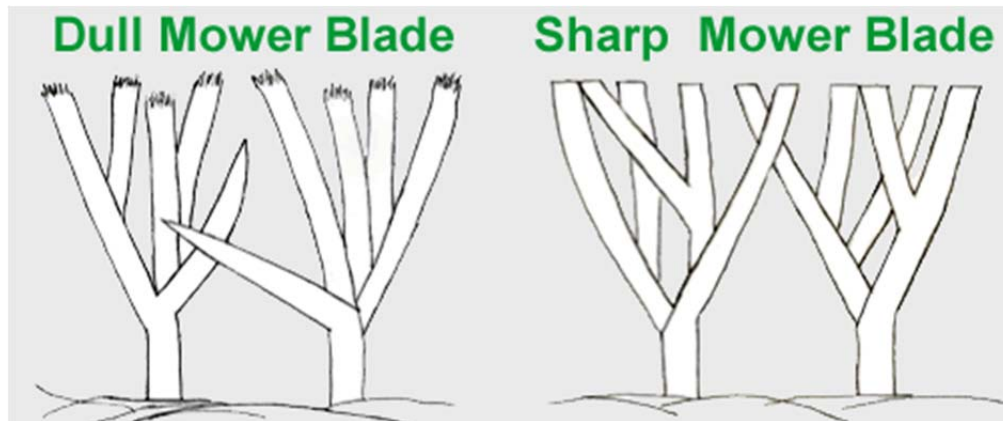
You can also use this method to kill grass and start a new bed for next year. Cardboard is used under mulch to kill the grass naturally without chemicals or disruptive tilling.

Janette Sawyer, Master Gardener

Sharper Scrimmage

Did you ever wonder how that neighbor with the perfect hedges and golf-green lawn does it? No need to wonder— could be the secret is in sharp blades. It's better to cut than tear at your hair or your nails, and so it is with plants. When you cut with a sharp edge, the cut is clean, not all raggedy and bleeding.

Here is the difference between dull and sharp mower blades:



We've all seen grass that looks like this:

And the same thing happens when a bush is 'pruned' with a whack of a dull shears or hedge clipper.

The raggedy blades of the grass and rough-cut sticks and leaves on the bush will turn brown as they dry up in the wind, and provide opportunity for infections to take hold on the injuries.



The good news is that there is no secret to keeping garden tools sharp. Just keep a file or an oilstone (also called whetstone) handy in your garden bag. It only takes a few passes in one direction on the beveled side of the blade, like filing your nails.



Fair warning, wear gloves and keep the blades pointing away from your body and hands as you sharpen. A little elbow grease means less work for you if your pruners, loppers and shears are working like they are supposed to work! Even tools you may not think of as 'sharp,' like shovels and trowels, can become nicked and bent during use. Clean and inspect them for

damage, then file off any burrs and smooth out the dings with your file.

You know that when your lawnmower is vibrating so hard you can hardly hang on to it? Probably needs at least a sharpening, and maybe a new blade. Blades on lawn mowers should be examined and sharpened at least twice during the mowing season. Every time you hit a rock or a root, you should inspect for damage. First, turn off the mower and wait until it stops spinning completely before investigating. Next, remove the blade from the lawnmower. There are plenty of videos online to show you how to do this. If the blade is

heavily nicked or broken don't sharpen it, go buy a new one. It will be cheaper than the insurance claim when pieces of the old blade go flying off.

To sharpen a lawn mower blade you can use a file or an oilstone but a sanding wheel, grinder, or wire attachment for your drill might be faster. You don't have to tackle it yourself either. For a fee you can hire someone to come to your home to maintain your blades as well as tune up your mower.

Handsaws should be kept clean and inspected too, but don't try to do it yourself, take it to a professional for sharpening.

And finally, consider the maintenance of all your garden tools. Definitely clean off mud and debris before storing, and also try to make it a habit of disinfecting your tools between uses, between beds, and between plants to maintain the health of your yard and garden, and extend the usefulness of your tools. According to the Virginia Cooperative Extension, you should disinfect tools even between cuts on the same plant when disease is present. Tests have shown that rubbing alcohol is effective to use and should be used at full strength. Bleach and other home cleaners are corrosive to metal and will pit and rust your tools, decreasing sharpness. Periodically use linseed oil, or paint, on the wooden handles of your tools, and use an oiled rag to wipe down any metal surface to protect from rust.

Get into the happy habit of sharpening and keeping your tools clean, and you might be the neighbor with the best hedges and greenest lawn!

Deborah Newman MG Intern 2013

What Should You Be Pruning Now?

All the spring blooming shrubs should be pruned NOW - before July 15—think azaleas. With your well-sharpened pruners (not the shears!) take you azaleas down to the previous layer by pruning one little branch at a time to keep the natural, layered shape of the shrub. Get unruly forsythia under control by removing the oldest/largest shoots. If it's really out of hand consider cutting the whole bush to within 6 inches of ground level, mulching well and keeping it watered well all summer.

You may consider shearing back spirea after its first bloom to encourage a second bloom and keeping the shrub a manageable size. This time you can use the shears!

Shear back perennials—penstemon, verbena, coreopsis (in August)—to encourage reblooming or just to clean them up and show off the foliage as in the case of the penstemon Husker Red.

Summer flowering perennials such as phlox can be cut back to control height and delay flowering.

Cut back autumn flowering plants such as aster and chrysanthemum to control height and make them fuller and more compact. This can be done through late June.

As the summer progresses many perennials benefit from deadheading or pruning back to the next bud.

Achillea

Once a favorite plant primarily to those who dried flowers, Achillea, commonly known as yarrow, has been gaining in popularity partially as the result of the work of plant breeders, and partially because it is an undemanding garden plant. Satisfy its few simple requirements and you'll have yarrow with you for years to come. Of the approximately 100 species of Achillea, only a few are useful ornamentals. Of these, *A. x 'Coronation Gold'* and the Galaxy Hybrids (a cross between *A. taygetea* and *A. millefolium*) are among the very best.

A. x 'Coronation Gold' is a cross between *A. filipendulina* and *A. clypeolata* but is often found listed as an *A. filipendulina* cultivar. It is both heat and drought tolerant and is the best of the yellow/gold-flowered achilleas for our area. The foliage grows about 12 inches tall and the flat-headed golden flowers grow from 24 to 36 inches tall. The plants range from 12 to 36 inches across and form a tidy clump of aromatic, grey-green, fern-like foliage. They can be planted as close together as 12 inches although I find 24 inches preferable. In our area it begins blooming in mid-June.



'Coronation Gold'

'Coronation Gold' is excellent for cutting for either fresh use or as a dried flower. For fresh use, cut after at least half of the florets on the 3-4 inch wide head are open. For drying, wait to cut until the ray flowers have fallen and the inner disc flowers resemble little heads of cauliflower - the British call them bobbles. To dry: bunch and hang the flowers; place them upright in buckets in a warm, dry, dark room (such as an attic); or dry in a vase with or without water. Divide 'Coronation Gold' every three to four years in early spring or fall. Propagation is by division or rooted cuttings taken in the spring or early summer. Don't try to grow it from seeds; 'Coronation Gold' doesn't come true from seeds.

The Galaxy Hybrids series include a number of plants in excellent colors: pink ('Appleblossom'), red ('Beacon'), salmon ('Salmon Beauty'), rose and pink ('Weser River Sandstone'), burgundy-red ('Summerwine'), and yellow ('Great Expectations'). The flower heads range from 3-5 inches across and the plants are 18 to 24 inches tall. They have a tendency to spread and require more room than 'Coronation Gold'. Space plants about 3 apart to give them ample room.



'Appleblossom'

Achilleas must have full sun; shade will not do. They are drought tolerant and relatively soil-tolerant, growing well even in poor soil, although average garden soil or soil with a little sand is preferable. They can become lanky and the flower stems can flop about a bit if grown in soil that is too rich or fertilized with a nitrogen-rich fertilizer. They are happy with a pH range from 5.5 to 7.5. Achilleas are intolerant of wet feet and very heavy clay. If you have these conditions, you must raise your beds to keep their roots dry and amend the soil before planting or they'll pout and eventually die out. Deadheading will extend the bloom season. In late winter or early spring, cut back any foliage remaining from the previous year.

Achilleas may occasionally be attacked by powdery mildew, rust, or stem rot. None of these will kill the plants and can be dealt with by cutting off and destroying affected foliage and stems. Insect pests generally aren't attracted to them but butterflies and bees are fond of the flowers. Best of all, deer don't like them!

Good companions for achilleas include most blue-flowering perennials such as *Veronica* and *Salvia* species and hybrids, blue and purple alliums, larkspur, delphiniums, *Echinops* species and *Nepeta* species.

I haven't tried the Galaxy yet in my garden, but I'm planting several next spring to give them a whirl under my garden conditions.

Lina Burton, Associate Master Gardener

Hooray for Hydrangeas, Divas of the Summer

One of my all time favorite flowers since the days of owning my flower shop have been Hydrangeas. Their in your face boldness, “I will not be ignored” beauty has captivated me for years. So much so that this spring I have started a bed some 20’x40’ beneath two massive maples trees just to showcase these lovelies.

The four basic groups of hydrangeas are; macrophylla, arborescens, quercifolia and paniculata. The cultural requirements for most hydrangeas consist of morning sun and afternoon shade with rich moist soil. Some varieties can handle and need sun such as paniculata. For the sake of space - we will be talking about *Hydrangea macrophylla* or “mopheads”, the most popular variety and the one visualized when you mention the plant. Big showy flower heads that range from white, pink, deep rose to blue and purple: their color can be manipulated by playing with your soil’s pH. Want pink? Add lime. Want blue? Add sulfur. For pruning advice follow this link - <http://www.hydrangeashydrangeas.com/pruning.html> .

Shown below left is a “popcorn” variety named Ayesha, center, Harlequin and right, the ever popular ‘Endless Summer.’



A subspecies of macrophylla is normalis or ‘Lacecap’; these shrubs are looser in growth habit and not quite so outrageous in appearance. They work well in woodland settings and as under canopy for smaller trees. Shown below are ‘Lady in Red’, ‘Ami Pasquier’.



To learn more about the care and handling of Hydrangeas – Professor Michael Dirr has written the ultimate guide – [Hydrangeas for American Gardens](#).

Becky Phillips, Master Gardener

My Favorite Flowers, Impatiens, are Doomed!

Ah, impatiens, the country's most popular summer annual because they can grow in filtered shade and have such a wide range of colors; red, orange, pink, rose, salmon, white violet and even lavender blue. Planted in mass, they are a real beauty! Or dot them here and there in your garden for splashes of color. And they are so easy to grow - plant, water and enjoy. But wait, what are those yellowing leaves? And those spots? Why are all the leaves falling off? It appears our most favorite flowers have a fungus called downy mildew and it is spreading.



The fungus is specific in that it goes for *impatiens walleriana* and doesn't impact other types of impatiens like New Guinea or SunPatiens or even other types of plants around it. Symptoms include yellowing and wilting of foliage to total leaf loss. The infected plants should be removed completely (roots, soil, leaf drop, etc.) and placed in a bag to be thrown away. Do not replant area with same type of impatiens (*walleriana*) but you can plant New Guinea, begonias or any other flowering annual that suits the area in terms of sun/shade, size and landscape asset.

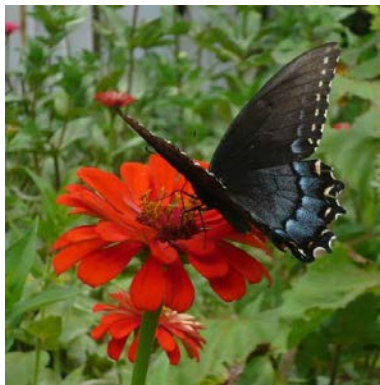
There are no chemical sprays available for the homeowner to thwart the problem so don't be tricked into purchasing these annuals from your favorite store if they look fine. They may have been treating the plant commercially but you cannot continue the efforts and will only be bringing the fungus home with the plant. It will rear its ugly head later and your planting efforts will be fruitless. Find an alternative and enjoy your summer! Looks like it might be 3 to 5 years for them to eradicate the fungus so buyer beware.

For more information: <http://www.ladybug.uconn.edu/factsheets/documents/impatiens.html>

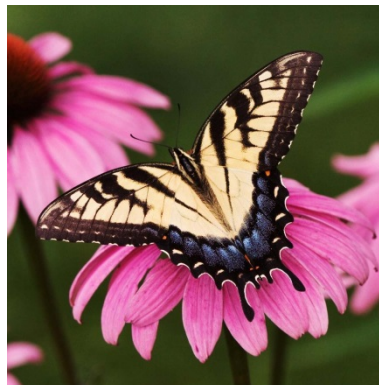
Barb Bailey, LCMG

Give Butterflies a Landing Pad

Butterflies love to nectar on flowers that provide them a "flat surface."



Zinnia



Coneflower



Queen Anne's Lace

Milkweed – Required for Monarch Butterflies

If you are a plant, it's tough to have the word "weed" in your name. Some people automatically think you are a pest and have no good purpose. But many gardeners know that a weed is just the wrong plant in the wrong place and many "weeds" have very valuable uses.

Milkweeds are among those valuable weeds. Native Americans used the tough stalk fibers for making string and rope. It had many medicinal uses in earlier times including wart removal, cough suppression and treatment for typhus fever and asthma. In fact, Carl Linnaeus named the genus after Asclepius, the Greek god of healing, because of the many folk-medicinal uses for the milkweed plants. In World War II, children in the United States were encouraged to collect milkweed pods and turn them in to the government, where the fluffy silk was used to stuff life vests and flying suits. The silk was especially good because of its exceptional buoyancy and light weight. Also in World War II, because of the shortage of natural rubber, scientists in the United States tried to turn common milkweed's latex into a rubber like substitute. Today, foragers value tender milkweed shoots and milkweed flowers which are edible after boiling.

But milkweed has a special place in the effort to provide habitat for Monarch butterflies. Monarch butterflies only lay their eggs on milkweed, and its caterpillars only eat milkweed. The white sticky sap that gives milkweed its name contains a mild poison; its bitter taste warns away many of the animals and insects that try to eat its tender leaves. Certain insects, including monarch butterfly larvae, are immune to the toxin. By feeding almost exclusively on milkweed leaves, they are able to accumulate enough of the poison in their bodies to make them distasteful to predators.

There are over 100 species of milkweed in the United States but only about 25% of them are Monarch host plants. The three milkweeds native to this area (common milkweed, swamp milkweed and butterfly-weed) are all excellent Monarch host plants and are also popular nectar plants.



Butterfly weed

Butterfly-weed, *Asclepius tuberosa*, is probably the best garden plant. It grows no more than two ft. tall, has fine leaves and clusters of red-orange flowers in June and July. It prefers slightly dry, well-drained soil. It grows readily from seed.



Swamp Milkweed

Swamp milkweed, *Asclepius incarnata*, grows 2-3 ft. with pale pink flowers in late summer and fall. It prefers moist soil but will grow in ordinary garden soil.

Common milkweed, *Asclepias syriaca*, grows 3 - 6 ft. tall with large coarse leaves and showy, purple and very fragrant flowers in June through August. Common milkweed can spread rapidly by rhizomes and often forms

extensive colonies in the wild.



Common milkweed

In order to offer pollinators a variety of bloom times, plant all three of these milkweeds when possible.

Carol Ivory, Master Gardener

My Favorite Summer Flower: Petunias!

Easy to grow? Check.

Easy to find in the stores? Check.

Tolerates moderate watering? Check.

Blooms all summer through fall? Check. Check.

Available in just about every color- red, blue, white, cream, pink, yellow, burgundy, purple? Check.

Can ramble in a garden bed, cascade from a window box, or fill in a container? Check.

Not (usually) bothered by deer or rabbits? Check.



Wave Petunias



Superfinia

If you answered 'yes' to the above questions, then the garden annual for you is a petunia! Petunias like a spot in full sun, in fertile soil and with good air circulation. As annuals, petunias bloom all season and even through our early frosts. Give petunias a water-soluble fertilizer monthly, and you'll be rewarded with tons of blooms. If they get leggy, just pinch them back to force new growth and more blooms. Many new cultivars have been developed which tolerate our hot, humid Loudoun County summers.



Million bells

My favorites are the trailing Wave and Tidal Wave petunias, the Superfinias, the Supertunias, and the Supercascades. Wave Petunias are a hybrid cultivar of petunias that was introduced several years ago. This series was among the first of the true trailing petunias that spread effectively as a ground cover. Waves spread quickly and with little



Picotees

care in full sun, making them excellent as border plants or even in large beds. I also like the smallflowered petunia-like plant called 'million bells' or calibrachoa. You can also find bicolors, picotees, and fluffy doubles. When purchasing a petunia, read the label to determine the habit of the plant: 1) grows into a neat and compact mound like the Millifloras, 2) cascades like the Supercascade series, or 3) grows to form a

huge mound 2 feet high by 5 feet across such as the Tidal Wave series.



Milliflora

Petunias are a happy, carefree plant, lending an informal look to the garden. And did I mention that deer don't (usually!) eat petunias?

Linda Ward, Master Gardener

Calendula officinalis: Pot Marigold



Calendula officinalis: Pot Marigold

Calendula, bright yellow gold, daisy-like flowers with pale green leaves brighten our gardens from June through the first frost. Commonly known as the "pot" marigold, this plant should not be confused with our modern marigold, the *Tagetes* species, known as French or African marigolds easily found in catalogs and nurseries.

Calendula has a long history of use and had a place in kitchen herb gardens. A "pot" herb, in this case the "pot" marigold, refers to the 16th to 19th century use of a plant eaten or steamed. Flowers were gathered and dried and added to soups

and broths and said to comfort the heart and lighten the spirits. Did you know that the International Herb Association picked calendula as the herb of the year for 2008? How about considering this plant for your 2013 gardens? Beautiful radiant flowers, a companion plant, helpful and traditionally used in skin ailments - qualities that continue to establish calendula a worthy garden addition.

Calendula includes about 20 species of edible flowers from the daisy family. Despite its nickname of pot marigold, calendulas differ from the flowers of the genus *Tagetes*. Calendulas have edible petals, whereas *Tagetes* marigolds are dangerous *for both humans and animals to ingest*. *If you have a plant that resembles a marigold in your garden, you must be entirely sure it is a Calendula before eating it or allowing pets near it. To tell if a marigold is a calendula, examine its features and look for telltale signs of its genus.*

Please note the differences: The above photo is a picture of *Calendula officinalis*. The photo to your right is French marigold, *Tagetes* sps, which we commonly select for our gardens. While the *Tagetes* species is known to help deter bugs from our tomato plants and others, **it is not edible**.

Going forward I will refer to the edible in this article as calendula.

Where Found: this plant is native to south Europe but now found all over the world; hardy; can easily reseed itself even though it is considered an annual

Parts Used: flowers and leaves

Uses: anti-inflammatory, astringent, anti-fungal, helpful with menses as it acts as a normalizer

Calendula has a long history of use with skin problems. An infused oil or cream can be applied to external bleeding, a wound, bruising or strains. Made into a tea and then applied externally it is also effective for the above mentioned skin ailments. In the Civil War and WWI marigold flowers were made into compresses or poultices to treat wounds and prevent infections. Slow healing wounds and skin ulcers have also been shown to respond to calendula creams, ointments and salves.



French marigold, *Tagetes* sps

External use (Note: always check with your doctor before using)

Infused oil:

1. Place fresh or dried calendula blossoms in olive oil, about $\frac{3}{4}$ full in a pint or quart mason jar works great
2. Pour olive oil in to the top of jar
3. Cover and let sit on windowsill for 2-4 weeks; shake often to disperse oil through blossoms
4. Strain; put plant material in compost bin
5. Keep oil in garden area for any cuts or irritations that can easily occur when gardening; keep some in the medicine cabinet. Very soothing for rough chapped skin or other minor irritations as mentioned above.

Calendula creams are safe for baby's skin and there are several good companies that use calendula flowers in their baby skin care lines.

Internal use— as a tea: Calendula has been used for digestive inflammations such as indigestion and ulcers. It seems to aid gall bladder function and give relief to indigestion as well.

Cooking: Calendula flowers have been used as a saffron substitute in the coloring of rice dishes. Calendula leaves and flowers are used in salads.

Here's a simple yet tasty recipe for adding calendula blossoms to a side dish (you may have gathered and dried blossoms from last year's harvest). Adding to food is an age old principle of "food can be our medicine; medicine can be part of our food."

Carrot Rice and Calendula flower

Ingredients:

1 cup brown rice
 2 cups water
 1 T butter
 1 onion sliced
 1 t minced fresh ginger root
 3/4 cups grated carrots
 Calendula flower petals to taste
 salt & pepper to taste

Directions:

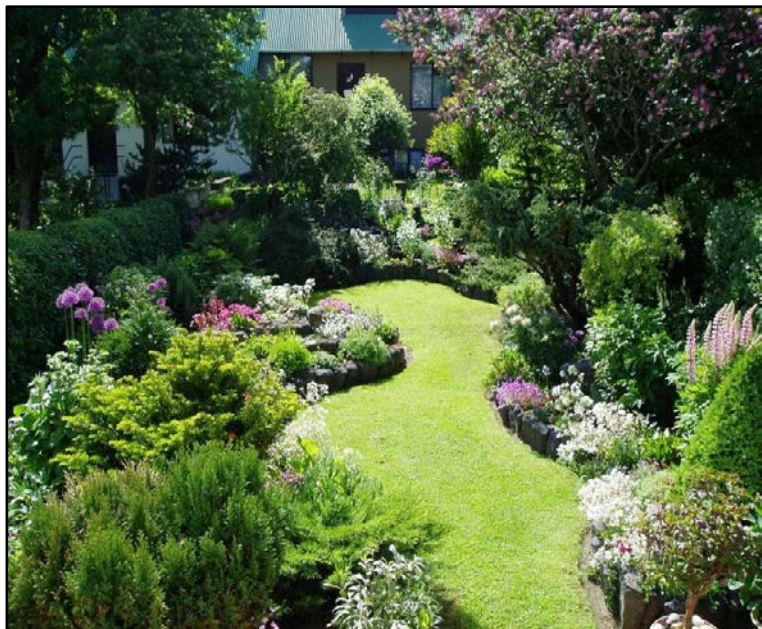
Combine rice and water in a medium saucepan. Bring to a boil over high heat. Reduce heat and simmer until tender. While the rice is cooking, sauté onion, ginger & carrots. Combine with rice and add calendula petals & salt to taste.

Companion planting: " *both marigolds and the calendula are known to be effective companion plants. Companions help each other out by repelling harmful insects and/or attracting beneficial insects like bees. Calendula makes a good companion to herb and vegetable gardens because it repels tomato hornworms and asparagus beetles. It also attracts caterpillars, leafhoppers, aphids, and whiteflies, so you can plant it away from your main garden to trap these pests. The flowers also attract beneficial insects like bees.*"

Submitted by Judith Dreyer, MS, BSN, RN and FCMG.

The Stewardship Role in Landscape Design

Everyone who develops a garden is, in fact, a “landscape designer.” The process of laying out plant material in a pleasing manner, weaving in bits and pieces of rock, wood, water, and whimsy brings out the artist in each of us. Some compositions are more skillful than others, drawing on the principles of design to dazzle with artful angles, flowing curves and complementary colors. Other “designers,” without formal training or even putting plans to paper, just have an innate eye for placement and combinations that enchant.



When it comes to the plant material to use in our designs, what accountability do we have to make certain that the choices we make are not only pleasurable but *responsible* ones? What role should we, who design and form the landscape, play in stewardship of the land not only under our control but the acres beyond?

Merriam-Webster dictionary defines “*stewardship*” as the conducting, supervising, or managing of something; *especially: the careful and responsible management of something entrusted to one's care*. Example: *stewardship of natural resources*. Along with designing our gardens and private spaces to be functional and attractive, what role does stewardship play and how much weight should be given

when making plant choices? Should it even play a part?

An active topic of debate, and sometimes very heated discussions, is the use of **alien or non-native plants** on public and private properties. It’s almost a white hat versus black hat scenario, where any support of non-native plantings is viewed as a character flaw. The Virginia Department of Conservation & Recreation has a wonderfully educational website where they have the clearest and most succinct explanation of the issue I have found (http://www.dcr.virginia.gov/natural_heritage/invspinfo.shtml):

“Alien plants, also known as exotic, non-native, or nonindigenous plants, are species intentionally or accidentally introduced by human activity into a region in which they did not evolve. Many alien species are well known and economically important in agriculture and horticulture, such as wheat, soybeans, and tulips. Alien species, whether plant or animal, often do not become established outside of cultivation and, if they do, they usually have few impacts on natural communities.”

So those of us who sit down on a cold winter morning to a steamy bowl of cream of wheat (grown in the US, but native to Turkey) or who enjoy a riot of spring tulips in bloom (natives of Kazakhstan, *not* Holland; an import), support the use of non-natives. Crape myrtles and some of our favorite maple tree varieties are from China, Japan and Korea. They also gave us most of our roses, brought to America by the French and English. Mexico gave us a staple food—tomatoes—and our Christmas poinsettias several hundred years ago. Ancient magnolias depended on beetles for pollination before any type of bee, including our beloved honey bees (non-native; imported from Europe) even existed. There are several magnolia varieties native to our state; but not all of the magnolias growing in Virginia are natives. And who doesn’t catch their breath upon seeing the beautiful, predominately Japanese Yoshino cherry trees (*Prunus x yedoensis*) that turn Washington D.C. into a

fairyland every April?

So we have non-natives all around us, for good or for bad. Some plants have been here since time began; others are fairly new neighbors. And there's even a big debate about what a "native" is: how long does it have to be in the environment before it is considered a native? The common orange tiger lilies (*Hemerocallis fulva*) growing on roadsides and in fields were brought to America in the late 1700's. They are now naturalized in 42 states. Can they yet be considered to be a native, because they have lived and adapted in this North American environment for over 300 years?



Some say no...

"Nativars" are improved cultivars of native plants. Are they still indigenous plants? For example, oakleaf hydrangea (*Hydrangea quercifolia*) and smooth leaf hydrangea (*H. arborescens*) are Virginia natives, but are the improved cultivars 'Snowflake' and 'Annabelle' afforded native status? *How do we decide, as good stewards to the environment, what is best to plant in our own landscape?*

It's not always an easy decision to make and everyone needs to do their own research to find their comfort level. Start by reading Doug Tallamy's *Bringing Nature Home*. It makes you think differently about what you have planted in your own backyard. But one area that is crystal clear is this: *never install/maintain plant material that is considered to be an invasive alien*. Back to our DCR website:

"Invasive alien plants...escape cultivation and become agricultural pests, infest lawns as weeds, displace native plant species, reduce wildlife habitat, and alter ecosystem processes. Across the country and around the world, invasive alien plants and animals have become one of the most serious threats to native species, natural communities, and ecosystem processes. They also exact a costly toll from human economies that depend on resources and services provided by healthy ecosystems. Examples include destruction of vast areas of western rangelands, clogging of important waterways, and increased costs in maintaining open powerline rights-of-way.

*Of the 4,000 alien plant species introduced to the United States that have escaped cultivation, approximately 400 are serious invaders. **Half this total was introduced for horticultural uses.** Others arrived accidentally in seed mixes, packaging materials, ships ballast, and by other means. Invasive plants now infest more than 100 million acres. One study estimated that from 1901 to 1991, economic losses in the U.S. caused by 15 invasive plant species (not including agricultural weeds) were \$603 million (Office of Technology Assessment, 1993). The Virginia Dept. of Conservation's Division of Natural Heritage and the Virginia Native Plant Society have identified 115 invasive alien plant species that threaten or potentially threaten natural areas, parks, and other protected lands in Virginia."*

As a professional landscape designer, I strongly encourage the use of natives to not only support and grow our pollinators and restore environments, but to enhance *geographic uniqueness*. We need to celebrate the differences in our North American regions, to avoid the McDonaldization of our environment. Even though I live in the exact same USDA Plant Hardiness Zone of 7a in Virginia as I did at 7,000' in arid New Mexico, I don't want the same garden here as I had there. It doesn't make sense.



Edye Clark, Master Gardener

ABCs of Trees

Botanical Name: *Pinus virginiana*

Common Name: Virginia Pine, Scrub Pine, Jersey Pine

 NATIVE

- Zones:** 4 - 8
- Family:** *Pinaceae*
- Habit:** evergreen
- Form:** round crown, irregular crown, open and sparse crown density as tree ages
- Height:** small to medium size tree reaching up to 70 feet; more often seen from 20-40 feet in height
- Spread:** 20-35 feet spread
- Growth rate:** fast
- Life span:** 65-90 years
- Texture:** fine
- Leaf:** evergreen needles, simple, Fragrant, 1 1/2 to 3 inches long, needles are paired in fascicles and are often twisted, often yellow green in winter
- Flower:** species is monoecious; males cylindrical, yellow, near branch tip; females yellow to red, curved prickles present
- Fruit:** conical to ovoid cones are 1 1/2 to 2 1/2 inches long, sessile and persistent, with red-brown scales and an umbo armed with a sharp, needle-like prickle, maturing in the fall, may persist on the tree for many years, often releasing their seeds in the second year
- Bark:** orange-brown and scaly on young trees; older stems develop thin, small, scaly plates, cinnamon colored patches often on upper parts of trunk

Site Requirements: plenty of sun. Will grow in poor, dry soils including clay, but grows best in loam, sandy loam on well-drained sites. Drought tolerance is high.

Diseases and Insects: resistant to pests/diseases

Landscape Uses: good pioneer and wildlife plant, meaning they are some of the first trees to take over a field and have lots of wildlife value

Noteworthy: Virginia pine seeds are an important food source for many small mammals and birds. Older trees that have begun to suffer stem rot provide good nesting sites for woodpeckers. When used for revegetation of mine spoils, Virginia pine has value for wildlife cover and food, and is locally very important



for foraging white-tailed deer. Many species of fungi live symbiotically with this tree. The fungi grow on the roots of Virginia Pine. They absorb nutrients from the tree and allow other nutrients to be absorbed by the tree that it otherwise wouldn't get, which is one of the reasons this tree is so hardy.

In the early days, the Cherokee Indians used the species medicinally for an array of ailments. Virginia Pine historically was also used for mine timbers, railroad ties, rough lumber, fuel, tar and charcoal. Virginia Pine today is mostly used to make paper (pulp wood) for lumber, and for reforestation of abandoned agricultural lands, cutover and mined sites. Many people also use the Virginia Pine trees as a Christmas tree because of its lovely shape when young.



Holly Flannery, Master Gardener, Tree Steward

ABCs of Trees

Botanical Name: *Quercus alba*

Common Name: White Oak

 NATIVE

- Zones:** 3 - 9
- Family:** *Fagaceae*
- Habit:** deciduous
- Form:** pyramidal when young, upright-rounded to broad-rounded with wide spreading branches at maturity
- Height:** can grow over 100 feet in the wild
- Spread:** 50 to 80 feet
- Growth rate:** slow to medium, very slow after first 20 to 30 years
- Texture:** medium
- Leaf:** alternate, simple, obovate (broadest above the middle). 4 to 8 1/2 inches long, about half as wide, with 7 to 10 rounded lobes. Dark green to almost dark blue above; glaucous (greyish/bluish) beneath turning reddish brown in the fall and often remaining attached in winter.
- Flower:** males yellow-green in slender 2 to 4 inch hanging catkins; females reddish-green in small, single spikes. Appear at same time as leaves.
- Fruit:** fruit 3/4 to 1" egg shaped to oblong acorn, enclosed for one fourth of its length in a light, chestnut-brown bowl like cup with raised scales (bumpy). Nut colors a deep brown and detaches from "cup" after reaching maturity. Acorns produced by white oaks germinate days after they fall from the tree. Only a root is produced in the fall, the shoot is produced in the spring.
- Bark:** light ash-gray, often broken into small, vertically arranged blocks, scaly on the surface. Sometimes smooth and grey, which is caused by a fungus.



Site Requirements: Found in many types of soil, but performs best in deep, moist, well drained soils.

Diseases and Insects: Pin oak sawfly, oak skeletonizer, Asiatic oak weevil, chestnut borer, leaf miner, oak lace bug and oak mite. Diseases can include anthracnose, basal canker, leaf blister, leaf spot, powdery mildew,

rust, twig blight to various galls and scales. However, the White Oak is a durable and long lived tree.

Landscape Uses: The white oak tree is probably the most majestic of all oak trees. This tree will spread out at the top even in heavy forest. When found in an open area a mature white oak produces a picture-perfect fullness, and is sometimes wider than it is tall. Placed in large landscape, it is an impressive ornamental shade tree.



Noteworthy: The high grade wood is used for lumber, furniture and interior finishes. The wood is considered outstanding for making tight barrels used in storing whiskey and other liquids. In colonial times, the wood was important in shipbuilding.

Acorns are eaten by many kinds of birds and mammals. Some of the most popular are deer, squirrels, turkeys and bear. Blue Jays and squirrels help spread the seeds to new places so more oaks can grow.

Doug Tallamy in *Bringing Nature Home* has high praise for the value of the white oak to the maintenance of biodiversity. "Oaks are the quintessential wildlife plants: no other plant genus supports more species of Lepidoptera, thus providing more types of bird food than the mighty oak." Oaks support 517 species of Lepidoptera.

Did you know? The White Oak tree is the state tree of Illinois as well as Maryland! The most famous example



Wye Oak

in Maryland was the Wye Oak in Wye Mill, MD. "Estimated to be nearly 500 years old, the old Wye Oak was the largest white oak tree on record, both in Maryland and the nation. It measured 31 feet, 10 inches, in circumference, stood 96 feet tall, and had an average crown spread of 119 feet. Among its impressive characteristics were massive buttresses or "knees" at the base which helped support this huge tree. "Before it toppled during a severe thunderstorm on June 6, 2002, the Wye Oak was one of only two trees surviving as a National Champion since inception of the National Big Tree Register in 1945. Seedlings from its acorns have been grown by the State Forest Service and other programs have been tried to preserve the Tree's genetic makeup. In April 2002, an infant white oak, cloned from the original Wye Oak, was planted on the grounds of George Washington's estate at Mount Vernon, Virginia." (from

<http://msa.maryland.gov/msa/mdmanual/01glance/symbols/html/treewye.html>)

Ursula Ney, Master Gardener, Tree Steward

The Garden Wonk: Plants and Drought

Drought or “moisture deficiency” is the most common stressor for landscape plants. This is often a temporary condition but significant rainfall shortages have become more frequent and may persist for multiple years. Woody plants are typically more tolerant of water stress than herbaceous plants because they can store more energy in their roots and woody tissues. However, trees may die as many as five years after a drought ends due to diseases caused by the drought.

A plant’s first response to moisture deficiency is to close its leaf stomata to reduce the loss of water through transpiration. But this causes its own set of problems. When the stomata are closed, plants cannot absorb carbon dioxide causing photosynthesis to shut down, cutting off the plants food supply.

When our flow of resources (money) stops we have to cut back and reprioritize. Plants do the same thing. Normally plants produce chemicals to protect themselves against pests and disease. Producing these chemicals takes a lot of energy. When drought is severe, plants will reduce the production of these compounds, increasing its susceptibility to attack by disease and pests. Just as stressed humans are more prone to sickness, so are plants. Pests and diseases that commonly attack drought stressed plants include borers, bark beetles, armillaria root rot, Dutch elm disease, pine wilt nematode, verticillium wilt and canker fungi such as *Botryosphaeria* (redbud, rhododendron, etc.). Plants with any kind of root disease will be more rapidly and severely damaged by drought. Dead and dying limbs should be removed because they may harbor pests and disease which may spread. Typically disease will not become apparent until a year or two after the drought; therefore, it is often difficult to identify drought as the primary cause of plant disease or death.

Some insect species simply prefer hot, dry weather. Their populations will be high during drought. Spider mites are attracted to and proliferate on drought-stressed plants.

Thus plants suffer drought damage both directly and indirectly. Direct damage is caused by the drying out of foliage, buds, bark and roots. The edges of leaves brown and the leaves curl. Evergreen needles brown from the tip downward. If the drought continues, shoots and leaves die from the top of the plant down and from the outside in. Growth slows or stops, leaves get smaller, the flowering period is shorter, and fruit drops early. Suckers develop on branches and trunks. Plants may leaf out and then die later in the growing season due to depleted food supplies. This may occur even a few years after a drought.



Leaf scorch

How do plants adapt to handle drought? Drought tolerant plants typically have thick waxy or hairy leaves that minimize water loss. Consider the hairy leaves of *Rudbeckia* that are very drought tolerant. Wilting can also be a strategy to minimize water loss. Drooping leaves are at a different angle to the sun, reducing the amount of solar heat they intercept. Some plants wilt daily in the afternoon sun and then bounce right back. Some plants such as turf grass can go dormant for the duration of a drought. Others, such as spring ephemerals, complete their life cycle before the annual summer drought.

The impact of drought on plants varies with the severity and duration of the drought as well as other factors including the plant species, soil conditions, stresses and pests that may affect the plant. A comprehensive approach that includes irrigation, proper mulching, proper pruning and integrated pest management can help mitigate the impact of drought.

Carol Ivory, Master Gardener, Tree Steward

Notes from the Help Desk:

Q: Any news on the stink bugs (BMSB) this summer?

A: It appears that the stink bugs could be back in full force this summer according to many sources. *"In an interview on National Public Radio, Tracy Leskey, a U.S. Department of Agriculture's Research Service entomologist, said stink bugs are expected to make a big comeback in 2013. We did find that local BMSB populations were six times larger going into overwintering sites in the fall 2012 compared with fall 2011, Leskey said. What we don't know is what that means regarding populations for 2013. It depends on how well they survive the winter and the many factors that can potentially influence on population density."* (<http://www.agprofessional.com/news/188710951.html>)



Here is an entire website devoted to BMSB: <http://www.stopbmsb.org/>

Our best advice for removal is to go out very early in the morning (every morning) to hand pick them off your plants and knock them off into a cup of soapy water. We do this out at our Demo Garden and it can take hours but it is effective ... slowly but surely.

Barb Bailey, LCMG

Q: A homeowner maintains his yard meticulously. Flower beds are nicely mulched, sidewalks neatly edged, and the lawn largely weed free -- except perhaps in the spring when the lawn sprouts a new crop of henbit, chickweed, annual blue grass and such. This is puzzling because the usual weed control measures have been employed. In early spring corn gluten was spread as an organic, pre-emergent weed killer to contain grass-like weeds before their seeds germinate. And to deal with broadleaf weeds, an application of a synthetic herbicide was dispensed with a hand sprayer after the weeds emerge. Nevertheless, spring after spring, a new crop of weeds arrive. What actions would you recommend?

A: The homeowner should take measures to deal with "winter weeds." True, most weed seeds in this area germinate in spring, but some do so in the fall. That's especially true of annual blue grass, that light-green-colored, low growing, clumpy grass that seems to set hundreds of seed heads per plant. It's a winter annual, i.e., it germinates in late summer, goes dormant in winter, revives in spring to set seed, and dies off in the heat of summer. To deal with that type of weed, the homeowner should repeat his spring weed control measures in the fall. He can control the annual blue grass -- as well as other grass-like winter weeds -- by applying corn gluten or another pre-emergent weed killer as the weather cools and air temperatures drop to about 75 degrees F. Also use a hand sprayer to apply a selective herbicide against whatever broad leaf weeds emerge.



Annual blue grass

More about lawn weed control strategies at:

http://www.anr.ext.vt.edu/lawnandgarden/turfandgardentips/tips/Fall_lawn_weed_control_strategies.html

The best way to maintain a weed-free lawn is to keep the lawn grass itself vigorous and healthy. When it prospers, weeds are denied the light and nutrients they need to compete with the grass. Here's a great web site for tips on how to do that: <http://www.anr.ext.vt.edu/lawnandgarden/turfandgardentips/>

Jim Kelly, LCMG

SUMMER SUBSTITUTES ... Hello New Garden Edibles!

Consider this home vegetable gardener's dilemma: We spend much time planning our very own kitchen garden, creating and tending it (including companion planting and all that) because we want our very own fresh vegetables to enjoy the entire growing season, from spring to fall. It is summer, and you're set for an outdoor gathering to showcase your backyard harvest. Salad greens would be nice with the grilled meat. Now, wait a minute, where are the lettuces? They are no longer in the garden, or the ones sitting there have bolted (gone to flower) and are no longer edible. It is OK, you think, you will have chips and guacamole and salsa as sides. Wait a minute, where is the cilantro? What is still growing in the garden has turned into seeds called coriander. It definitely has no place in guacamole. You soon realize your fresh produce corner right in your backyard is not giving you what you want when you want it.

When you have to go out to pick up cilantro and lettuces from the grocery for your outdoor barbecue after all that work in your kitchen garden, you know something is wrong. So here is an idea: Plant **Summer Substitutes!**

For Cilantro: Papaloquelite or Papalo (*Porophyllum ruderale*). Flavor is a combination of cilantro, cucumber, green pepper, arugula, and citrus. Papaloquelite has a reliable leaf production in the heat of summer. Full sun, grows 4-6 feet tall. Use fresh, not good cooked or dried. A Texas/Mexico native.



Young Papaloquelite



Vietnamese Coriander

Vietnamese Coriander (*Persicaria odorata*). Close to cilantro in taste. Warm-season ground cover because of spreading habit. Full sun but prefers some afternoon shade; consistent moisture.

Edible Flowers

With so much focus on gardens now going organic, it is good to be reminded that edible flowers from our garden add beauty, taste, or texture to our summer dishes and drinks. They can be familiar ones you may have used like roses, calendula, signet and African marigolds or lavender. Add squash blossoms to your summer edibles. Daylily buds are sweet and crunchy. Also, culinary herb flowers, especially familiar ones, are generally edible.

Substitutes for Spinach, Lettuce, Salad Greens

Malabar Spinach (*Basella alba or rubra*). A heat-loving vine with a taste very similar to spinach. Fresh leaves are mucilaginous (moist/sticky), fleshy, juicy, and crisp but more like spinach when cooked. Very ornamental.

New Zealand Spinach (*Tetragonia tetragonoides*). Warm-season leafy groundcover. Leafy green with high Vitamin C content. Full sun, grows 1-2 feet.



Malabar Spinach

Vegetable Amaranth or Calaloo (*Amaranthus*). Superior nutritional value - more than beets, spinach, and Swiss chard. Not mucilaginous. Grows 2-3 feet tall. Native to the Americas.



New Zealand Spinach



Vegetable Amaranth

Radish Substitute (for extra bite and zing)

Rattail Radish (*Raphanus caudatus*). Instead of waiting for bulbous roots to dig up, it is the pods that are edible and taste just as good as the root radish. As a bonus, flowers attract many varieties of butterflies. Keep picking to allow more flowers and loads of pods throughout the summer.

REMEMBER: As it is pleasurable to discover new garden edibles, those listed here are very promising additions to our local vegetable gardens. Make sure all your garden edibles are unsprayed or pesticide-free.



Rat's Tail Radish

Maria Daniels, Master Gardener



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Announcement

The Loudoun County Master Gardener Demonstration Garden at Ida Lee has achieved designation as a "Certified Audubon Wildlife Sanctuary" through the Audubon At Home and Loudoun Wildlife Conservancy sanctuary program.

The Audubon at Home Wildlife Sanctuary program is a relatively new program administered by the Loudoun Wildlife Conservancy in partnership with both the Master Gardeners and the Master Naturalists.

The certification recognizes the efforts of the Demo Garden leadership and volunteers to protect the rich natural environment of Loudoun County by removing invasive plants, introducing and protecting native plant species, eliminating the use of commercial fertilizers and pesticides, and conserving water and protecting water quality. Certification of the Demo Garden as an Audubon at Home Wildlife Sanctuary also requires observation of vulnerable wildlife, specifically 10 of 30 identified species that use the garden as habitat – the program lets the wildlife decide on the health and suitability of the habitat.

The Master Gardeners and the Demo Garden team have shown a strong commitment to both environmental stewardship and wildlife management. We should all applaud their efforts and strive to be a little more wildlife friendly in our own gardens. For a fine example of the difference you can make in your own yard or garden stop by the Demo Garden at Ida Lee to observe the native plants, pollinators or even the rich compost, all important components of a wildlife sanctuary.

To learn more visit www.loudounwildlife.org/Audubon_at_Home.html or e-mail Ann Garvey at agarvey@loudounwildlife.org.

