Introducing our New Look!

Ria Malloy, University of Maryland Extension, Home and Garden Information Center

The College of Agriculture and Natural Resources is converting all of its websites to a new platform that will give us consistent look. The Home and Garden Information Center has taken this opportunity to consolidate three of its websites into one place to help you find answers to all your gardening questions. The expected debut is April 2, 2013. We hope to have a substantial amount of content ready for launch date and we have big plans for ongoing improvements.

We’ve organized the content into easy to find categories with an overall Sustainable Gardening theme. You can find Tips, FAQ’s, and Best Practices within each topic area and in the Resource Library. Not to worry, your favorite features will still be available! We are developing new content areas on sustainable landscaping practices, turf alternatives, growing fruit, and more. When you subscribe to the quarterly HGIC eNewsletter, you will also have the option of adding your garden to the growing list of food gardens in Maryland. As of 4/2/13, our new URL will be: http://extension.umd.edu/hgic

Call us at 800-342-2507 (in state) 410-531-1757 (out of state)
or visit us at our new URL http://extension.umd.edu/hgic
We hope you like our new look. Pardon our progress as we continue to build the site and fine tune the look. Let us know what you think. Send an email to Jon Traunfeld, Center Director at jont@umd.edu.

http://extension.umd.edu/hgic
or
http://extension.umd.edu/growit
Emerald Ash Borer - The Green Menace is Here and Expanding its Range!

Mary Kay Malinoski, University of Maryland Extension Specialist

It’s time to think about looking for Emerald Ash Borer (EAB). It has killed many millions of ash trees across the Mid-West and Eastern U.S. The Maryland Department of Agriculture needs your help in locating possible infested ash trees and stopping the movement of the emerald ash borer into other areas. Even though all of Maryland west of the Chesapeake Bay is under quarantine, the infestations are spotty, so it is still very important to report possible infestations. The Maryland Department of Agriculture will continue monitoring for this pest with the purple traps. Adult beetles begin flying about the time that black locust is in bloom.

The EAB can even kill large ash trees within three years after boring into the trees. Ash trees are one of the most common and important landscaping trees used in Maryland and are common in western Maryland forests. Ash wood is used for all traditional applications of hardwood from flooring and cabinets to baseball bats.

Presence of the emerald ash borer typically goes undetected until trees show symptoms – usually the upper third of a tree will thin and then die back. This is usually followed by a large number of shoots or branches arising below the dead portions of the trunk. Other symptoms of infestation include: small D-shaped exit holes in the bark where adults have emerged, vertical splits in the bark, and distinct serpentine-shaped tunnels beneath the bark in the cambium, where larvae effectively stop food and water movement in the tree, starving it to death.

If you have prominent ash trees in your yard that you want to protect from EAB, treatments will need to be made in March. Large trees will need to be treated by a certified arborist. Insecticide options can be accessed from this document: http://emeraldashborer.info/files/Multistate_EAB_Insecticide_Fact_Sheet.pdf. Be sure to check labels and instructions to make sure that Emerald Ash Borer is on the label. To help you make a decision on treatment, Purdue University published an excellent decision guide: http://extension.entm.purdue.edu/eab/pdf/NABB_DecisionGuide.pdf

To help stop this damaging beetle, homeowners and citizens who live in and travel through known infested areas can help:

- The USDA expanded the federal quarantine to include all areas where EAB is under state quarantine under a federal quarantine area. Current quarantine information can be found at emeraldashborer.info under where is EAB.
- Maryland west of the Bay is under quarantine. Ash plant material, products, and firewood cannot be moved from the Western shore to the Eastern Shore.
- Don’t move firewood – buy it where you burn it. Hauling firewood is the most common way for...
damaging plant pests to be moved from one area to another.

• Don’t plant ash trees. Since EAB is expanding its range in Maryland, diversified plantings of alternative tree species are recommended for residential landscaping.

• Report any signs of the emerald ash borer to the University of Maryland Home and Garden Information Center at 1-800-342-2507.

Other Links to Emerald Ash Borer Information

• Main Emerald Ash Borer Information Page - Maryland Department of Agriculture

• Emerald Ash Borer Pest Alert - USDA Forest Service, Northeastern Area

• www.emeraldashborer.info - excellent multi-state site from Michigan, Indiana and Ohio

• Spanish language Emerald Ash Borer site- Purdue University

• Emerald Ash Borer Look-Alike Chart - University of Nebraska

Coming April 2, 2013...
Get to the Root in this Year’s Veggie Garden

Jon Traunfeld, University of Maryland Extension Specialist

2013 is the Year of Root Crops for Grow It Eat It, UME’s exciting project to teach and promote food gardening across the state. Some gardeners shy away from these earthly delights because they don’t know that they can be grown here or they’ve tried them and failed. Others don’t realize how much better garden-raised root crops taste compared to store fare.

Root crops are mostly biennials— it takes two years for them to complete their life cycle. The roots that we harvest and eat are storage roots that generally help the plant store energy needed for reproduction the following year—flowers, seed stalks, plantlets. Roots crops have some unique and valuable features for gardeners who want to get the most from their plots. Some, like beet and radish, produce crops in spring and fall; some, like sweet potato and garlic, produce edible parts other than roots; and most can be harvested and then stored and enjoyed throughout the winter months. So make some room this growing season for root crops!

All of the root crops mentioned or shown here are grown with great success each year in all regions of Maryland. You can find “Vegetable Profiles” on the Grow It Eat It website for beet, carrot, garlic, leek, onion, potato, radish, and sweet potato.

Cold tolerance of common root crops

- Hardy (can tolerate heavy frost)- garlic, leek, multiplier onion, turnip, radish
- Half-hardy (can tolerate light frost)- beet, carrot, kohlrabi, rutabaga
- Half-tender (frost injures plant)- potato
- Tender (frost will kill plant)- sweet potato
- Storage roots that can overwinter in place- garlic, leek, carrot, radish (daikon will begin to decompose by mid-winter), turnip, multiplier onion

Tips for success

- Start small- plant a small area in new crops you haven’t grown before.
- Consult plant date charts and plant at the right times during the growing season generally spring and mid-late summer. Garlic, shallot, and multiplier onion are usually only planted in fall.
- Root crops need a minimum of eight inches of loose, fertile soil to grow well (carrots and parsnips will do better with 12 inches).
- Lighter soils, high in sand will make it easier for the storage roots to enlarge. Whether your soil is high in sand or clay, adding compost will provide some nutrients and make the soil looser and more crumbly.
- You can also deepen your soil by double-digging a new root crop bed. If that sounds like too much work, push your garden fork into the soil and rock it back and forth to loosen subsoil. Then add and mix in 1-2 inches of compost.
- Don’t add fresh or partially decomposed manure in the spring. It’s a terrific host for wireworms, carrot fly, and other root crop pests.
- Start with transplants to get a jump on the season
- Cover newly emerged seedlings or planted transplants with floating row cover to speed up growth and protect plants from pests.
- It’s easy to plant too many seeds in the row or bed. Be sure to thin out these extra seedlings so that you end up with the correct spacing between plants. Overcrowding leads to weak plants and small roots.
- Carrot- Plant a row of carrot and then plant radishes in a parallel row 3 inches from the carrots. Radish germinates more quickly and will help mark the carrot row. The radishes will be harvested by the time the carrots need extra room.

Learn and Share with Grow It Eat It

The Grow It Eat It blog is a fantastic resource for real-time garden tips and information. Erica Smith, UME Master Gardener in Montgomery Co. has been our fearless and able blog leader for four years. The Year of Root Crops will be a strong blog theme in 2013. So far, ten of the blog entries have been on root crops! Subscribe to or follow the blog to learn how Master Gardeners are growing their root crops. Send us photos and experiences from your garden that we can share on the GIEI website (jont@umd.edu).
Plant beets every two weeks beginning in early April for a steady harvest. Photo: Kent Phillips

Grow radishes and small carrots (e.g., ‘Thumbelina) in a Salad Table. Photo: Erica Smith

A few of the many different radish cultivars you can grow. Photo: Erica Smith

Nice harvest of freshly dug carrots from MG demo garden at the Montgomery Co. Extension office. Photo: Erica Smith

Winter storage radishes (daikon) grow to 10 inches or more and make an interesting late summer-fall crop. Photo: Jon Traunfeld
The dark purple carrot is ‘Purple Haze’—a big hit with kids and Jimi Hendrix fans. Photo: Sabine Harvey

Turnip and carrot make good roasting partners. Photo: Nancy Robson

Different types of sweet potatoes. Photo: Erica Smith

These leeks are overwintering happily in the garden. Photo: Erica Smith

Freshly harvested leeks. Potato and leek soup anyone? Photo: Erica Smith
Boxwood Culture, Diseases and the New Blight

David L. Clement, University of Maryland Extension Specialist Plant Pathology

Boxwoods have always been a popular shrub in Maryland and recently they have become more widely planted because of their deer resistance. However, boxwoods are often overly pruned into tight shapes that limit air circulation within the canopy and favor foliar diseases.

Boxwoods grow well in full sun to partial shade. Sites exposed to full winter sun can cause foliage to “burn” and turn orange. Boxwoods planted with a south or southwest exposure suffer winter burn more than plants with an east or north exposure due to increased sun exposure. As with all evergreens normal leaf drop does occur, but leaves normally remain functional for 3 years. Boxwoods are broad leafed evergreen shrubs that are typically used as foundation plantings and backdrops for planting beds, topiaries, and formal gardens.

Boxwoods require adequate drainage, ample amounts of organic matter and grow best within a soil pH range of 6.5 to 7.2. Excessive yellowing of older inner foliage or premature leaf drop may indicate a lack of nutrients. Do not cultivate deeply near the boxwoods or shallow roots will be damaged.

Boxwoods require only light applications of mulch. Do not apply more than one inch of mulch over the root zone and keep it clear of the main stem. Excessive mulch may encourage vole (meadow mice) activity and production of adventitious roots in the mulch layer which are very prone to desiccation (drying) damage.

The most appropriate pruning method for all boxwoods is thinning. Thinning allows the center of the plant to receive adequate sunlight and air circulation. Properly pruned boxwoods will have leaves along the entire branch length. Dense foliage encourages fungal diseases such as macrophoma leaf spot and volutella canker. Shearing stresses plants and should only be used in boxwood topiaries. The best time to thin boxwoods is December through February.

Cultural Problems
Winter Injury

Winter injury may be confused with early stages of the fungal diseases phytophthora root rot or volutella blight. Leaves turn from bronze to reddish brown as a result of exposure to cold, dry winter winds. Tissue death is caused by the removal of water in the leaves faster than the plant can replace it through root uptake from frozen water in the soil. Bark splitting can be caused by a rapid temperature drop caused by a mid-winter thaw. Dead twigs and branches in the spring may be the result of ice and snow damage from the winter.

Winter damage can be reduced by locating plants in partially shaded areas protected from winter winds. Physical barriers, placed about 18 inches from the plants on the windward side, made from materials such as burlap or plastic, can also lessen winter wind damage by reducing wind velocity. Maintain adequate soil moisture in the fall to prevent winter desiccation. To avoid damage from falling snow and ice do not plant boxwoods under roof eaves. For established boxwoods, tie a string or twine at the base of the plant and spiral the twine up and down the plant to hold it together and gently brush snow off plants as soon as possible. This will help prevent damage from falling ice and snow. Inspect plants for winter damage in the spring and prune out affected areas.

Boxwood Diseases
Root Rots
Phytophthora spp. and Ganoderma lucidum

The fungi, Phytophthora spp. and Ganoderma lucidum, can cause root rots in many boxwood cultivars. Symptoms include poor growth, loss of healthy foliage color (leaves eventually turn light yellow), upward turning and inward rolling of leaf margins, dark brown discolored wood at the base of the stem for 2 or 3 inches above the...
soil line, and loosening and separation of the dead lower bark. As a result of the fungal infection, the root system is reduced and dark brown.

Although there are no chemical cures for these diseases they can be prevented by proper planting. Avoid planting boxwoods in poorly drained compacted soils or in low areas where water collects. Also avoid placing boxwoods near downspouts. Construction of raised beds or grade changes may be needed to ensure proper drainage. Root diseases on older established plants can result from changes in water drainage patterns.

**Volutella Stem Blight or Canker**
*Pseudonectria rouselliana*

Both American and English boxwood are highly susceptible to this disease caused by the fungus, *Pseudonectria*

**Macrophoma Leaf Spot**
*Macrophoma candollei*

Most boxwoods are susceptible to infection by the weakly parasitic fungus, *Macrophoma candollei*. The most obvious symptoms are the many tiny black raised fruiting bodies found on dying or dead straw-colored leaves. Again in home landscapes proper pruning and thinning is the most effective way to manage this disease.

**The New Boxwood Blight**
*Calonectria pseudonaviculata*, syn. (*Cylindrocladium pseudonaviculatum*)

A new disease called Box Blight or Boxwood Blight has been causing defoliation of boxwoods throughout Europe since the late 1990’s. In October 2011, the disease was found in North Carolina and Connecticut in both nursery, and landscape plantings. The disease was also found in a
Virginia nursery. Since this first US report the disease has been identified in a number of northeastern states and also in Oregon, and British Columbia. The first Maryland case of Boxwood Blight was confirmed on plants from a landscaper’s nursery in 2011, and last year in 2012, in a landscape.

The disease is caused by a fungus called *Calonectria pseudonaviculata*. The first symptoms begin as leaf spots followed by rapid browning and leaf drop starting on the lower branches and moving upward in the canopy. The key symptoms that differentiate Boxwood Blight from other boxwood diseases, such as Volutella Blight and Macrophoma Leaf Spot, are numerous narrow black cankers (black streaks) that develop on the green stems. The pathogen does not attack the roots, so larger plants may produce new leaves during the growing season, but may lose ornamental value as defoliation becomes severe.

Repeated defoliation and dieback from stem cankers has killed small rooted cuttings in nursery propagation. The causal fungus can remain alive in fallen leaves which can then serve as the source of infection for subsequent years. The spores of the fungus can be splash dispersed through irrigation or rainfall resulting in spread of the disease within a plant or to nearby boxwoods. The primary method of long distance disease spread is most likely shipping of infected plants, use of contaminated tools and transport vehicles that contain fallen infected leaves.

Recent research on the susceptibility of various boxwood cultivars has shown promising results for resistance in some cultivars. Within the last year, Japanese spurge, *Pachysandra terminalis*, and Allegheny spurge, *Pachysandra procumbens*, have also been shown to be susceptible to boxwood blight in the landscape. Sweet box, *Sarcococca*, another ornamental that is in the boxwood family (Buxaceae) has also been infected under experimental conditions. Research is under way to test the effectiveness of fungicides for management of Boxwood Blight.

Suspected Boxwood Blight cases should be reported to University of Maryland Extension.
Greedy Groundcover Grasses Crowd Out Natives

By Nevin Dawson, Forest Stewardship Educator, University of Maryland Extension

Majestic oaks tower over a dense carpet of lush green grass, their size and grandeur emphasized by the empty space between their massive trunks. The beauty of this park-like scene is undeniable. The forest appears orderly and well-manicured; friendly and inviting.

But there is something wrong here. The leaves rustle in a momentary breeze high above your head, and then, nothing. No “perlee perlee perlee” of the Kentucky warbler, no “cher, teacher, teacher” of an ovenbird, just silence.

While this scene does instill a sense of beauty in the people who see it, for many other species it lacks essential elements of good habitat—diversity, cover, and food.

The culprit in Delmarva is often Japanese stiltgrass. This quickly-spreading groundcover often starts out in disturbed soil or along roadways, and quickly spreads into neighboring areas, even those in full shade.

The leaves are flat blades 4 inches long and about a half inch wide with points on both ends. There’s a silvery line down the leaf that’s slightly off center, which separates it from the native grasses that can be found in the same areas. Its flower heads are thin spikes. Its seeds remain viable in the soil for up to five years.

The slender wiry stems are up to 3 feet long, but bend under their own weight, creating a thick mat that easily shades out most natives species. The plants also increase the pH of the soil, and are not palatable to deer. If allowed to thrive, the diversity of the forest understory will decline, along with the food and cover sources that many native birds and animals depend on.

It does have some weaknesses. It is very easy to pull by hand, especially when the soil is moist, although pulling may open the door to even more invasive plants. You may be able to cut it with a mower or string trimmer in some areas, and goats will eat it. August is best for cutting—any earlier and it may have enough time to grow back and set seed.

It is also susceptible to herbicides. A solution of 0.5% to 2% glyphosate, which is broad spectrum and will kill or damage any plant, or a 0.28% solution of fluazifop, which only kills grasses, can be sprayed on the leaves. Add 0.5% surfactant and dye if it’s not already included in the mix you use. Be sure to follow all instructions on the label—it’s the law.

Japanese stiltgrass is an annual plant, which means that your goal is to deplete the seed bank by removing every plant that sprouts without allowing any new seeds back into the soil. You will need to stay vigilant over many years, but each year should get a little easier.

There is a new invasive grass species that is similar to Japanese stiltgrass in many ways. There’s one big difference—it’s even worse.

Wavyleaf basketgrass was discovered in Baltimore County, Maryland in 1996 and has quickly spread through many other counties in Maryland and Virginia. In some areas it has even out-competed Japanese stiltgrass.
The leaves are roughly the same size and shape as Japanese stiltgrass, but do not have the silvery line. The leaves do have distinctive ripples that make it easy to identify.

Its seeds are coated with a sticky goo that makes it impossible for any human, animal, or vehicle to move through a patch in seed without picking up hitchhikers. It’s best to stay out of infested areas from August through November to avoid aiding its spread.

Wavyleaf Basketgrass is a perennial, which means that you will be fighting both the seed bank and the plant itself. It can easily be pulled by hand, but herbicide spraying is often the better option in areas where no native plants remain. A 1-2% solution of glyphosate should do the trick. A selective herbicide like Clethodim will only kill grasses, and can be useful when native sedges and wildflowers are mixed in with the grass.

As with any invasive species control effort, it is essential to have a plan for replacing the invasive plant with a native species suitable for the site. Without this important step, you may find yourself in an unwinnable war.

Take control of these grasses on your property now to keep your woods the messy noisy place that it should be.


If you enjoy receiving the HGIC e-newsletter, stay in touch more often by “liking” us on Facebook and following us on Twitter.

Is all this social media technology new to you? Facebook is an online gathering spot where you can connect with friends and people who have similar interests. Go to HGIC’s Facebook page for a preview. Like what you see? Click the Facebook Sign Up button to get started. If you are already on Facebook, enter Home and Garden Information Center in the search field and click on the like button. Once you “like” the HGIC page, you can read posted comments, post questions, and comment on posts by others. Do you like vegetable gardening? Connect with our vegetable gardening network on the Grow It Eat It Facebook page.

Twitter is another way we are communicating with Marylanders. Tweets are very short messages (140 characters or less) and often include hyperlinks to other web sites or publications. To learn more visit HGIC and GiEI Twitter pages and click the “Follow” button.
Did you know that every month the consultants at the Home and Garden Information Center share some of their favorite plants in the Baltimore Sun newspaper and also on Home and Garden’s website? Below is a sample of some past spring selections. Be sure to visit our website each month for an updated selection of plants.

**CREEPING PHLOX**  
*Phlox stolonifera ‘Sherwood Purple’*

This under-utilized gem of a phlox creates a ground-hugging mat of small evergreen leaves that carpet the ground all year. In May, creeping phlox sends up slim stems about 6-8” tall, topped with clusters of traditional phlox blooms in shades of purples, pinks or white. Bloom is lightly fragrant and beneficial to butterflies. ‘Sherwood Purple’ is the best variety to choose when you want to use it as a groundcover. For those seeking a native alternative to evergreen vinca, Phlox stolonifera fits the bill. This unpicky phlox likes shade and moisture, but tolerates dry periods.

**EASTERN REDBUD TREE**  
*Cercis canadensis*

With stunning spring-flowering trees around every bend in the road, our native redbud still stands out. A profusion of fuchsia blossoms run along its branches, highlighting them in a unique way. *Cercis canadensis* is well adapted to Maryland soils, but prefers moist, well drained soil. Woodland edges or partially shaded locations are best. With a mature height of 25 feet, it can be planted under utility wires. The lush green, broad, heart-shaped leaves and slender reddish brown bark with orangish inner bark peaking through, makes redbud a lovely and interesting addition to the landscape.

**LENTEN ROSE**  
*Helleborus orientalis*

Lenten rose blooms for an incredibly long time--late winter to May--with petals in smoky purple, speckled mauve, white, and pastel green. Even in summer, fading blooms continue to be attractive. More happily, deer snub the foliage and usually the flowers. Leathery leaves, heavily serrated, emerge bright green and turn dark green. Allow old foliage to decompose or remove it in late winter. Lenten rose self seeds or can be divided. This perennial flower can also serve as a groundcover. Plant in moist shade to part shade--a slope is ideal to look up at the nodding blooms.
**Question:** My husband and I are having a difference of opinion. I prefer using red colored mulch in my perennial beds because I like the contrast of color between my plants and the mulch. My husband says that it is not natural and that it is not worth paying extra for. Who is correct?

**Answer:** Dyed mulch has come into favor the last few years. Actually colored mulch does not offer any advantages over conventional types of mulch but many people do find it aesthetically pleasing. Wood chips are dyed to enhance their ornamental value. Technically you both are correct; color and composition are important when designing a perennial bed but the real purpose of using mulch is to conserve moisture, reduce weeds, prevent soil erosion, and to protect roots from the summer heat and the winter cold. Undyed bark and wood chip mulches do look more natural. But again, everyone has their own personal preferences.

*The following is an excellent example of a typical homeowner question to HGIC’s online Q & A section on a daily basis from homeowners. Most often we get questions from people that want an insect or a plant identified or help diagnosing a plant problem. Photos attached with a question are extremely helpful to aid with the diagnosis process. As shown in this photo, insects should be placed on a contrasting background with a ruler or a coin so we can determine the size.*

**Question:** The other day I found these insects in our basement. We had our house treated for termites many years ago and I am concerned that they have come back. The pictures of termites I found on the internet do look different than this but I want you to look at them. Please tell me what type of insect these are and how I can get rid of them? Thank you in advance.

**Answer:** You will be relieved to know that these are not termites. What you found are earwigs. Earwigs are common insects found mostly in the garden but they do occasionally wander indoors. They are not harmful to you or your home. Try to narrow down how they are entering your basement and seal off all entry points. Clean-up leaf debris and try to reduce moisture around your foundation to reduce their habitat. No other control is necessary. In the garden earwigs can cause damage to plants but it is generally not significant unless the population is high. Homemade traps can be placed around plantings to reduce their numbers. For additional information see our publication HG 4, Earwigs.
Where did the **MONTHLY TIPS FROM HGIC** go? They’re on our website! Use the links below to see all the tips by topic area and month.*

- **Lawns**
- **Woody Ornamental Plants**
- **Herbaceous Ornamental Plants and Aquatic Gardening**
- **Fruit**
- **Vegetable and Herb Gardening**
- **Soil, Fertilizer, Mulch and Compost**
- **Seasonal and Indoor Plants**
- **Indoor and Outdoor Pests**
- **Wildlife**

*Please note: To find HGIC’s tips on our new site, go to http://extension.umd.edu/hgic/resource-library/tips.*

Thank you for subscribing to Home and Garden News. Our Certified Professional Horticulturists are available Monday - Friday, 8 AM - 1 PM to answer your questions. Call 800-342-2507 (in-state) or 410-531-1757 (out-of-state). Please visit us on the web at extension.umd.edu/hgic. If you wish to be removed from this mailing list, please e-mail jljacobs@umd.edu.