Observations and Lessons from 2009 Food Gardens

Jon Traunfeld, Extension Specialist, Fruits and Vegetables, and State Master Gardener Coordinator

2009 was a rewarding year for people who love to grow some of their own food. For once, we got some recognition and respect because of the intense public interest in growing vegetables. The “growing” trend was fueled primarily by the recession, the White House kitchen garden, and an emphasis on going green and eating local. After all, you cannot get much more local than your own front- or back-yard! Seed sales when through the roof and, based on a national survey, the National Gardening Association predicted a 19% increase in the number of U.S. households producing vegetables.

The Grow It Eat It campaign is the University of Maryland Extension’s response to the huge new demand for information and assistance with starting and maintaining successful food gardens. Master Gardeners taught classes, demonstrated sustainable gardening techniques, and promoted food gardening from one end of the state to the other. Faculty and staff at the Home and Garden Information Center answered hundreds of gardening and pest questions. In the course of teaching Master Gardeners and community gardeners I visited many gardens and farms in 2009. This is the best part of the job- learning from interactions with my fellow tillers (or no-tillers!) and learning by observing what’s going on in the vegetable beds and fields that I visit.

Get answers and fix mistakes now- don’t wait till next year to get answers to the many questions you asked yourself and problems that you observed in the garden. It never fails that people call the garden hotline in May right as they are planting to ask about something they vaguely remembered was troubling them from last season. Call our garden hotline (800-342-25070 or e-mail us your questions today!

Keep working on your soil- it takes several years to transform infertile and compacted soil into the rich, soft soil that will produce high yields every season. It’s easy for first year community and backyard gardeners to become frustrated by poor soil. Don’t give up! Just keep adding compost, and applying organic mulches. Apply a 4-inch layer of shredded leaves over all your beds to protect and enrich your soil.
**Critter control**—sharing some of the bounty with wildlife is one thing, but a lone deer or groundhog can devastate your un-protected garden. Stay tuned as we add fencing information to the Grow It Eat It web site. Wildlife pressure on food gardens is significant throughout Maryland. Some type of fence is the surest method for excluding unwanted critters.

An attractive wood and woven wire fence protecting a school garden.

Grow transplants to fill your garden beds - this summer I saw a lot of wasted seed sown incorrectly, at the wrong depth and spacing. I also saw a lot of seeds displaced or washed out of soil by heavy rain and lots of seeds damaged or eaten by birds, insects, and diseases. Growing your own transplants or “starts” will greatly increase garden productivity. How you ask? By giving your plants a head start under a fluorescent shop light inside or in a plastic flat or Salad Box™ outside you can shorten the time plants need to mature in the garden and reduce wasted space. You also save time and money by eliminating the need for thinning and re-planting.

Grow transplants from March - August to fill empty spaces in your garden.

Salad Tables and Salad Boxes are great nurseries for baby plants that you can transplant into your garden.

Try floating row covers— I always tell people that I’m a cheap gardener. I don’t run out to buy the latest and greatest gadgets, tools, and toys. But here’s something I can easily recommend because it more than pays for itself. Use floating row covers to 1) exclude your toughest insect or bigger critter problem and 2) to increase plant growth spring, summer, and fall.

A solar powered electric fence with two strands of white polywire.

This row cover is laying directly on top of fall vegetable plants.
Connect with other gardeners - sharing the bounty of your harvest and experience with others is one of the great joys of growing food. It puts a smile on the face of your grumpiest neighbor! Form a vegetable garden club so neighbors have a fun way to visit each others gardens and learn together. Visit a community garden, join a seed saving exchange, try a new seed company, surf for good vegetable gardening web sites- and JOIN the Grow It Eat It network.

Plant for beneficial insects- the most exciting vegetable gardens are humming with insect activity. If you plant to attract parasitoids, predators, and pollinators, you will have bigger yields and fewer pest problems. Here is a short list of the many wonderful garden plants that will provide nectar, pollen, and habitat for insects that naturally control pests and pollinate our crops- dill, fennel, hyssop, anise hyssop, asters and zinnias, calendula, comfrey, red and white clover, borage, mint, basil, broccoli raab, buckwheat, alyssum, corn flower, bachelor's button, bee balm, and butterfly weed.

Sheet composting weedless gardening, no-till gardening, lasagna gardening- call it what you want- it works! We used the technique on three new 8 ft. X 8 ft. beds at the Home and Garden Information Center with excellent results. Just spread overlapping sections of newspaper or un-waxed cardboard over the new garden area and cover with an 8-12 inch layer of compost and shredded leaves. By spring you’ll be ready to plant into the new bed without turning the soil.

Late blight lessons- this disease that infects and kills tomato and potato plants was devastating to many gardeners and farmers. Tomato plants infected with Phytophthora infestans were purchased by home gardeners at large retailers. The widespread problem pointed up the risks associated with regional and national supply chains for live plants grown in huge quantities at a small number of sites. We can reduce our collective risks.
for these types of major outbreaks by growing our own transplants or purchasing locally grown plants.

**A hard-to-beat-tomato**- if you only have room for one tomato plant next year- in the ground or in a container- you may want to plant ‘Juliet’, a 1999 All-American Selections winner. This F1 hybrid tomato is not waiting around for Romeo; she’s busy producing clusters of nearly perfect fruits. They are the size and shape of an elongated chicken egg- similar to but larger than the grape tomato cultivars popular with gardeners. Kids love to pick and eat the fruits. Best of all, they remain fully ripe and tasty stored in a bowl in your kitchen 2 weeks after harvest. Quite remarkable.

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**Don’t Move Firewood!**

_by Mary Kay Malinoski, Extension Specialist, Entomology_

**Do you like the sound of a perfect pitch smashed over the left field fence or real maple syrup on your pancakes??.....Then don’t move firewood!**

Huh? Believe it or not, they do have something in common. Some of the worst invasive pests have been and are being moved around the country in firewood. Emerald ash borer has largely been spread around the mid-Atlantic and mid-West by people moving firewood. Emerald ash borer kills ash trees and has been devastating to ash trees in urban and forest settings. Most of the ash trees harvested for making baseball bats and tool handles come from Pennsylvania and New York, both of which have emerald ash borer like Maryland does.

Asian longhorned beetle is a devastating pest of maple and other hardwoods. It is currently infesting trees in the New York City area, parts of New Jersey, Chicago, and in Worcester, Massachusetts which is perilously close to the main maple sugar production areas of the Northeast US and Quebec, Canada. It is just a short camper or trailer ride with some infested firewood to Maryland and there goes our maples! We have many maples planted as street trees and in our forests. We don’t want this critter!
All hardwoods look pretty much the same when bucked up and split for firewood. It is extremely difficult to tell what species of wood you are buying. Buyer beware and be careful. Take the pledge not to move firewood at stopthebeetle.info. Maryland needs more votes! Remember: BURN FIREWOOD WHERE YOU BUY IT!

For more information on Emerald ash borer and Asian longhorned beetle see HGIC’s [emerald ash borer page](https://www hgic.colostate.edu), U of MD’s [Pest Threats](https://www.pestthreats.com) website, and the University of Vermont’s [Asian Longhorned beetle page](https://www.pestthreats.com).

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**Fall Pruning of Landscape Trees and Shrubs**

*by Ray Bosmans, Professor Emeritus, University of MD.*

Exactly what is pruning? Why and how do you do it?

Pruning is very different from “trimming”. Pruning involves the selective removal of plant parts, sometimes significant size parts to help train a tree or shrub, to remove problem branches, or to “rejuvenate” an older declining tree or shrub. When properly done it will improve overall plant health, vigor, productivity, and appearance.

Trimming is far less dramatic procedure that involves the removal of branch tips, unwanted shoots, or water sprouts on the trunk. A common example of trimming is the shearing of a hedge or shrub to make it denser. Trimming may be safely done almost anytime that it is required. However, extensive trimming late in the summer can cause new sprouts to emerge which will not harden properly before winter. These new shoots will usually die during winter. (To learn more about trimming, watch these [HGIC trimming videos](https://www.hgic.colostate.edu/).)

Pruning, because it has a much greater influence on the growth of a tree or shrub needs to be done at the proper time to avoid causing problems.

**Timing:**

Spring flowering trees and shrubs produce their blossoms on the wood produced in the previous year. Basically any tree or shrub that blooms before mid-June is classified as a spring-flowering plant. To avoid reducing the bloom for the current spring, prune these plants soon after flowering but before midsummer.

Summer and fall flowering trees and shrubs produce their blossoms on the new wood produced in the current spring. Prune these in the
spring and you can actually improve the blossom display.

Non-flowering trees and shrubs may be pruned in the spring or in the late fall or winter. Needled evergreens can be pruned in the spring, early summer, late fall or winter.

Contrary to older recommendations, it is no longer recommended to prune back plants after planting or transplanting (except for fruit trees).

Types of Pruning:
- **Renewal or rejuvenation pruning**: most woody plants can be rejuvenated with pruning that removes most or all of the older growth. It reduces the size of the plant and stimulates new growth from the base. This type of pruning is often done on overgrown foundation plants, old forsythia, lilac, viburnums, hydrangeas and other shrubs. It is best done early in the spring.
- **Dead wood removal**: the removal of dead or badly diseased branches can be safely done at any time of the year. Its removal has no detrimental effect on the plant.
- **Low hanging branch removal**: a problem branch or two from a tree that is so low that becomes a safety issue may also be pruned off anytime. However if many branches need to be removed to ‘elevate’ a tree this is best done in the early spring or late fall/winter while the tree is still dormant.
- **Training a plant**: as a new tree grows it may need a little help developing a straight single trunk and branches that are well angled and spaced out. Pruning during the first few years after planting will help. A shade tree should have a single trunk that does not divide into two or more trunks. Branches should not cross over each other or rub each other. Sometimes too many branches are growing too closely together and need to be thinned. Many older trees develop a dense canopy of branches. This makes a tree prone to breakage during strong winds during summer thunder storms. Its help to selectively thin out the branches to allow wind to flow through the tree rather than push against it.

Making the cut:
Most pruning cuts only involve the cutting of a twig with pruners or a pruning saw. Branches that are one to two inches, and larger, in diameter must be cut in a three-step process to prevent bark damage to the trunk. The first saw cut is an “under cut” a few inches away from the trunk at the branch collar. This cut is only a third of the way into the branch. It will prevent the branch from stripping the bark from the trunk when it falls. The second cut is made an inch or two away from the first towards the end of the branch. This cut is made all the way through. The branch will fall off leaving a clean cut. The final cut is to remove the small branch stub left behind. This is not a flush cut. You should leave the branch collar - that slightly raised area above the branch meets the trunk. There is no need to paint a wound dressing on the cut surface.

The pruning of fruit trees and cane-bearing (brambles) fruits is a little different and more involved than the pruning of ornamentals. Call our hotline (800-342-2507) for more information.
Reflections of a Plant Pathologist

by David Clement, Plant Pathologist

As this gardening season comes to a close it might help to highlight some of the diseases that impacted our Maryland plants. Many of you were affected this year with a devastating vegetable disease with a rich historical past known as late blight. The disease came in early on infected tomato transplants from garden centers and hung around to also infect our main season tomato crop. Our wet summer helped this disease flourish and cause a lot of disappointment for many vegetable gardeners. As a plant pathologist I can’t help taking this event as a teachable moment for those who forget the impact this disease had on some of our fellow Irishmen around 1845. I’m speaking of the potato famine that caused starvation and large numbers of immigrants to come to this country looking for a better life. In those days the role of pathogens and disease cycles were largely unknown and the science of plant pathology was being born. It was humbling to see this disease advance even with our more sophisticated knowledge, and experience how fast it wiped out home garden harvests. Indications so far are that the devastation this summer was caused by the common strain of this pathogen and that means that it should not overwinter here in Maryland. Let’s hope that we get a clean start next season.

On other disease notes this season brought us a new previously unreported powdery mildew disease on Bradford pear in the Maryland landscape. Although to a plant pathologist this is an exciting piece of history it might just be another nail in the coffin for the once beloved Bradford. Another serious discovery this season was the first report of Sudden Oak Death or Ramorum Blight on a witch hazel in a Maryland landscape. This is a serious development and one that will be monitored closely because of the potential spread in our neighborhoods and forests. Read more about this threat on our web site. Also under promising new disease developments we are currently investigating a new foliar blight of Japanese Stiltgrass which is a very invasive weed in our landscapes and native environments. We might get lucky and see this disease reduce the spread of this weed.

Finally for all those of you who can’t get enough of this kind of interesting stuff consider purchasing a copy of our newly printed book on pests and diseases of broadleaved shrubs and shade trees available from the Natural Resource, Agriculture, and Engineering Service (www.nraes.org). I’m sure that it will be a real page turner during this holiday season.

TOP

Questions and Answers

Ask the Expert

by Debra Ricigliano, Certified Professional Horticulturist

Question: Earlier this fall I divided and replanted many of my established perennials such as coral bells, foamflower, coreopsis, and daylilies. Is there something that I should do to protect them during the winter?

Answer: Yes, if you haven’t done so already apply several inches of mulch, shredded leaves or pine needles in the bed after the first hard frost. Evergreen boughs laid throughout the bed also provide protection. Periods of freezing and thawing causes plants to heave from the soil, exposing roots to wind desiccation. Perennials planted in clay
soil are at a higher risk for heaving because clay soil holds more moisture. Fluctuating winter temperatures also increases the problem. A solid layer of packed snow actually provides more root protection. Remove the mulch in early spring before new growth begins.

**Question:** I purchased a large potted amaryllis plant in October, hoping to enjoy it over the holidays. The plant has long, strap-like leaves and two thicker stems topped with two buds on each stalk. The buds look like they are about to open any day now. Please tell me how to take care of the plant and what should I do after it blooms?

**Answer:** Amaryllis are in the genus *Hippeastrum* and are native to South America and South Africa. They need bright light with some direct sunlight during the active growth period. So keep it in a sunny window. Normal room temperatures are fine except when flowering. Temperatures between 55°-65° F will prolong the bloom period. Right now water enough to keep the soil moist, allowing the excess to drain from the container. Water less often after it has finished blooming; wait until the potting mixture feels dry. When all blooms have faded cut off the flower stalk at the base and be careful not to injure the leaves.

At this point it is important to encourage leaf growth; healthy leaves produce energy that is used to form flowers next year. Keep it watered and fertilize monthly with a complete, water soluble houseplant fertilizer. After the danger of frost has past bring it outdoors and slowly introduce the plant to a sunny location. Again keep it watered and fertilized through the summer. If you want it to bloom around the holidays again you will need to begin the dormancy period by mid-August. Stop watering it and move it to a cool, dark location. The leaves will yellow and die back. You can also leave it outdoors until nighttime temperatures dip into the mid-fifties, but it will bloom later in the winter. Keep the bulb on the dry side and do not fertilize. After about 8-10 weeks of dormancy you should notice the tip of a flower stalk emerging. Move it back to a sunny, warm location and begin watering and fertilizing it again.

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**Gardening Gifts**

Not sure what to get your garden lover this holiday season? Give the gift of practical, up-to-date, expert information...in the form of the Maryland Master Gardener Handbook.

For gardeners who wish they knew more, this is a treasure trove of academically researched and experientially tested information on effective and sustainable horticulture.

Produced by faculty at the University of Maryland College of Agriculture and Natural Resources, this 640-page spiral bound book makes a wonderful addition to the reference library of both beginning and seasoned gardeners. Order your copy online or print and mail your order form. The price is $69 which includes shipping. Questions? Call Robin Hessey at 410-531-1754.

Looking for other gift options? We have a limited number of *Salad Box™* and *Salad Box™* kits available. The *Salad Box™* ($49.95 plus shipping) measures 22” x 15” x 4” and is hand crafted of Western cedar. It will provide years of gardening and eating pleasure. The kit, includes a *Salad Box™*, nutrient-rich organic potting mix, lettuce seeds and instructions. It sells for $69.95 plus shipping. Place your order on the [Grow It Eat It website](#). Questions? Call Ria Malloy at 410-531-5556.
**NOVEMBER 2009**

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<td>Continue to plant spring flowering bulbs</td>
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<td>Cauk, seal up cracks &amp; entry points to prevent critters from coming indoors</td>
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<td>Nursery trees &amp; shrubs can be planted until the ground freezes</td>
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<td>Monitor your houseplants for scale, aphids and spider mites</td>
<td>Plant garlic by mid-November</td>
<td>Fall cleanup reduces diseases &amp; insects which overwinter in plant material</td>
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<td>Old leaf drop on rhododendrons &amp; evergreen shrubs is normal</td>
<td>Fall is the best time to trap voles</td>
<td>Incorporate organic matter into your vegetable garden</td>
<td>Dig hole now if you will be planting a “live” Christmas tree after the holiday</td>
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<td>Drain outdoor faucets &amp; hoses</td>
<td>Remove &amp; destroy gypsy moth egg masses</td>
<td>Store leftover seeds in a cool, dry place</td>
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**DECEMBER 2009**

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<td>Wipe the leaves of houseplants with a damp cloth to remove dust</td>
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<td>Allow soil of houseplants to dry out between waterings</td>
<td>Buying a cut Christmas tree? Read ► HG 45</td>
<td>Store fertilizer in solid containers to prevent rodent feeding</td>
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<td>Prune evergreens for holiday greens ► HG 84</td>
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<td>Turn compost bin - keep it moist</td>
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<td>Water young &amp; newly planted trees &amp; shrubs until ground freezes</td>
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<td>Store bird seed in metal trash cans with lids</td>
<td>Provide a source of fresh water for birds through the winter</td>
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<td>Avoid using fertilizers to melt ice. Use bay friendly methods</td>
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