Not Bad For A Bus Trip

According to Oprah, lots of people want to ride with you in the limo, but what you want is someone who will take the bus with you when the limo breaks down. Not having a limo to begin with, some Master Gardeners and 30-odd friends were happy to take the bus north last week to see some gardens.

Our first stop was at Fort Ticonderoga, not to ponder military maneuvers but to visit the King’s Garden, a name that goes back to a 1777 British map when the gardens provided food for the resident soldiers. Later, starting in the 1820’s, William Pell, the first private owner, created an arboretum and pleasure grounds. Today, the most prominent feature is the garden created in the 1920’s by landscape architect Marian Coffin. The generous space, with a reflecting pool, lawns and hedges, and formal flower beds, is enclosed in a magnificent red-brick wall that provides tremendous “bones.” Beyond the walls are a children’s garden, military vegetable garden, and Victorian greenhouse, all meticulously tended.

Back on the bus, we successfully crossed the border into Canada, where we had a date with The Montreal Botanical Garden. That evening, we strolled in the dark to the Magic of Lanterns show. Staged in the Chinese Garden, which is modeled on private paradises of the Ming Dynasty (1368-1664), the Lanterns draw thousands during their annual appearance around the pavilion, on the lake and amongst the trees. While there were literal lanterns, the showstoppers were 200 lighted figures, including pandas, elephants, birds, large cats of prey, palm trees, dancing humans and just about everything else in-between. Each figure is designed in Montreal but created from a framework and painted silk in Shanghai. While some in the group tutted that it looked like a miniature golf course, I marveled at the surreal beauty of this 3,000 year-old tradition.
If the Lantern Show was a bit of horticulture akin to Times Square, the next day, back at the B.G. we saw gardening Las Vegas style. Running from last June to the end of September, Mosaicultures is a prestigious international competition, staged every three years in a different worldwide city. Each of the forty-plus displays was created using plants, and is based on the broad theme “Land of Hope,” with various sub-themes encouraging peace and environmental awareness. Most of the plants used are rather small, including sedums, sedges, santolina and alternanthera, but some of the displays are huge. Mother Earth, several stories high, has one hand holding flowing water, the other supporting a deer. A towering beekeeper looms over a hive of bees the size of ponies. Gorillas, baboons, ducks and frogs of various scale represent endangered species, and an enormous tree covered in birds reminds us of the plight of our feathered friends. Some displays evocate specific stories, such as The Man Who Planted Trees, which features a large green shepherd carefully installing a seedling while his woolly sheep, fuzzy dog and galloping horses roam nearby. Not bad for a bus trip.
This season has been a challenge in the vegetable garden. Now, tomatoes that won’t ripen. As a youth my Grandfather taught me not to store the apples with the potatoes because the potatoes will sprout. Come to find out, ripening fruit gives off ethylene gas.

Ethylene is one of the five major plant hormones along with auxins, gibberellins, cytokinins and abscisic acid. Age and plant development determine when ethylene is produced and how it is used.

In years past, I've looked at how to control stretch on tomato transplants with apples. Apples give off ethylene. By enclosing the seedlings with apples for twelve hours, stretch was reduced. A small amount of ethylene (1-2 ppm) has a dramatic effect on tomatoes.

Green tomatoes will ripen on the counter covered with a piece of newspaper. Now if we add apples, will they ripen sooner? The answer is YES! A simple experiment done with two brown bags proves this out. Both held green tomatoes. One had a few wild drop apples. In six days the tomatoes with the apples are turning red. Not so with the other bag, it took ten days for the color to turn, but only on one tomato. Age and development of the fruit must also play into this.

Controlled ripening. The commercial producers do it by alerting the DNA of a plant or using growth regulators. We can ripen tomatoes sooner with a few apples. Should I spread apples on the whole crop? Probably not. Can I get ripe tomato earlier in the spring? We’ll see.

This bright little fellow looks like he might be more at home in Times Square than on a basil plant, but that is where Rensselaer County Master Gardener Barbara Nuffer found him. He turns out to be called the candy-striped leafhopper, Graphocephala coccinea, and he ranges from Canada to Panama. At only 5/16 of an inch big, he might seem unimportant, but this creature has been implicated in the spread of Pierce’s Disease, which causes the decline of oaks, elms and other tree species.
Buckeye Basics

It is fairly well known that Ohio is the “Buckeye” state, its residents are often called buckeyes, and The Ohio State University students and athletes are buckeyes of an extraordinary nature, but why the horticultural link? I was in Columbus, Ohio recently and I had a chance to explore the horticulture and the present usage of the term “buckeye” and I found the background rather interesting.

In the late 1780’s Ohio was a vast forested area inhabited by Native Americans who hunted deer for food and fur. Most noticeable on the deer are their large round brown eyes that are especially prominent on the male or buck deer. The Native Americans used a common forest tree, *Aesculus glabra* (Ohio buckeye), to make woodenware and baskets; its seeds were crushed and scattered into shallow stream pools where they would stun the fish and make them easy to catch. The seeds are large brown round nuts that contain a toxin called aesculin which is regarded as poisonous. The Native Americans would roast the nuts and then peel and grind them into flour as the roasting process removed the toxins. They called these nuts “Hetuck” which was their word for male deer as the nuts resembled the eyes of the buck deer, hence buckeyes.

As the early settlers inhabited the Ohio territory the spokespersons chosen had qualities that reminded the Native Americans of male deer and they were termed “Hetuck” - thus the simple beginning of Ohioans being known as buckeyes. Over time the seeds of the Ohio buckeye tree took on talisman qualities as many people carried them in their pockets for luck. Today necklaces of Ohio buckeye seeds are worn by fans at OSU football games to bring victory to the home team.

It is easy to confuse an Ohio buckeye tree for a horsechestnut tree as both are in the genus *Aesculus*. However, the species name of the horsechestnut is *hippocastanum* and the tree originates in Europe and Asia; the Ohio buckeye’s species name is *glabra* and it is native to North America. While they look very similar the bark qualities differ, with the Ohio buckeye bark grey and scaly with some cracks and the horsechestnut bark dark brown and smooth or broken into irregular plates.

Both have tall cream colored flowers in spring but the Ohio buckeye is less conspicuous than the horsechestnut; both flowers are important sources of nectar for hummingbirds. New cultivars of horsechestnut flower pink and are prized by homeowners, but most *Aesculus* suffer from leaf blotch issues that deteriorate the foliage as the summer passes, lessening the ornamental value. The seed drop is a messy issue if the trees are in an area that is mowed or near a sidewalk.

While Ohio buckeye and horsechestnut may not be a good choice for most homeowners as they get very large with a range of 40 to 80 feet depending on variety and conditions, a better choice for buckeye fanciers would be *Aesculus parviflora*, the bottlebrush buckeye. This is a shrub that grows 8 to 12 feet tall with a similar spread plus it has gorgeous upright whitish pink blooms in late spring that really attract pollinators. This is an underused plant that, like its relatives, prefers a moist soil rich in organic matter and slightly acidic. It is not fussy about sunlight and grows well as an understory planting and in dappled shade; a good choice zone wise for the Capital Region and upstate New York, bottlebrush buckeye may be the buckeye for you!
Cleaning up in the fall allows the gardener’s mind plenty of time to wander. As I was raking leaves and pulling out expired annuals recently, I came across a woolly bear caterpillar. Examining the brown and black bands, I struggled to remember – is a wide brown band an indicator of a harsh winter? Or is this creature telling me it will be a cakewalk through the cold? Finding no resolution in my own memory banks, I had to go inside and look it up.

The woolly bear (Isia Isabella) has a warm place in most people’s hearts, since it is not destructive, it doesn’t bite, and it’s cute to look at. Exactly how the legend of this insect’s ability to predict weather got started is probably lost in the mists of time. With bands of black bristles fore and aft, the width of brown band tells the story, wider predicting a milder winter. Individuals will vary, so finding several in your garden will leave you wondering which one to believe. The scientific method suggests adding your results and taking an average.

Woolly bears are active in the fall, looking for safe places to hibernate – unfortunately, no one warns them about crossing sidewalks and roads. At their top speed of 0.05 miles per hour, the far side of a road like Hoosick Street might as well be the moon. Those that live to see the new year feed a bit more in spring, pupate, then hatch into an Isabella tiger moth, which is a rather subdued beige with darker spots and stripes. There are two generations per annum. Their wide range of preferred food, everything from asters to maple leaves, probably keeps their damage from being noticed, helping them escape “pest” status and therefore the spray can. Woolly bears range from northern Mexico, throughout the US, and well into Canada.

Between 1948 and 1956, Dr. C.H. Curran, curator of insects at the American Museum of Natural History, measured the bands of the woolly bear caterpillars found at Bear Mountain in the lower Hudson Valley. His bears predicted relatively mild winters, and their forecasts came remarkably true. Since 1988, naturalists at the Bear Mountain State Park have been doing the same, and claim 80% accuracy. Some folks claim that it is the age of the caterpillar that determines banding, while others argue a correlation with rainfall. Either way, the reliability of this insect seems amazing.

And when you have an amazing insect, why not a festival? That’s what locals in Banner Elk, North Carolina, decided. Needing an annual event to spur excitement in the area, a merchant’s group got together to sponsor the first “woolly worm” race in 1978, with 63 caterpillars competing. The event has blossomed to attract 1,000 worm trainers, 140 vendors (can you imagine all the worm-related food?) and 20,000 attendees each October. First prize winners in the races, such as last year’s number one woolly, “Lickety Split,” take home purses of $1,000. That’s one talented bear!

For more information on the Woolly Worm Festival in North Carolina, see http://www.woollyworm.com/
It’s Not Easy Being Green:

Learning The Lessons From My Square Foot Garden

My square foot garden is ready for bed. But before I tuck it in and walk away, it’s time for an honest evaluation. I know once the plants are gone, the lessons will be forgotten. So, what worked? What didn’t? Why? And most importantly “whataygunnado about it?”

Let’s start with a positive. The fencing worked very well. Wrapping the two 4X4 beds and containers with a four foot high green mesh fencing shut down the free bunny buffet. Our “veggie” world is in our side yard and in plain sight, so it must blend in – and looks like it belongs being surrounded by lilacs, forsythia and in the shade of a magnolia tree.

Tomatoes were a partial triumph. Yes, we had a flood of red and orange cherry tomatoes that have been transformed into soup, sauce and oven roasted for future dishes. However, I planted plum tomatoes where I should have had sandwich tomatoes. A couple of BLTs would have been nice.

Over in beans and peas, their containers, complete with fencing for climbing, worked well. But I learned through yellowing leaves and meager yields that containers require more care…..and watering. You can’t count on Mother Nature. Next time I’ll have a watering schedule that will be tailored to the plant’s needs…..and stick to it.

The rainbow of salad greens….mesculin, spinach, leaf lettuce kept the crunch on the dinner table….but I didn’t plan for a second planting so the salad days were cut short.

The broccoli and Brussels sprouts were another hit and a miss. I planted. They grew. But I didn’t know enough about them. I had to go back to the book to find out when to harvest the fruits of the effort. I was too late for the broccoli…..but still harbor some hope for the sprouts. Thankfully, they have a longer growing season which means I have bit more time to get smart.

So “whataygunnado about it?”

Plan first. Plant second. I thought I knew what I was doing. After all, this is year three. I just charged in with a plant list and a sketch regarding placement. I did remember to consider the relative height of neighboring plants. Last year taught me carrots will not grow overshadowed by chard. I knew enough to give the tomatoes a change of venue.

Get smarter. But when it came to other veggies, I overdid it and under thinned it. Why didn’t I pay attention to Mel Bartholomew, the square foot garden guru? On page 109 of his book he told me that in one square foot section you can grow: one broccoli; one cabbage; one pepper plant. The next square can grow 4 leaf lettuce; 4 chard (do not plant next to beets! They look too much alike) 4 marigolds. You can plant 9 bush beans; spinach and beets in a square. And 16 carrots, radishes and onions.
Plant with a purpose. So, next time, I’ll know what I want to do. I won’t plant radishes or anything else we don’t eat on a regular basis. Maybe I’ll make one 4X4 garden a true salad garden complete with a re-planting schedule. The other plot? How about two types of tomatoes? Both cherry and sandwich style. That would leave me space for two pepper plants, 16 onions, carrots and beets.

Hey, next year is looking better already! But it won’t work unless I correct one root cause: commitment. This year, I wanted a veggie garden but I wasn’t committed to be the veggie gardener! In 2014 tending my garden needs to be a priority. Trying to sandwich the work in between other projects won’t cut it. I tried. I failed. So, before I plant in 2014, I have to learn more about the square foot gardening process and the specific needs of the plants I choose to grow. Then I have to be willing to plant, thin, weed, feed, water, harvest and nurture and take responsibility for raising my veggies and take pride in the process.

I think that just might work.

MUMS THE WORD!

Right on schedule, yellow school buses are making their rounds, there is a chill some mornings, and pumpkins are appearing at farm stands, marking the progression to fall. For flower lovers, that means mums. While I’m accustomed to buying potted mums for autumn displays, then unceremoniously dumping them on the compost heap when the snow flies, I know there is more to this plant, so I’ve turned to the National Chrysanthemum Society, USA, for answers.

The historical roots of the chrysanthemum are shrouded in the mists of ancient China. Writings from the 15th century B.C. indicate its use as an ornamental, as do mum motifs on Chinese porcelain. Despite (or maybe because) of the chrysanthemum’s pungent odor, it also found culinary and medicinal uses, with the roots boiled as a headache remedy, the sprouts and petals eaten in salads, and the leaves employed in beverages. By the 8th century A.D. the Japanese adopted the mum, using its image as a symbol for the emperor and prominent families. The Japanese celebrate National Chrysanthemum Day, also known as the Festival of Happiness. Dutch explorers may have been the first to introduce chrysanthemums into Europe in the 18th century, and John Stevens, of Hoboken, New Jersey, is credited with bringing in the “old purple chrysanthemum” to this country in 1798. By the 1930’s, scientists discovered that shortening the plant’s exposure to daylight could trigger the normally fall-blooming mum into flowering any day of the year, thereby providing the ability to schedule them as a crop.

Today, the mum is the number one pot plant grown in the US, chiefly because of its lasting ability, wide range of colors and flower forms, and ease of cultivation.

It all sounds rosy, but gardeners often cry, “Why aren’t my hardy mums hardy?” As usual in the horticultural world, the reasons are rather complex. First off, some mums just don’t come from very cold-tolerant stock. These are sometimes called “florist’s mums,” and have no chance of hacking it as perennials in the Hudson Valley. Next, consider that a chrysanthemum purchased in full flower in September, even if planted and watered properly, doesn’t have much time to establish a root system before winter comes knocking, thereby making survival next to impossible. The Chrysanthemum Society therefore suggests planting hardy mums in the spring. A sunny spot, with decent soil, a little fertilizer and water through the growing season might produce a plant that becomes perennial. If plants aren’t available in spring, fall mums might be coaxed to live through the winter if cut back and kept barely moist in a cool, frost free environment (some basements may do) and then planted in May.

University of Minnesota, which knows cold weather, also offers some tips. They say to plant mums in a sheltered spot, side-dress with a complete fertilizer in early August, and mulch after the ground freezes. Plant breeders have introduced a long list of truly hardy cultivars, so if you are serious about growing mums for keeps, check out their recommendations.

Text by David Chinery    Photo by http://www.hort.cornell.edu/4hplants/Flowers/Chrysanthemum.html
Each year, along about February or March I am always excited to get started planning a vegetable garden. I get a great deal of enjoyment from planning, growing and harvesting the garden. I especially like to grow potatoes since you get to nurture the plants all through the season and are amazed at the fantastic yields that you have at the end of the summer. I also love that this is a crop that you can store and enjoy through the winter months. For many years my variety of choice has been ‘Green Mountain’ an heirloom from the 1880’s that yields and stores well. This variety has become a little hard to come by and unfortunately I did not get my order together early enough to get my supply of ‘Green Mountain’.

Now every gardener knows that potatoes can be a real challenge to grow. Everyone has heard of late blight and of the great potato famine that it caused in the 1840’s which resulted in huge numbers of Irish immigrants coming to America to seek new opportunities. As if the diseases are not enough to contend with potatoes also have a few important insect pests that can take their toll including the flea beetle and most importantly the Colorado potato beetle. The Colorado potato beetle is quite interesting- it is native to North America and fed on a weed called buffalo bur. It was never a problem until potatoes were widely grown- indeed the potato gave this insect the food supply to achieve its genetic potential and become a major crop pest.

This year I thought I had a fantastic crop of potatoes. I got the tubers in early, the tubers did not rot despite the wet weather and I saw no sign of any of the insect or disease pests that I would see in a normal year.

So it was with great anticipation that I went out to dig potatoes in early August. I even was toying with the idea of entering some of my crop in the local fair if the quality was good.

I started by digging a row of yellow potatoes that I had left in my storage area this spring-yes, I broke the rules about only using certified seed, but I was thoroughly impressed with the yield and the size of these tubers, the quality was great.

Next I proceeded to the red potatoes which really are my favorites. The first few plants that I dug up looked great with large numbers and sizes of potatoes. Then I noticed the cracks in the skin. As I continued to dig just about all of the potatoes had cracks in the skin. I moved into the next row of white potatoes and had the same problem.

Now I started to question what had gone wrong. Since the symptoms were fairly widespread among the varieties I had grown I decided that it was most likely a physiological problem of the potato plants. As I researched some of our printed resources as well as on-line resources I decided that the issue was most likely skin cracking, which is caused by inconsistent watering. This made sense to me since I rely on natural rainfall in my garden and rarely water. When these potatoes were planted the ground was extremely wet but at the time that the tubers actually formed it was a bit drier. Apparently this type of condition causes the tissues in the tuber to grow at different rates- that is the inside of the tuber is expanding more rapidly than the tissues on the outside of the tuber resulting in splits as shown in the pictures. When I first dug these tubers the cracks were quite narrow and you could see the white flesh on the inside. You can see that now, after about a month of storage time the cracks have healed over and although these potatoes will not win any beauty prizes they still taste good and they seem to be storing fairly well. Let this be a lesson- it is not only insects and diseases that can cause problems in the garden but also the interaction between how we manage the plants and the type of weather conditions that we experience. Even though my potato crop won’t win any beauty prizes this year I still got some good yields and will get to enjoy the produce from the garden through the fall and early winter. For more information on physiological problems of potatoes check out the University of Nebraska-Lincoln web site at http://cropwatch.unl.edu/web/potato/cracking

Text and photos by Chris Logue
This month’s photos come from Rensselaer County Master Gardener Beverly Reinhardt. She writes, “Every August my family goes to the Adirondacks for a camping vacation at Putnam Pond near Ticonderoga, NY. We love to hike to small ponds to swim and picnic. These fungi were just too beautiful to walk by and not take pictures.”
What to do in October?

The best way to beat a sudden chill? Stay busy. As gardeners we shouldn't have much trouble staying warm this month. Let's see what some of our options are.

Around the garden:
* You could start by thinning out one-third of the oldest branches of forsythia, lilac, spirea, and potentilla. They'll shape up better in the spring.
* Forget about cutting back ornamental grasses, sunflowers, and wildflowers—leave them for winter interest and for wildlife.
* Don't remove chrysanthemum foliage—leave it to protect the crown.
* Cut back other perennials (except spring bloomers, roses, and grasses) to a few inches above soil level.
* Prune tea roses back to 8 to 12 inches high, mound compost around the bud union, then cover with a rose cone.
* Once the tops are killed off by frost, collect gladiolus, calla, and cannas bulbs and store them indoors.
* Plant spring bulbs, such as tulips, daffodils, and hyacinths.
* If you want to overwinter your geraniums indoors, dig them up this month.
* Pot up some paperwhite bulbs for holiday forcing.

In the vegetable arena:
* Continue harvesting root crops from the garden; they're often best after a frost. Mulch them if you intend to store them in the garden to harvest throughout the winter.
* Plant garlic and shallots 2 inches deep and 4 inches apart; mulch with 6 inches of straw or shredded leaves.
* If you have an asparagus bed, top-dress now with manure or compost.
* It's time to plant winter rye as a cover crop on any empty vegetable beds.
* And there's still time to haul in a pot of parsley: Pot it, water well, and set in a bright window.

And if you need more:
* Be sure to water trees and shrubs so they don't dry out before the ground freezes.
* Collect leaves to shred (with a shredder or mower) and compost. Be sure to pick up and compost all fallen fruit from trees or vegetable plants. This will reduce the amount of pest and disease issues you'll have to contend with next year.
* Dig the hole for planting live Christmas trees now—before the soil freezes.

And, when it comes to the lawn? If it grows, you mow.

Text by Don Maurer. Photos by David Chinery
“Frost is gold in the morning, silver in the afternoon and lead at night.”

John Shute Barrington, 1st Viscount Barrington (1678-1734)

Gardening Questions?
Call The Master Gardeners!

In Albany County: Call 765-3514 weekdays from 9:00 AM to 3:00 PM and ask to speak to a Master Gardener. You can also email your questions by visiting their website at www.ccealbany.com.

In Schenectady County: Call 372-1622 weekdays from 9:00 AM to Noon, follow the prompt to speak to a Master Gardener and press #1. You can also email your questions by visiting their website at http://counties.cce.cornell.edu/schenectady/.

In Rensselaer County: Call 272-4210 Tuesdays and Thursdays from 9:00 AM to Noon and ask to speak to a Master Gardener. You can also email your questions to Dhc3@cornell.edu.

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