

October 2016

Volume 11, Number 9

Root Concerns

Notes from the underground

The Maine Event



Lobster, scenic seaside views, mild late summer weather – all pretty good, right? Just add in a fantastic garden and I call it great. A summertime trip to seaside Maine has always rated high on my list of good things, and now with the Coastal Maine Botanical Gardens (CMBG) gracing Boothbay, such a sojourn is even better. I'm just home from a bus trip with 49 of my now closest friends and can report that a journey there from anywhere is worth it.

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Botanical gardens are usually operated by a large city, state, or university, but CMBG started as the dream of a small group of mid-coast Mainers. Meeting for the first time in 1991, these “Founders” believed their state needed its own floral showcase, so they created an organization and started looking for a site. In 1996, they acquired 128 acres along the shores of Back River which had been slated for a housing development. Saving this beautiful landscape, home to over 300 native plant species, was itself a gift to Mother Earth. By putting up their own funds (some even using their homes as collateral) and working countless hours, the Founders opened the facility in 2007. In 2014, the garden welcomed a record 100,000 visitors and had grown to 270 acres. Today, not ten years from the start, it is a must-see destination capable of entertaining anyone from the studious avid gardener to a normal civilian interested in a stroll.



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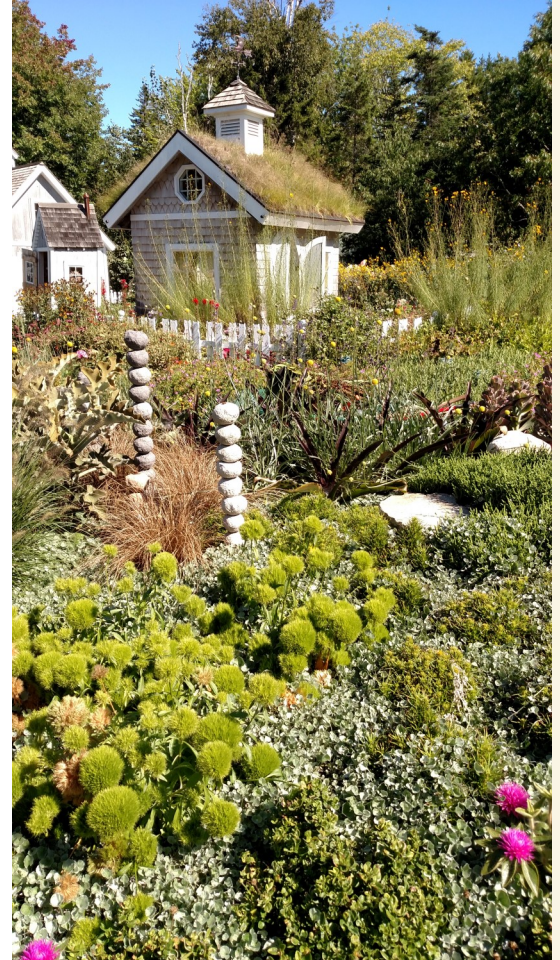


Given that we must be “back on the bus” in just five hours and with a lecture by Director William Cullina a must-see, I knew I couldn’t do it all. I zipped through the “green” visitors center (missing the gift shop and art exhibits) and also decided the rhododendron



garden could be sacrificed since the calendar said September. Descending the rugged trail through the Haney Hillside Garden, I heard loons calling from Huckleberry Cove. I paused at the Vayo Meditation Garden, where granite boulders from all over Maine serenely survey a granite basin, gave a nod to the Pine Cone Sculpture and checked out Fairy House Village. Retracing my steps back up the hill, I then spent most of my time in the Central Gardens. Here one finds the Great Lawn, Children’s Garden, Garden of the Five

Senses, Kitchen Garden, Forest Pond, Bog, Maze Lawn, Perennial and Rose Garden, Spouting Whales and Sal’s Bear. Bring your jogging shoes and prepare for a horticultural workout.



While some botanical gardens I’ve visited come off as stiff and boring, from a design perspective CMBG is spicy eye-candy. Plants are used dramatically, with high contrasts in color, height and texture. Large sweeps of several species are accented with one example of a bold, eye-catching plant. Since William Cullina is a native plant guru, having



written several authoritative texts, I was surprised that natives are joined by a cosmopolitan plant palette from around the world. With cool summers, relatively warm winters and ample moisture year-round, we now know the abundance that can grow in Maine. Thanks to you, Founders!



All-American Asters



Everyone appreciates the fall color. But below the scarlet oaks, flaming maples and shimmering ashes, the herbaceous plants put on quite a display, too. October belongs to the wild perennial asters, which light up roadsides and embolden abandoned fields. While many of our “wildflowers” are invaders from other countries, these beauties are all-American, and some fancier types are finally making it into gardens.

It took a little prod from the English for this to happen. They have been growing our native New England aster (*Aster novae-angliae*) and New York aster (*Aster novi-belgii*) for years, and calling them “Michaelmas Daisies.” Since Michaelmas is not a blow-out holiday here on this side of the pond (although, if Madison Avenue discovers the marketing possibilities, it may be coming), it almost seems we’ve lost our own plants to the Brits. Michaelmas, a feast day celebrating St. Michael held on September 29, is about when our asters start to bloom in England.

But we are also to blame for neglecting these plants. Nurseries have long found that native perennial asters lacked (here we go again) marketing potential. After all, they’re just green and vaguely weed-like for much of the year. Until recently, garden centers were deserted in the fall, so customers weren’t around when they bloomed. Gradually, however, the word has gotten out, with little advertising fanfare, how good they really are.



As with any plant, there are a few caveats. Some types tend lose lower leaves to powdery mildew and other diseases, so it is best to grow them behind shorter plants. Too much height and flopping at flowering also can occur. Luckily, native perennial asters are adapted to pruning and pinching to keep them well groomed. By cutting back by one-third to one-half in early to mid June, the flower show is enhanced and the plant reaches a sturdier, and lower, height. Pruning later will delay flowering by a few weeks and may reduce the number of flowers produced. This resiliency paid off in my garden when a falling trellis demolished a purple hybrid aster one spring. Despite pruning to almost ground level, it sprang back to life and bloomed beautifully the following fall.



While the natives are pretty, the cultivars are better. A personal favorite is ‘Alma Potschke,’ with strong pink flowers on a three to four foot tall plant. ‘Honeysong Pink’ is a paler pink with bright yellow centers growing to about the same height. One which grows shorter naturally is ‘Purple Dome,’ which becomes a two foot mound covered with dark purple/blue flowers. Another good performer for me has been ‘Schone Von Dietikon,’ less than three feet with medium blue petals. Unfortunately, while this Teutonic-inspired plant seems popular in England and Europe, it’s harder to find here than a case of German measles. A selection which I have not seen but sounds intriguing is ‘Winston Churchill,’ three feet tall with fiery red flowers. As Winston might have said about getting Americans to know asters, “Never, never, never give up!”

A Garden of Amazement

This year we have seen some amazing things our flowers or plants have done. It's been interesting how the freckle-faced lilies have mutated over the years. When we bought them many years ago, they all had the signature "freckles" on orange petals. By the way, you may know them as

blackberry or leopard lilies. Gradually the petals have changed, and now some flowers are just yellow and some are pink with yellow stripes in the center, and some still have their freckles. Each year the change becomes more pronounced.



We planted peas along the chain link fence and a few weeks afterward we put in morning glories, both bluish-purple and red. The pea plants are long gone, leaving the morning glories to climb up the fence. Right in the middle of a strip of the former color is a beautiful, twice-as-large light blue one. And the densest portion of flowers is where the biggest patch of peas was. The flowers probably loved the nitrogen from the peas. About two feet in front of the fence we planted zinnias, and some of the morning glories have reached their tendrils across the span to twine around them.

Last year we had petunias in the pool-tub-turned-flower-pot, but this year we put in pansies. Growing in the less than eighth-of-an-inch space between the pavers just below the tub, are three petunias blossoming away.

We always bring our amaryllis outdoors for the summer to grow and flourish so they can produce flowers in the winter. One has decided it didn't want to wait and now has a stalk with four beautiful flowers on it.

Our vegetables really grew this year with tomato plants taller than I am. My husband, Ralph, added some composted cow manure we purchased to the soil before he planted seeds or plants. They all responded very, very well. The cabbage heads were huge, and the winter squash plants have more squash than usual. And, of course, the zucchini flourished! I have quite a repertoire of recipes as a vegetable, as well as using the ones that got away for bread. Isn't it amazing how they can grow overnight from four- or five-inches long to baseball bats the next morning??



Text by Schenectady County Master Gardener Jean Cook

Coffee(tree) Time



wikipedia.org

Mention Kentucky and the mind travels to coal mines, fried chicken, festive spirits and The Derby. Gardeners might add Kentucky bluegrass, one of the best species for local lawns, even though scientists say it's native to northern Africa, Asia and Europe, too. Chances are, Kentucky coffeetree (*Gymnocladus dioica*) would cross few people's minds. Like many of the other endless problems we hear about each day, this is something we ought to change.

Adaptable to a wide range of soil and environmental conditions, including the ravages of the city, most Kentucky coffeetrees grow to about 75 feet high. The foliage is unique – each leaf, which can measure up to three feet long, is composed of dozens of small leaflets, in an arrangement botanists call “bipinnately compound.” This gives the tree a distinctive texture from afar, and when the leaves drop in autumn, the branches appear starkly bare and clumsy. The gray-brown bark is hard, scaly and recurved, described by my Rutgers professor Doc Hamilton as having “spoon-depressions.” To visualize this, remember the dregs of mashed potatoes you mused around on your childhood dinner plate. As if all this character weren't enough, mature female trees produce giant, leathery pea-like pods of about ten inches. According to the oft-told story, the dark brown, circular seeds inside were processed by early settlers into a pseudo-coffee. I've never read historical accounts of this brew's taste, but it may be telling that Starbucks has not offered it on their menu, yet.

Truth be told, these settlers were lucky they didn't drop in their wagon tracks, since the leaves, pods and seeds of Kentucky coffeetrees are quite poisonous to both man and beast. Cattle have been poisoned by drinking from pools contaminated with the fruits. Scientists propose that roasting the seeds over a campfire allayed the toxic cytisine inside, sparing the unwary pioneers, but I think I'll stick to Sanka while out on the trail.



uky.edu/hort

Although *Gymnocladus* ranges from Ohio west to Oklahoma, Kansas and Nebraska, nowhere is it common. Why so? Travel back to the Pleistocene, and we see Mastodons munching on the seedpods of Kentucky coffeetrees. Their stomach enzymes could melt the notoriously hard seed coats, allowing the seeds to sprout happily in a pile of nutritious dino-dung. Fast forward back to today, when no known animal eats these pods. New trees only appear near their parents, having no animals to scarify and transport the seeds. Since the coffeetree has never become a darling of gardeners or the nursery industry, this could be a species doomed to fail.

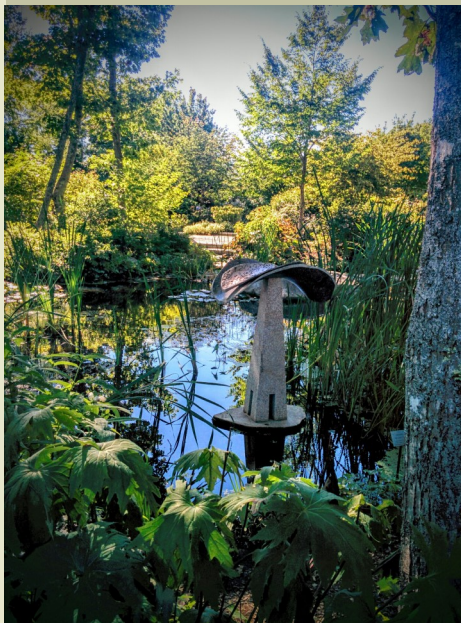


sewanecherbarium.files.wordpress.com

Luckily, a few people care. The Minnesota Landscape Arboretum has promoted several forms, including one called 'Stately Manor,' a fruitless male for those who insist on less mess on the ground. The Brenton Arboretum in Dallas Center, Iowa, is assembling a living collection, and seeds have been stored in the North Central Regional Plant Introduction Station seed bank. I've grown my own seedlings and enjoy three trees in my side yard. Let's celebrate our native flora and rescue this great American from obscurity.

Text by David Chinery

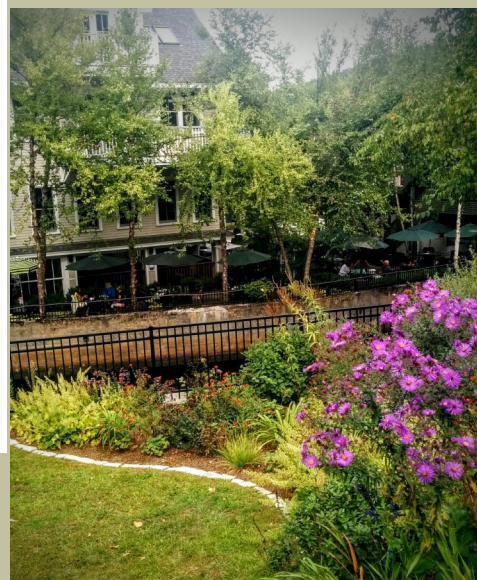
Green Shots: The Gardening World in Pictures



This month's photos come from Master Gardener Mary Lee Kopache. She writes, "Bewitched Master Gardeners visiting early Autumn gardens in Maine, New Hampshire, Vermont and locally discovered form and texture had cast their magic spell! Spirals, spheres, triangles, crescents, rectangles, cylinders and symmetrical and parallel images - some engineered by nature, others by humans - can be found in this month's photos.



Textures abound, also, many judiciously used and some in surprising ways, as in the meditative garden's spiral walking path of decreasing size, smooth hard river rocks which unconsciously encourage the barefoot visitor to 'retreat within' as the mind detects the pressure changes underfoot! Which forms and textures can you find? Happy H(a)unting!"



What to do in October?



Clean

Clean all material from gardens.

After a frost, cut back herbaceous perennials to 3 inches. Leave woody perennials like lavender until spring, and ornamental grasses and sunflowers for winter interest and birds.

Remove and discard diseased foliage.

Recycle other garden debris and compost.

After raking, shred leaves into leaf mulch.

Plant

Plant spring blooming bulbs such as crocus and daffodils.

Continue planting garlic.

Divide spring and early summer blooming perennials.

Plant deciduous trees and shrubs, which will be on sale at garden centers.

Mulch trees to retain moisture, and keep them well-watered..

Dig

Dig canna, dahlia, and caladium tubers, and other tender summer blooming bulbs. Clean and store in a cool, dry place.

Dig and pot annual geraniums if you want to overwinter them in the house.

Dig a hole if you will be planting a live Christmas tree.

Prune

Thin out one-third of the oldest branches of forsythia, lilac, spirea, and potentilla shrubs for better bloom and shape in the spring.

Prune old wood and crossed branches in trees.

Protect

Winterize broadleaf evergreens such as rhododendrons and holly with an anti-desiccant such as Wilt-Pruf to reduce moisture loss.

Roses

After a hard frost, mound additional soil around the crown of hybrid roses.

Add mulch after the ground freezes in late November.

Do not prune until spring.

HELPING PLANTS COPE WITH DROUGHT

We would all agree that plants need water to survive but for their caretakers, gardeners, how much water to give them is often a point of confusion. The rule of thumb is that most plants need an inch of water per week during the growing season. Some exceptions are newly planted material, vegetables, and annuals, especially those growing in containers. These plants will require more vigilance and more water to help them grow roots and get established. In the Capital Region in the past gardeners could count on consistent and generous amounts of rainfall in the spring and fall. A few years ago that pattern gave way to a new model of less consistent rainfall but one that is very intense when it does occur. Our area is experiencing extreme dryness but the central and western regions of New York State are in a drought. Small plants and shrubs dehydrate and die without water and if they survive, the following season's growth may be affected by poor flowering or fruiting. While established trees appear to soldier on, they too feel the effects and damage often appears the following season. Deciduous plants (those that drop leaves in fall) often drop green leaves in summer to help compensate for the dry conditions. Quite simply, what they cannot maintain, they lose. Secondly, leaves may become scorched around the edges as the dryness persists. But what if this pattern becomes the new normal for us in upstate New York? Here are a few tips to help you to help your plants deal with dry conditions and a changing climate.



When purchasing new plants, look for the words 'drought tolerant' on the label description. Most native plants will have this quality and will offer more habitat and food sources for insects and birds than exotic imported plants.

Do not use overhead irrigation as it wastes water and can foster disease. Gentle drip irrigation such as soaker hoses is the best method for plants and trees. Remember that established trees will need deep watering if there is no appreciable rainfall in several weeks.

Evergreen shrubs and trees need an inch of water a week up until the time that the ground begins to freeze, usually late November. This is very important to help the evergreens manage moisture loss through their needles during the winter and periods of low wind chill factors.

Mulch with 2 inches of shredded hardwood, or a similar natural product, being careful not to have mulch up against tree trunks. Mulching should be one of the last chores of the fall. It will conserve moisture in summer and insulate in winter and it suppresses weed growth. The added advantage is that as the mulch ages and degrades into organic matter, it enriches the existing soil. More is not better in regards to mulch and "volcano" mulching (excessive mulch mounded up and around a tree) is taboo.

Install a rain barrel to collect run-off from a roof. This water can be used for any watering except vegetable gardens. If you are looking for a rain barrel, consider the Albany County Soil and Water Conservation District. To purchase a rain barrel, call 765-7923 for details.

Keep a garden journal to record what climate changes you are dealing with and what you are doing to mitigate them. The long term outlook is for an increase in summer temperatures that will result in more days over 90 degrees. That is hot for humans and plants alike!

TEXT BY SUE PEZZOLLA

Roots and Wisdom: Summer 2016



Roots and Wisdom is a youth agriculture and community service program that brings together urban, suburban, and rural Schenectady County residents (particularly youth) to grow organic vegetables for sale and donation within Schenectady County. The 2016 season has been a year of learning and growth! Our growing season was a great success. The Summer Crew and program volunteers worked very hard to make it all possible.

This season there were 20 Crew Members, four Crew Leaders, and one incredible supervisor (Hassleer)! One of the returning crew members also acted as our Harvest Share Manager and controlled the quality, as well as the quantity, of the vegetables that were harvested.



It was incredible to see the growth of our Crew and watch everyone open up as they began to learn more about each other. In addition to weeding, seeding, harvesting, fertilizing, and selling vegetables, we listened to several presentations on topics such as Urban Agriculture, Nutrition, and Banking. The Crew also took a mini-field trip to the Central Park Rose Garden to observe the beautiful roses and layout and observe a different type of gardening.

We also had the opportunity to use vegetables from our garden to make delicious foods. The dishes created included zucchini noodles and pesto, sautéed vegetables and pasta, vegetable casserole, and ratatouille. All the dishes were delicious and we got to try many vegetables and new foods.

My experience at Roots and Wisdom has helped to further my passion for environmental sustainability. This summer has given me a new perspective on sustainable agriculture and the amount of commitment that lies behind it. In the future I hope to be able to visit and continue to see it grow and inspire others!



Text by Olivia Golden, Skidmore College Summer Crew Leader Intern

*“My garden will never make me famous,
I’m a horticultural ignoramus,
I can’t even tell a stringbean from a soybean,
Or even a girl bean from a boy bean.”*

Ogden Nash
(1902-1971)



Gardening Questions?

marksrichardson.files.wordpress.com

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 from 9:00 AM to Noon on Mondays and Thursdays, 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 from 9:00 AM to Noon on Tuesdays and Thursdays and ask to speak to a Master Gardener. You can also email your questions to Dhc3@cornell.edu

Cornell Cooperative Extension of Rensselaer County

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“Root Concerns: Notes from the underground” is a shared publication of Cornell Cooperative Extension of Rensselaer, Albany and Schenectady Counties. It is published by Cornell Cooperative Extension of Rensselaer County.



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**Upcoming Classes at the Sustainable Living Center (Greenhouse)
180 Ptl. Arthur Chaires Lane (Central Park) Schenectady**

**Natural Skincare Products from your Garden:
For holiday gift giving and personal use. December 1, 6 - 8 PM**



Join Master Gardener Melissa Mackinnon to learn how to make simple, high-quality skincare products from plants you can grow in your garden. Participants will learn about herbal oils and hydrosols, and will make a calendula cream for face and body as well as the world's oldest commercial facial toner, *Queen of Hungary's Water*. Great for ages 15 and up.

Cost: \$15 per person and includes two jars of cream and toner to take home.

Pre-registration and payment is required by November 28, 2016.

Individuals with special needs requiring accommodation should contact the Cornell Cooperative Extension, Schenectady County office, 518-372-1622, prior to the program or activity.

Children's Class: Birdseed Feeders, December 10, 10 - 11:30 AM

Invite and entice winter birds to your yard with these lovely feeders. Under the direction of Extension Educator Angela Tompkins, each child will make three feeders in a decorative shape, that can be given as gifts or kept so they can watch birds enjoy the fruit (seed!) of their labor. The class is designed for children ages 4 and up, and an adult must be present to assist the child.

Cost: \$10 per person, with no charge for person assisting.

Pre-registration and payment is required by December 5, 2016.



Individuals with special needs requiring accommodation should contact the Cornell Cooperative Extension, Schenectady County office, 518-372-1622, prior to the program or activity.



Holiday Table Centerpiece, December 10, 2 - 3:30 PM

Bring a decorative holiday touch into your home with an elegant table centerpiece. We will combine an assortment of fresh flowers, aromatic evergreens, pinecones and candlelight to create a beautiful seasonal centerpiece.

Cost is \$20 per person and includes all project materials.

Pre-registration and payment is required by December 5, 2016.

Individuals with special needs requiring accommodation should contact the Cornell Cooperative Extension, Schenectady County office, 518-372-1622, prior to the program or activity.

Winter 2016 Classes Registration Form

Name(s) of Participant(s): _____

Address: _____

City/State/ZIP: _____ Phone: _____

Class Choice:

_____ Natural Skincare Products from your Garden (\$15 per person)

_____ Children's Birdseed Feeder (\$10 per person)

_____ Holiday Table Centerpiece (\$20 per person)

Amount Enclosed: \$_____ **Please make check payable to CCE,SC and mail to:**

**Cornell Cooperative Extension, Schenectady County, 107 Nott Terrace, Suite 301
Schenectady, NY 12308-3170**

Questions? Please call 372-1622, ext. 240 and speak with Grace.

Class sizes are limited, so register early!

If you would like to be added to our email address book to receive future class information by email, please give your email address: _____