Summer can be a momentous time. Take 1967’s Summer of Love, when the Hippies were at their height. The Summer of ’42 was a 1971 movie I never saw, and then there’s the Summer of George (Seinfeld’s sidekick), when even more than usual goes wrong for Costanza. I’m declaring 2017 the Summer of Tar Spot, a maple blighting disease causing concern among today’s flower children, a.k.a. concerned gardeners.

Although I am tempted to blame this problem on The Man, plant pathologists tell us it is caused by a fungus called *Rhytisma*. The tale begins with very small yellow spots appearing on the leaves of susceptible maples in June. As these spots enlarge, small black dots appear in the yellow. As summer progresses, the small black dots coalesce into large ones, up to an inch and a half in diameter, making the foliage look rather ghastly. Soon, the ugly leaves start prematurely shedding from the tree, weeks before normal autumn leaf drop. Early defoliation gets some people perturbed about the fate of the tree, others annoyed because leaves are on the lawn, but either way eyebrows are raised. Fortunately, there are two pieces of good news.

First, tar spot doesn’t usually impact sugar maple, a species of tremendous value locally, and while it can infect silver and red maples, it particularly loves Norway, a tree we no longer recommend because it is invasive. Additionally, even heavily spotted Norway maples usually don’t show lasting damage from this plague. For those who want to take action, the recommendation is to rake and destroy the infected leaves, or at least remove them from the site. Leaves can be shredded and piled, but the pile should be covered or turned in the spring, as the trees re-leaf, to prevent the travel of spores to
the new foliage. The fungus would likely be destroyed if the leaves were broken down in a hot compost pile. To be effective, fungicides can be applied in spring, but are usually cost-prohibitive and environmentally unjustified.

Tar spot is a fickle creature, causing a hullabaloo some years and barely showing a spore in other seasons. It was first thoroughly described as being in New York in the 1980’s by Cornell plant pathologist George Hudler. I attended talks given by Dr. Hudler on this novelty, where his enthusiastic teaching style and love for science infected us with zeal for tar spot. Norway maple was widely planted in upstate communities as a replacement for diseased elms, so when tar spot bubbled up, many towns faced round two of tree trouble. 1991 was also a heyday for *Rhytisma*, with even the *New York Times* covering the spots, but in recent years the disease has generally kept a low profile.

Weather plays a tremendous part in the success or failure of plant pathogens, and this spring’s rainy periods of required air temperature dealt a trump card to tar spot’s hand, allowing it VIP access to maple foliage. Let’s hope for a change in the wind next spring.

**Thalictrum and Cimicifuga**

*Thalictrum and Cimicifuga,* married for life:
"I love your filigreed purply curls."
"I love your pompous white spikes."

Look at them swaying there out in the wind,
bowed by the nastiest weather:
always reverting to genus
and always together.

By Johnathan Galassi and found in *The New Yorker*
My how things change. Not that long ago, a plant like our native Joe-Pye weed was rarely invited into perennial gardens, considered too coarse to be of interest. Then came the native plant folks, the pro-meadow movement and the anti-invasive coalition. We’ve learned that there is value in growing the plants which have been here for eons, and that we don’t have to bring in foreign flora to have beautiful gardens. I also give Joe-Pye kudos for being tall (five to seven feet or higher), bold, and easy to grow. My patch doesn’t require staking or spraying, and only occasionally do I have to yank a little out to keep the peace.

According to internet lore, the original human Joe Pye was either a Native American healer or a white Indian enthusiast. Either way, he lived in 19th century New England and his name stuck to this plant which our ancestors assigned many uses. Hollow-stemmed Joe-Pyes (the plants) were used as drinking straws and blowguns to apply medicine. Some natives ate the “love potion” roots while speaking to an intended, presumably so they would say the right thing, while others thought of the flower as a good luck charm. More seriously, Joe-Pye weed was employed to promote sweating, as a pregnancy tonic, for rheumatism and gallstones, and as a diuretic. A pregnant woman who turned ill from smelling a corpse was told to bathe in water steeped in Joe-Pye. Dried leaves, when burned, were said to repel flies. None of these uses are part of today’s dating, medicinal, or pest control scenes, however, and I’ve yet to see Joe-Pye on an Infomercial, so it appears that the modern world has passed its potential by.

Trying to figure out the botanical classification of Joe Pye weed is enough to induce sweating, rheumatism and gallstones. They’ve recently been taken from the genus *Eupatorium* and re-assigned the name *Eutrochium*, and botanists now recognize more species and subspecies than previously. Fortunately, you can still grow Hollow Joe-Pye, Spotted Joe-Pye, or Sweet Joe-Pye, whether you go au courant and call them *Eutrochiums* or old-school and stick with *Eupatorium*, the plants don’t care. All have leaves arranged in whorls up the long tall stems, and all prefer moist soil in a sunny environment. They like cool summer evenings and don’t mind harsh winter temperatures, so they are ideal plants for the Capital District. Small pinky-purple flowers are arranged in flower heads, which in turn are combined to make an impressively large inflorescence.

I have two large clumps at home. The more spectacular one I believe is *E. maculatum*, spotted Joe Pye weed, which has stems with purple speckles and darker green leaves than my other plant, which might be *E. fistulosum*, hollow Joe Pye weed. Spotted has more flowers in each flower head and larger flower clusters, too. Few pests plague this plant, aside from the occasional leaf-eating larva and some leafminers, and the butterflies love it. Perhaps they remember the folklore and need a diuretic.
Blueberry Season

It’s blueberry season in upstate NY and if you haven’t had the opportunity to visit a blueberry farm to pick your own or purchase some berries, now is a great time. Some varieties of blueberries produce fruit as early as the Fourth of July all the way through Labor Day.

The Schenectady County Master Gardeners recently visited Blueberry Hill Solar Organic Farm located in Galway, NY. The owners of Blueberry Hill, Laura Hess and Jeff Feero, have been operating a U-pick farm for just over ten years but, they discovered the blueberries on the property were planted in the 1950’s. Laura said right after they bought the land, people starting asking, what are you going to do with all the blueberries on the property? They didn’t realize how many bushes were hidden under the overgrown areas of the farm until they began exploring. Ten years later they have over 200 blueberry plants that are just full of fruit! She explained that they do not use any synthetic products on or near the plants to control weeds or insects, and they are very conscious about cleanliness when they pick, keeping the berries and plants as clean and healthy as possible. Laura demonstrated the best way to pull the berries off the trees using your thumb and forefinger to roll it into the palm of your hand. U-pick containers that strap around your waste are also available to customers.

If you are interested in growing blueberries at home, there are some important things to consider before you get started.

Soil and Site Selection

Soil is the first thing to investigate before purchasing any plants. Blueberries love acidic soil. Without the correct soil pH, bushes become unhealthy and produce little fruit. Contact your local Cooperative Extension for instructions on how to take a soil sample to test for soil pH. The ideal pH is around 4.5-5.0. If the soil pH is not in this range, they can advise on how to adjust it. Blueberries also require well drained soils. Adding organic matter, such as compost, aids in moisture retention and
improving soil texture and overall health! If the soil pH is above 5.0, regular fertilizing each year with ammonium sulfate will keep the soil pH acidic. Do not use aluminum sulfate on blueberries. Mulching around the plants helps to keep down the weeds and aids in moisture retention. Wood chips, shredded leaves or straw are all good options for mulch.

Pick a sunny location and avoid areas that are frost pockets. Blueberries produce well in the sun, but can tolerate some shade.

Watering, Pruning, and Pollination

Blueberries are shallow rooted plants and need plenty of water during the growing season. An inch of water a week is the best rule of thumb.

Blueberries require regular pruning to produce high yields of fruit. Pruning helps to ensure a long life for your plantings. The best time to prune is in the late winter or early spring. Prune out the dead limbs, anything that looks weak or diseased and the old wood. Visit Cornell Guide to Growing Fruit at home for images of the best way to prune blueberries, or contact your local extension.

Blueberries do not require cross-pollination to produce fruit but planting at least two cultivars will increase yield. Bumblebees and other native insects are enthusiastic pollinators of blueberries; the more insects working the plants, the more fruit you will harvest!

Like all plants, blueberries can have pest and diseases to contend with. Rabbits and birds can be a nuisance. Cage blueberries or use fencing to keep the rabbits away. While the berries are ripening, bird netting held above the plants is effective in keeping the birds out. A recently introduced pest called the spotted wing fruit fly will attack blueberries and other fruits. The adult fly inserts its eggs into the ripening fruit. The larvae feed on the ripening fruit, damaging it. Some other pests include the blueberry maggot, borers and scale. Anthracnose, twig blight, and cankers are some diseases to be on the lookout for.

In addition to the tasty fruit, blueberries make a great landscape plant. They don’t require a lot of space or maintenance and produce fruit just after a couple of seasons, reaching peak production after 8-12 years. Blueberry plants produce small white bell shaped flowers and the leaves turn a beautiful red color in the fall. They are a great replacement plant for burning bush, which now is considered an invasive plant.
Choosing Blueberry Cultivars

There are lots of blueberry cultivars ideal for growing in NY State. Before you choose, know the climate zone where you reside. Cornell’s “Guide to Growing Fruit” suggests the following:

Earliblue—hardy in Zones 5 to 7. Berries are large with light blue skin and have a soft flesh and mild flavor. The fruit does not shatter (drop easily) from the bush, and it is resistant to cracking. Plants are vigorous, productive, upright, and well-shaped.

Duke—hardy in Zones 5 to 7. This productive newer variety from New Jersey has large fruit with good flavor.

Blueray—hardy in Zones 4b to 7. Berries ripen in early midseason and are crack resistant and very large with medium–light blue skin, firm flesh, and a strong flavor and aroma. The plants are upright, spreading, and consistently productive. It overproduces (produces too much fruit, weakening the plant) unless carefully pruned.

Patriot—hardy in Zones 4 to 7. It is partially resistant to phytophthora root rot and has excellent-tasting fruit. The plants are vigorous, productive, open, upright, and smaller than other cultivars.

Berkeley—hardy in Zones 4 to 8. Berries are very large and light blue and have a mild flavor and firm flesh. Berries ripen in midseason, store well, resist cracking, and do not shatter from the bush. The plants are vigorous, open, spreading, and easy to grow.

Bluecrop—hardy in Zones 4b to 7. Berries are medium large and have a light blue skin, an excellent flavor, and firm flesh. Berries shatter somewhat from the bush, but they resist cracking. The plants are vigorous, consistently productive, spreading, and drought tolerant.

Herbert—hardy in Zones 5 to 7. Berries ripen in late midseason, are very large and medium blue, and have tender flesh and a very good flavor. They resist cracking and do not shatter from the bush. The plants are consistently productive, vigorous, open, and spreading.

Darrow—hardy in Zones 5 to 7. Another variety with exceptional flavor for the home gardener.

Jersey—hardy in Zones 4 to 8. Berries are medium sized with medium-blue skin and firm flesh. They keep well, resist cracking, and have a good flavor. The plants are vigorous, productive, erect, and easy to prune.

Coville—hardy in Zones 5 to 8. Berries are large and aromatic with medium-blue skin and a tart flavor. They do not shatter from the bush. The plants are productive and late ripening with vigorous, open, and spreading growth that is easily pruned.

Lateblue—hardy in Zones 5 to 7. Berries are late ripening, firm, light blue, and highly flavored. The plants are productive and vigorous with erect growth. They ripen in a relatively short time, about seven days after Coville.
What to do in August?

_Sydney Eddison said, “Gardens are a form of Autobiography.”_

**What does your August garden say about you?**

**Perennials:** Divide and transplant daylilies and bearded irises. To divide a plant, cut back the foliage to about six inches, dig up the plant and separate sections of the root system by hand or with a sharp knife. Keep weeding.

**Lawns:** During drought periods, provide an inch of water a week. Check for grubs. Grubs are beetle larvae, and they feed on grass roots. One sign of grub damage is brown areas of turf that pull back easily. Another sign is torn-up areas of grass, caused by skunks, raccoons and birds digging in your lawn for grubs. Keep mower blades set to 3 or more inches. Grass blades are leaves, which need to photosynthesize; cutting them too short stresses the plants. The best time to fertilize your lawn is Labor Day (or thereabouts).

**Annuals and container plants:** Water more often. Their roots have more volume than the soil so they dry faster. Pinch back to promote thicker growth. Fertilize. Plant for fall color. Although chrysanthemums are perennials, it’s best to think of greenhouse-grown mums as annuals. Planting them this late in the season doesn’t give them time to establish an extensive root system before a frost.

**Bulbs:** Order for fall planting.

**Shrubs:** Prune summer flowering shrubs. Those shrubs, such as big-leaf and oakleaf hydrangea, viburnum and rose of Sharon, can be pruned as their flowers fade, if needed.

**Roses and evergreens:** Don’t fertilize now.

**Vegetables:** Second crops of spinach, peas, beets, radishes, and lettuce can be planted. Enjoy eating everything that is ready!

_Text by Master Gardener Judy Brown and photos by David Chinery_
Say the word “anticipation” and I automatically hear the Carly Simon song and picture *Acanthus spinosus*. My first reaction might be somewhat normal for people of my age, especially males who fell under the spell of that sexy voice back in the day. The second would only be understood by a gardener whose plant has “been keeping them wai-ai-aiting” for a long time to bloom. In this case, the *Acanthus spinosus* I installed well over fifteen years ago has finally, for the first time ever, produced a flower stalk this summer. Its good I wasn’t in a hurry and had little to do in the meantime.

We just aren’t used to such sluggish performance from most perennial plants. Nurseries know today’s customers want instant color, so not only short-lived annuals but also long-term perennials are often offered for sale in bloom. From a sales perspective this might be necessary, but horticulturally, I often think it better to buy a perennial with a well-developed root system and abundant foliage. And I know from books and the kvetching of others that *Acanthus* takes time to launch. But good grief, I have barely a memory of 2002, other than I put this slowpoke in the ground.

Here’s why I fell under this dilly-dallier’s spell. First, there’s the very impressive clump of foliage, with deeply cut, dark green leaves like no others you’ve seen and up to three feet long. The overall impression is somewhat thistle-like, but much classier. Then in summer appear bold four foot spikes of white snapdragon-like flowers with reddish-purple hoods, again highly unusual. Here is something other than a humdrum hosta or a flock of phlox. This is a plant that demands notice, a plant that even someone absorbed by one of life’s other interests might notice without having to trip over it. *Acanthus* is a plant my lovely but non-gardening wife might even ask about.

We *Acanthus*-philes are in good company, as the ancient Greeks and Romans fancied the plant, too. *Acanthus* leaves decorate both Corinthian and Composite capitals of columns, and can also be found on friezes and other bits of classical architecture. Virgil described Helen of Troy as wearing a dress embroidered with the foliage. Medieval manuscripts were decorated with *Acanthus* scrolls, and in Renaissance times the pattern was incorporated into furniture and fireplace mantles where it continues in popularity today. Ornate Victorian wallpaper, mirrors, jewelry and textiles also carried the theme, and the Arts and Crafts movement, which loved the shapes and patterns of oak and ginkgo leaves, also carried *Acanthus*. It’s fair to say that we’re probably exposed to swirling, stylized *Acanthus* foliage in the art and architecture of our built environment much more than most of us are even aware.
The woodchucks have finally driven me out of my house. I live in Cohoes and several new apartment complexes have been built on Delaware Avenue, which runs parallel to the Hudson River. The first set of apartments was built on a twelve acre field. Well, that displaced a lot of deer - as many as five or six deer were in my very small yard at one time. Deer were everywhere on Van Schaick Island: the golf course, private residences and even busy Ontario Street. Of course deer do what any vegetarian would do. They trimmed the rhododendrons, the holly bush, the yew, and then, for dessert, they decimated the hostas. As time went on, more and more apartment complexes were built in the area and more and more deer were displaced. The traffic and congested living did not please the deer and I noticed their populations did not increase as rapidly as they had when the first apartment complex went up. Then (was it the winter of 2015 - 2016?) we had an unusually severe winter. By spring it was not common to see five or six deer in my yard anymore. Instead, the woodchucks moved in. I paid a trapper $500.00 to trap skunks, opossums and some woodchucks. The next year I bought an electric mesh fence for about $500.00.

Obviously, I love to garden. This spring, as always, I shopped for young plants. I always look for a six pack that happens to contain seven plants. To my great joy, I found both red and white cabbage packs, each of which contained seven plants. I bought them and planted them. Within two days there wasn’t even a small trace of a leaf left on any cabbage plant! Well, never mind, I had planted bean seeds, radishes, kohlrabi and beets. The radishes sprouted first and then the beans. The beans got to have their first mature leaves (the second leaves to emerge) and the next time I looked there were no bean leaves at all. The same is true for the beets and the kohlrabi. Finally, when all the plants that the woodchucks favored were gone, they turned to the radish leaves.

Some things need to be clarified! What about my fence? It is hooked up to a car battery and last year, when the battery was low, I hooked the battery up to a battery charger. While the battery was hooked to the charger, the woodchucks chewed through my fence. The second thing that needs to be clarified is that we have at least one large family of woodchucks - maybe more. I guess an animal can be fertile and multiply when well fed.

The title of this article is “How Plants Defend Themselves”, and so far I have done nothing but complain. I noticed that the woodchucks only ate the radish leaves after they had decimated the more desirable plants. So far they have not eaten the tomato leaves nor the leaves of the one eggplant I took from the Cooperative Extension plant swap. Eggplant and tomato belong to the Solanaceae family and this family produces tropane alkaloids in the leaves. Tropane alkaloids are psychedelic drugs and most animals tend to avoid them. An example of this type of alkaloid is cocaine. So Mother Nature has produced some plants which produce chemicals that even determined plant eaters avoid!

By Rensselaer County Master Gardener Inge Eley
What can be better than a shady garden during the hot days of August? These are just a few of the cool-colored plants in my garden.

- The Editor
My garden always reaches a crescendo in August, when the daylilies are ablaze, ornamental grasses reach for the clouds and the crabgrass sings a symphony of electric green throughout the lawn. There are surprises, too. A lovely green and purple coleus suddenly looked leggy, and it dawned on me that I had the new coleus downy mildew disease in my garden. This pathogen was first identified in 2005 in New York and Louisiana, then found throughout the country in 2006. In the words of Michigan State scientists, “the fungus which causes downy mildew on coleus is tricky and elusive.” There isn’t much to do but dispose of the now leafless former gem. I like learning about new plant problems, but much prefer them to appear in someone else’s garden.

Most beetles are small enough to squish, but August brings out the big guns. Shuffling outside one night to close the garage door, I stubbed a toe on a gigantic specimen. Lying on her back, six legs flailing in the air, the inch-and-a-half long beetle was the picture of futile struggle. If beetles could sweat, I would see this one glistening like a racehorse on a hot day in Saratoga. Working entirely against my better judgement, I swished her out the back door and into the night. I knowingly had released a tile-horned prionus beetle (*Prionus imbricornus*): how foolish was that?

Probably pretty foolish. The tile-horned prionus is a member of the tooth-necked long-horns, a group containing some of the largest beetles found in the continental U.S. They are named for one or two tooth-shaped projections which appear on the edge of their thorax, the body section just behind the head. Most folks wouldn’t notice the teeth, just the large size and color. The head, thorax and undercarriage are shiny black, while the wings have a leathery black texture. Some sources say they bite, but only when roughly handled.

You might think a bug this big would be widely studied, but that isn’t this case with this *Prionus*. Entomologist Richard E. White wrote, “it is probably the most harmful species in this subfamily, although an accurate estimate of the damage it causes is nearly impossible because it lives underground.” He goes on to say that tile-horn larvae feed on the roots of oaks, hickories and other hardwood trees, hollowing out and severing their lifelines. After larvae destroy one root, they move on to another. This results in trees dying, branch by branch, over a period of years, as people wonder why. The lifecycle, which goes from egg to larva to pupa to adult beetle, can take three to five years to complete.

My first encounter with *Prionus* happened years ago, when a man from East Greenbush brought in a humongous white larva he unearthed from a pine stump. I remember it was the size of a jelly donut, and I’m only slightly exaggerating. His trees, indeed, had died branch-by-branch.

What kind of fool was I, that night in the garage.

**Burly Beetle Bores, Excites**

*Volume 12, Number 7*  
*Text and photos by David Chinery*
“One is tempted to say that the most human plants, after all, are the weeds.”

*John Burroughs, naturalist and essayist (1837-1921)*

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](http://www.ccealbany.com)

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In Rensselaer County: Call 272-4210 weekdays 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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"What’s Happening At The Demo. Garden?"
**Wednesday, August 23 from from 6:30 to 7:30 PM.**
**NOTE EARLIER START TIME!** We’ll take a walking tour and check on the Cornell Vegetable Variety Trial, Herb Garden, Prairie Garden, Fragrance Garden, Pollinator Garden and more! Be prepared to walk and stand, or bring an easily portable chair.

For more information, call Cornell Cooperative Extension’s Horticulture Program at 272-4210 or e-mail dhc3@cornell.edu

Directions: From Interstate(I-90) Exit 8; east onto Rte 43; pass through Rte 4 intersection toward West Sand Lake; (approximately 2.1 miles); Left at Robert C. Parker School.

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