An E-mail Gardening Newsletter from Cornell Cooperative Extension
of Rensselaer, Albany and Schenectady Counties

August 2014

Volume 9, Number 7



Root Concerns

Notes from the underground

Kale: Queen Of The Greens?



http://www.ces.ncsu.edu/wp-content/uploads/2013/07/TuscanKale-289x300.jpg

Text by Sue Pezzolla

A recent email from a seed company urged me to purchase kale seed for a fall crop of what they termed the "queen of the greens." That got my attention. While I am a big fan of kale and many of my friends wear tee shirts urging me to eat more kale, I had never thought of it as the "queen" of the greens. I decided to dig a bit deeper and look at kale in this new light.

As a gardener I usually plant kale along with lettuce, chard and spinach as an early crop. They are all colorful and offer some early harvests of my favorite things. From a nutritional standpoint all but lettuce are outstanding in their field, so to speak, and they are all easy. All of these greens want a well-drained soil with a pH of 6.0 to 7.2 and consistent moisture which makes sense considering their high water content. By early July these crops are done and I am planting beans in their place. After the garlic comes out I start to think about a fall crop of kale in that space and so it goes in my raised bed. The truth is that I am especially keen on the fall kale as it just gets better with cooler weather and frost. It is always the last man standing, or flopping, in the garden and the prolonged harvest helps me deal with the end of the season that I treasure most, garden time.

Kale can be eaten raw, sautéed, or steamed. Some prefer it in a smoothie but I am not that hard core. It is the perfect mate in "beans and greens' or added to a salad. Try it slightly wilted and added to a summer pasta dish tossed with olive oil, garlic, red pepper flakes, and shrimp. Need to add fiber to your diet or lower your cholesterol? Try kale. The levels of vitamin C help to hydrate the body and increase metabolism perhaps leading to weight loss. The high iron content makes kale a must have veg for vegans and vegetarians and the balance of omega 3 and omega 6 fatty acids keeps the body healthy along with generous amounts of vitamins D, A, and K. In short, kale packs a nutritional punch. If you are a person who likes to snack, then kale chips are just the thing for you. The leaves are harvested, rinsed well and spun dry. Then they are coated in olive oil and placed singly on a parchment lined baking sheet and baked in a 350 degree oven for about 12 minutes. Upon removal from the oven the chips are sprinkled with sea salt or other spiced salts to your taste. Amazingly good!

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To plan for planting kale, think in terms of 50-60 days to harvest depending on variety. It is also possible to harvest kale young and tender for salads and stir fries as well as waiting for maturity. That is another plus in kale's column of great qualities. The varietal choices are several starting with a Dutch variety called 'Winterbor' which grows through many cuttings and frost. 'Winter Red Russian' is bicolored and very showy and 'Red Ursa' kale, another bicolor, is frilly leaved and full of flavors right into early winter. My favorite is 'Tuscan Lacinato,' one of the smaller types at 18" tall. This coarse textured kale is also known as dinosaur kale for its distinctive upright habit and huge textured leaves, but I grow it for its earthy flavor that rivals any comfort food in the books.



http://www.gardening.cornell.edu/homegardening/scene57dc.html

Recently I was sharing the topic of this article with a friend and she politely asked me if I had heard the news that cauliflower is the new kale? "Not in my world," I replied and then suggested that she eat more kale.

Sources:

www.gardening.cornell.edu

www.vegkitchen.com/nutrition/5-top-health-benefits-of-kale

Yikes! Who Did This?



Janet from Wynantskill shared these photos of her unfortunate Japanese maple tree with us recently. Someone sneaky, with sharp teeth, has been scraping up the bark. A little research suggested to us that a porcupine (*Erethizon dorsatum*) might be the culprit. Porcupines are large rodents, measuring up to three feet long and weighing as much as 40 pounds, although 20 pounds is near average. Long, chiseled tooth gouges are their distinctive trademarks. Bark damage is usually seen in winter, when other food sources are limited. In summer, they may normally eat fruits, vegetables and more succulent plants. Perhaps the porcupine who did this damage was looking to put a little more fiber in his August diet.



Chinch Diagnosis No Cinch



Why lawns turn brown is a mystery to most. When the sky doesn't yield rain, drought is easy to diagnose, but what about this summer, when rain has been ample? Lawn owners have been lugging in hunks of sod for analysis, and one culprit found is black and white, kind of cute, and awfully small. Meet the chinch bug.

Chinch bugs are sucking insects that feed on plant sap at the base of the grass leaves, stems and crown. They concentrate in limited areas and work outward from these centers of infestation, destroying the grass as they advance. The damage produced by the chinch bug will show up in non-shaded areas of the lawn as brown patches of dead grass. Sometimes entire lawns are killed except for certain types of weeds.

The chinch bug's average life cycle is fifty days. There are usually at least two broods depending on the length of the season. The adult bugs overwinter in dry grass and other debris that offers protection. Newly hatched bugs are wingless and yellow in color turning to a bright red a few days after hatching. Shortly before changing to the adult form they develop their typical brownish-black color. Adult chinch bugs are only 3/16 of an inch long. Their wings are folded over their backs in the form of an "X." There are several species, with the hairy chinch bug causing the most serious injury to turf in the Capital District.



http://entomology.k-state.edu/extension/insect-information/crop-pests/sorghum/cb.html

Is it drought, or is it chinch bug? This is a difficult question to answer, since the damage looks similar. A simple process to determine whether the brown spots in your lawn are chinch bug damage is called "flotation." Cut a six inch square piece of browning turf from the lawn, and sink it into a bucket of water. If chinch bugs are present, they will float to the surface in a few minutes. Another method involves inspecting a foot square piece of turf. Turn the turf upside down over a piece of white paper and scratch the grass roughly so that any insects in the turf fall onto the paper. If chinch bugs are present, they can easily be seen on the white paper. Remember, all other insects in that turf will be on the paper so you must he able to differentiate chinch hugs from other insects.

Keeping your lawn in good shape can minimize chinch bug damage, but even a healthy lawn can be attacked. Some perennial ryegrass and fine fescue varieties contain a naturally-occurring fungus called an "endophyte" which makes the grass resistant to chinch bug damage. If your lawn has been seriously injured by chinch bugs and needs to be re-seeded, consider using these varieties in order to reduce future problems. Don't plant grass seed which contains endophyte in pastures, since it can harm grazing animals (dogs and cats are exempt from this). Use of endophytic varieties could be a neat trick to avoid using an insecticide, should chinch bugs visit your lawn a second time.

Text by David Chinery

It's Not Easy Being Green:

Gods, Goddesses, Flowers & Fantasy



http://www.theoi.com/image/flora_anemone.jpg

Ever since I was a kid, Greek mythology fascinated me. I loved how the gods and goddesses lived, doing as they pleased, showing off their foibles and failings, their gifts and jealousies. For a while my dream team was Zeus, Hera, Aphrodite, Apollo and Athena. But somewhere reality crept in and I lost touch with the legends, that is, until I started looking closer at flowers.

I'm placing the blame on the Artemisia growing in our gardens. I was thinning them out one day when my "I wonder" engine kicked in. Wasn't there a Greek goddess by that name?" So I Googled the name and landed in a website at www.theoi.com - Theoi Greek Mythology – "Exploring Mythology in Classical Literature and Art."

Scrolling through the site I found some favorite flowers and re-learned their role in the Greek gods at play. Let's look at the legends.



http://www.theoi.com/image/flora_krokos.jpg

Anemone: a spring offering with blood-red flowers. The back story? It seems that Aphrodite- the goddess of love - created this flower to honor her lover Adonis, a handsome youth who had the misfortune to be slain by a wild boar. The flower blossomed from her lover's blood.

Giant Fennel: Remember Prometheus? He's the Titan that defied the gods and stole fire from Olympus and gave it to man. He carried the glowing coal from heaven to earth hidden in a fennel stalk. He quickly learned that you don't disobey Zeus. The angry king of the gods chained Prometheus to a rock where an eagle pecked out his liver – daily.

Crocus: This is a favorite of Hermes, the messenger of the gods and star of the FTD logo. This flower plays a starring role in the drama "The Seduction of Europa." It seems that Zeus fell in lust with the Persian princess when he saw her gathering flowers in a meadow. He transformed himself into a bull and breathed a crocus from his mouth to draw her near so he could carry her away.



http://www.theoi.com/image/flora_narthex.jpg

Myrrh Tree: This small spiny desert tree is rooted in Aphrodite's jealousy. As legend has it, Myrrha was a princess whose mother dared to compare her beauty to Aphrodite's! The goddess wasn't pleased and, in a fit of pique, she caused the girl to fall in love with her own father. When Dad found out, he chased his daughter with an axe. Who saved her? Enter again Aphrodite – the contrite and compassionate – who turned the princess into a tree.

Text by Rensselaer County Master Gardener Don Maurer

Narcissus: Ah, the first "selfie"- a hubristic youth who callously scorned all who came to court him. Big mistake. One of his rejectees was the goddess Nemesis. She caused him to fall in love with his own reflection. As he stared at his image, he slowly wasted away to become the flower that bears his name….and fame.

Olive Tree: How can you talk about Greek mythology without mentioning the olive tree? Athena really likes this tree because it helped her win a bet. According to the reports – Poseidon, god of the sea, and Athena – goddess of war, wisdom and crafts - were in a contest for control of Athens. Zeus intervened and promised the city to the one who produced the best gift for man. Poseidon produced a horse. Athena created the first olive tree. Who won? Well, is the Acropolis in the city called Poseidon?



http://www.theoi.com/image/flora_elaia.jpg

These legends combined with the myths and stories from other religions or beliefs add a special layer of mystery, romance and wonder to the familiar flowers and plants we grow. And next spring when I see a crocus, will I think of Zeus and Europa? Or on Valentine's Day, will the blood red hearts on the card from my wife remind me of Aphrodite's' love for Adonis? I hope so.

Salsa Making Class

Monday, August 25, 6 PM

Sustainable Living Center (in Central Park), 180 Ptl. Arthur Chaires Lane, Schenectady, NY 12308

Join Master Gardeners for a tour of our urban farm where we will gather all the fresh tomatoes, herbs and other veggies needed to make summer salsa. You will learn simple methods to prepare salsa and use it in a variety of dishes. Each participant will make and take a 16-ounce container of salsa. This class is fun for families and friends! Cost $10.00 per participant.



Registration Form

Salsa Making Class, August 25, 6 PM

Name(s) _____

Address: _____

City/State/ZIP _____

Phone: ( ) _____ Email _____

Registrations _____ X $10 each = $_____

Please make check payable to CCESC, and send along with this Registration Form to:

Cornell Cooperative Extension, Schenectady County

107 Nott Terrace, Suite 301

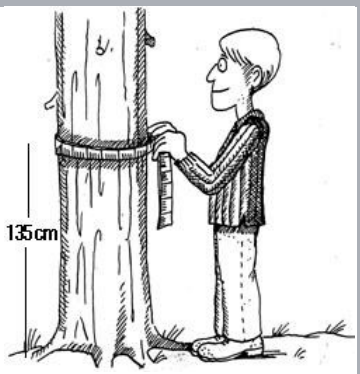
Schenectady, NY 12308-3170

Registration Deadline: August 20, 2014

How Old Is My Tree?

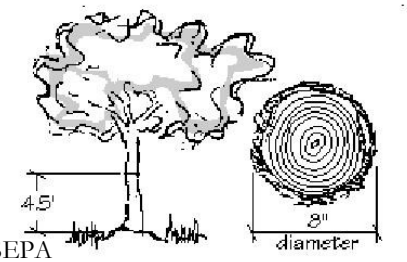
Text by Chuck Schmitt

"How old is my tree?" I have been asked this question numerous times in my Extension career and have probably given some really errant answers. As you know, guessing or estimating age is a dangerous task. It can be downright lethal if a woman is the object of such scrutiny. Steering clear of any human aging, I thought it would be safer to stick to estimating trees. As a result I was determined to educate myself in the way that trees are aged.



TreescapeCanada.ca

Now I know that a tree's age can be determined by counting the growth rings. The problem is, I need to cut the tree down to see them, not what most homeowners are looking for. Another method that can be employed is to use a tool called an increment borer and take a core sample out of the tree. This is much like taking a biopsy of an internal organ. It hurts a little and leaves a wound that may become infected. Also, not the best approach. So I turned to the International Society of Arborist to see if they have a better solution to this dilemma.



USEPA

Turns out, the foresters have solved this problem years ago. The International Society of Arboriculture has published a table to help us determine the age of most trees. The table is a list of tree species and their "growth factor". What's a growth factor? A growth factor is a number assigned to each species based on years of calculating that particular species normal growth rate. It would be unwise to assume that all tree species grow at the same rate. Additionally we have to take into consideration several other factors that help determine a trees growth rate.

First off is genetics. We kind of already covered this by indicating that not all species grow at the same rate, which is determined by genetics. A slow growing shagbark hickory with a 10" diameter trunk will be in the neighborhood of 75 years old while a similar sized red oak will be a mere 40 years old. The local site conditions and climate must also be factored in. What is the tree's water and nutrient availability? Does it have sufficient room for root growth or are the roots restricted? Are there any insect or disease issues? Is there any competition from other trees for resources or light? And conversely, are there other trees to form root graphs with which to share limited resources? Lots of other factors must be considered. The following growth factor values are determined for forest grown trees. If the tree in question is a residential tree or a street tree even more factors have to be evaluated. Some resources recommending fudging the estimate to be a little higher because these trees are "pampered" in the landscape setting. Personally I think the values should be lowered a bit as the tree is not growing in a natural situation. Residential sites and urban sites where the leaves are cleaned up and pollution is a greater consideration are growing in a situation with added stress that does not exist in a forested situation.

The tree aging formula goes like this. Once the species of the tree is known, measure the diameter of the main trunk at breast height. This is referred to as the DBH and is officially 54 inches (4.5 feet) above the ground. You could also measure the circumference using a tape measure and then convert to the diameter by multiplying the circumference by 3.14 (Pi). Diameter = circumference divided by 3.14 (Pi).

Once these figures are known, multiple by the growth factor to estimate the tree's age. Aspens and cottonwoods have a growth factor of 2.0. So a 10" diameter tree would be (10" diameter x 2.0 GF = 20 years old, estimated). Silver maples, pin oaks, littleleaf linden, and basswood have a growth rate factor of 3.0. River birch is a 3.5 and green ash, red oak, and American elm are set at 4.0. Red maples, Austrian pines and black walnut are 4.5 while sugar maples, white birch, white pine, black cherry and white oaks are set at 5.0. Some of the highest factors set at 7.0 for dogwood, redbud, and ironwood, with the slow growing white fir and shagbark hickory at 7.5; and the common horsechestnut at 8.0.

Keep in mind that no matter how much we take into consideration, it is still impossible to do anything but estimate the age of a standing tree using this method. Best of luck.


Measuring DBH using Biltmore Stick The University of Iowa - Engineering Dept.

This Beetle Beat Uncle Sam

Text by David Chinery



http://blogs.cornell.edu/ccecattall/files/2013/05/Japanese-Beetle-Picture-xst1qo.jpg

Although we blame increased travel and trade with bringing exotic pests to our shores, the phenomenon isn't new. As I've watched Japanese beetles eat my roses, cannas, and hydrangeas this summer, I've remembered that my home state of New Jersey was partly to blame for bringing this pest to us. What I didn't appreciate was the tremendous effort put forth by state and federal workers to stop the scourge. Their history I've gleaned from a website entitled "History of Rutgers' Department of Entomology."

The saga began when two inspectors, Harry B. Weiss and Edgar L. Dickerson, found a mysterious beetle in August, 1916, at the nursery of Henry A. Dreer, Inc., near Riverton, New Jersey. A dozen or so specimens were collected, but no further attention was paid until spring of 1917, when attempts to identify the species as American failed. Specimens were then sent to the United States National Museum and identified as Japanese beetles. Once this was known, Japanese literature was examined and it was concluded that the species was a serious threat to agriculture. On August 8, 1917, the nursery was visited again and the insects were found to be abundant in a small area, especially on smartweed. They were most likely imported as grubs on iris roots which the nursery had purchased from Japan five or six years before.



A Dreer's catalog from just before the beetle was discovered. From: www.victoria-adventure.org

Government action was timely, with The United States Department of Agriculture making $5,000 available for further study and New Jersey kicking in a matching amount. It was hoped that two months of action would stop the beetles. A half-mile wide band of foliage around the nursery was sprayed with arsenate of lead, while twelve light traps that would attract egg-laying females into areas treated with sodium cyanide were employed. Hand-picking of beetles, removal of sweet corn and other crops, and treatment of sod was also part of the plan.

When two months proved too short, similar efforts continued from 1918 to 1921. Unfortunately, lack of funds and labor, as well as primitive methodology, allowed the beetles to further disperse. Soon eradication was found to be futile and efforts shifted to slowing the spread. Scouting each year pinpointed how far the beetles traveled, badly infested areas were heavily cyanided, and children were paid to collect JBs by the quart. However, by 1921 213 square miles, including part of Pennsylvania, were in the beetle's territory. Some pastures were found to have 700 grubs per square foot of earth.

Researchers traveled to Japan, where wasp and beetle enemies of the JB were found, then brought back and released in New Jersey. Agricultural products were quarantined and heavily inspected, and a frightening array of pesticides, including liquid cyanide, methyl bromide, and eventually DDT, were unleashed. But the beetles marched on, ranging from southern New England to Virginia by 1946. Currently, they thrive in most places east of the Mississippi and in many hot spots beyond. Gardeners have spent untold millions on insecticides, beetle bags, replacement plants, new grass seed and other JB paraphernalia, so today they qualify as home-grown economic stimulants. My final question is this: if the Japanese beetle were to land here today instead of all those years ago, would the story have a different ending? I'm afraid to hazard a guess!

Green Shots: The Gardening World in Pictures





This month's photos come from Master Gardener Bette DiNovo. Bette writes, "Some of the most beautiful gardens in America can be seen in Charleston, South Carolina. When you visit you could:

Take some formal tours at Middleton Place, which features America's oldest landscaped gardens, or visit the grounds of Drayton Hall, one of the most significant, undisturbed historic landscapes in America, or

Take the Annual Festival of Houses and Gardens, if you are lucky enough to find yourself in Charleston in the spring, or

Take a casual walk around the streets south of Broad Street as I did last October. You will see countless historic homes dating back to the 18th and 19th centuries. Their architecture is grand and most of these homes have spacious side porches called piazzas. Piazzas have their own entrances and, in many cases, the ceilings have one or more fans to circulate the air. The most impressive thing about these homes is that each one has a garden, big or small, that is meticulously landscaped. Many homes show creative use of the creeping fig vine, boxwood, the Confederate rose and window boxes."

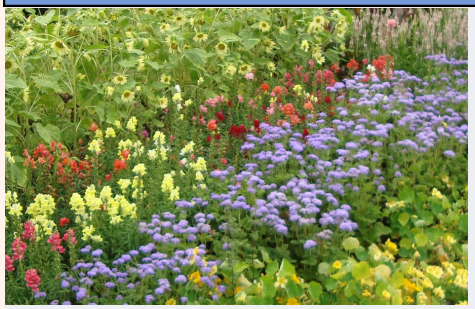






What to do in August

"A perfect summer day is when the sun is shining, the breeze is blowing, the birds are singing, and the lawnmower is broken." James Dent



Now is the time to think ahead towards harvesting. Whittier gives a good pep talk when he says, "He who smites the summer weed may trust thee for the autumn corn." **KEEP WEEDING!** The autumn colors and scents will be sweeter for it.

Many perennials can be profitably divided and replanted now. Swap or share with neighbors and friends. Many shrubs which need transplanting can be moved comfortably now and will settle in well for winter, having had three or four months to get re-established.



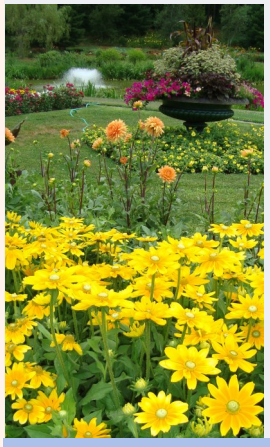
Humidity at this time of the year often creates a good environment for fungal diseases, especially powdery mildew on phlox and roses. Sanitation and thinning to provide aeration between stems will minimize problems.

Roses are demanding all the time, but they are absolutely insistent right now. They want all the attention you can give them and will respond handsomely to feeding, cleaning and pruning.

Out on the lawn, insects are busy munching on the lush burst of growth. Healthy turf is more resistant to damage from chinch bugs, sod webworms and grubs. If damage becomes apparent, call Cornell Cooperative Extension for advice.

Deep watering of the lawn builds roots properly. So during droughty periods make sure to provide at least the equivalent of one inch of rain weekly.

While watering, don't neglect the annuals and container plants. Now their roots have more volume than the soil does and they will dry rapidly.



Start preparing the houseplants and inspecting them for the gradual return indoors.

It's wonderful to go into the garden in August to see bushy plants that once were spindly transplants or a tiny row of seedlings trying to push through the soil. Now the vegetables are ready for picking! Visit your garden frequently to check your crops for produce. Home grown vegetables are best when they are young and tender.

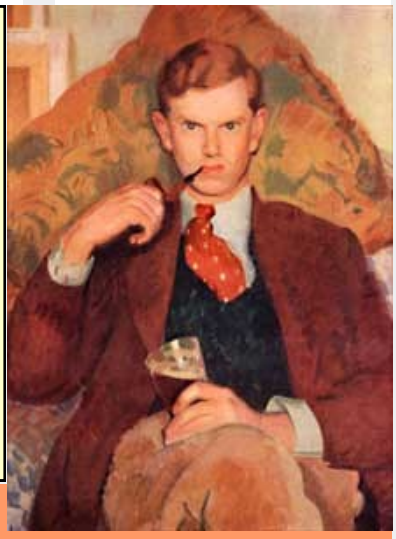
While you're out there enjoying the thrill of victory, keep in mind there are still things to do. Continue watering as needed; most vegetables require one inch of water per week. Continue weeding to avoid letting the weeds go to seed in the garden. Keep adding refuse to the compost pile for use in the spring.

Text by Master Gardeners Peggy Bloomwell and Cherry Christopher

Photos by David Chinery

If it could only be like this always - always summer, always alone, the fruit always ripe."

Evelyn Waugh



http://www.catholicauthors.com/images/waugh1.jpg

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 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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Cornell Cooperative Extension
of Rensselaer County's

Summer Gardening Programs

Admission to all programs is

FREE!

Rain or inclement weather at the start of the program may cancel it



Held at:
The Demonstration Garden
at The Robert C. Parker School
4254 Route 43, North Greenbush (Wynantskill), NY 12198

"The Wide World of Grasses"

Tuesday, September 9 from 7 to 8 PM. A discussion of the magnificent ornamental grasses found in the garden, as well as good grasses for lawns and the weedy grasses found in gardens and along roadsides. Presented by David Chinery, CCE of Rensselaer County Educator and Master Gardeners.

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 towards West Sand Lake; (approximately 2.1 miles); Left at Robert C. Parker School.

Individuals with questions or special needs requiring accommodation should contact Cornell Cooperative Extension at (518) 272-4210. CCE provides equal program and employment opportunities.