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

**July 2019** 

Volume 14, Number 5



## Trimming Your Wasteline

**Fact:** Americans (you and I) waste 133 billion pounds of food each year.

**Fact:** The USDA says that discarded food costs consumers (you and I) \$161 billion and is the largest single contributor to our expanding landfills.

**Fact:** That volume is about 1/3 of the food you and I lug home.

**Fact:** 30% of our food dollar is destined for the dump.



(For example, look at these six bananas. If the facts are right, two of these beauties will be wasted. Just like the box of greens that are past their prime, the bread gone stale and those leftovers that have lingered too long in the refrigerator light.

Now that I know the facts, and done the math and seen the impact on my budget, I need some help, advice or suggestions. The answers were only a phone away.

 Cornell Cooperative Extension provides equal program and employment opportunities. Please contact Cornell Cooperative Extension if you have special needs. No endorsement of products is implied. I called Rensselaer County's Office of Cornell Cooperative extension. You see, part of their job is provide nutritional info to consumers. I talked with Kim Mullen, one of the staff's Nutritional Resource Educators. When she talked, I listened and took notes.

**Have a plan:** When you go to the store know the foods and quantity you need to match your menu. Why buy 5 pound of potatoes, if you are only feeding two people?

### Cornell Cooperative Extension

**Buy fresh:** You pay more for strawberries in January that in June. That applies to the samplings available at your local farmers market.

**Don't buy names, buy nutrition.** Read the labels on the big name brands and the store brands. If the nutritional values are the same, save your money.

**Be a savvy saver.** If you find a real deal.....say a BOGO on pork roasts, go for it and freeze one for another day. But don't forget it. I've found some things in my freezer that defy description.

**Limit your trips to the store.** Dashing into the store to pick up a few things a couple of times a week can kill a budget.

Which leads to final, but obvious point. *Have a budget!* In addition to a plan, have a budget. We might find it easier to keep the spending under control if we tried a "cash only" approach. In today's debit card world, that's truly a radical idea for trimming our waste lines.

#### **Text by Rensselaer County Master Gardener Don Maurer**



Looking to find the freshest produce and products the Capital District has to offer?

Visit Harvest Connection at: www.harvestconnection-ny.com

### Yikes! What's Going On Here?



Photo by Anne Gilmartin and text by Rensselaer County Master Gardener Betsy Kauffman Welcome to pink slime mold, commonly called wolf's-milk slime mold or pink toothpaste slime mold. Its scientific name is *Lyco-gala epidendrum*. It belongs to a family of amoebazoans which sometimes look like, but are not true fungi. It is widely distributed throughout the world, and commonly found on hard wood mulch and rotting logs. It is harmless to plants, and if you consider it unsightly, you can scoop it up and remove it, or turn it over. The picture shows the fruiting bodies that grow from a plasmodium which in turn feeds on decaying plant material such as bacteria and fungi. These fruiting bodies will eventually turn to a dull tan and become powdery. At the stage you see pictured, the puffballs may exude a toothpaste-like substance if punctured.



#### Text by Rensselaer County Master Gardener Inge Eley

It's time to spend some hours in the fresh summer air. Many years ago, I was surprised to learn that our air has changed considerably through the years. Currently our air is about 78% nitrogen, 21% oxygen and less than 1% carbon dioxide. Nitrogen content has changed little from the time

the earth was created (about four and a half billion years ago) until today. Oxygen content, on the other hand, has changed dramatically from just about nothing to our current 21%. What creates oxygen? Photosynthesis! Does that mean there was no photosynthesis a few billion years ago? Exactly.

The first signs of life appeared about three and a half billion years ago. Early life (Archaea) was simple: it was microscopic and consisted of single cells. The electron microscope has revealed similar cells in rock formations known as stromatolites. Stromatolites are still being formed today by organisms called Cyanobacteria. How do Archaea compare to Cyanobacteria? Archaea means ancient and they are, in fact, much older than Cyanobacteria. Archaea still exist today and they survive in environments that may be extremely harsh. These conditions were present on the prebiotic Earth. In other words, early life subsisted on chemicals present on earth. However, as time went on, these chemicals became scarce, and cells were left with little to live on. Some cells originated that could make their own food - photosynthesis! In photosynthesis carbon dioxide and water are converted to carbohydrates and oxygen. At first, the oxygen was used to convert iron, dissolved in the oceans, to rust. As an example, if you have hard water, you may have noticed rust in your toilet bowl (where the water meets the air). Once the oxygen had rusted the oceans, then oxygen began to enter the air (about two and a half billion years ago). Once oxygen entered the air, some of the oxygen in the upper atmosphere combined to form ozone. Ozone then, as today, absorbs ultraviolet radiation. By about a half a billion years ago, enough ozone had accumulated so that now life could move to shallow water, near the coastline, and ultimately to land.

So, photosynthesis changed our atmosphere and in doing so, allowed for the formation of ozone, which ultimately allowed for life on land. It is of interest to note that optimum oxygen concentration for one of the early photosynthetic organisms - the Cyanobacteria - is only 11%. Certainly this lends support to the concept that early photosynthetic organisms lived in an atmosphere not nearly as rich in oxygen as today's atmosphere. Does this mean that oxygen levels are increasing and our descendants may breathe in more oxygen than we do today? We cannot extrapolate; remember our atmosphere changed in a matter of billions of years. In the short time we have been monitoring atmospheric gases, we have not seen any changes.

So go outside and appreciate the oxygen in the air that sustains most life.

### Mowing Matters

Living in a landscape of lawns as we do, it would seem knowing how to use a power mower would be second nature. But as I watched someone blow clippings all over a sidewalk and hit a crabapple tree with a push mower from my office window, I discovered yet another teachable moment.

Let's start with height. Mowing grass that is 4 inches high down to 3 inches is just right. This observes the



"1/3 rule," which states that removing just that much from the grass plant is best for it's health. It also leaves the grass tall enough to shade out weeds and maintain a generous root system, yet short enough that it looks good. Using a mowing height shorter than 2.5 inches is asking for a weed invasion, since grasses are weakened and more light reaches the soil surface. On some riding mowers, you just turn a dial or move a lever to set the height. My walk-behind is more complex, but fiddling with the lever on each wheel and using a ruler makes it possible.

Clippings can cause controversy. As a teenager I liked hitching the Parker Sweeper to my dad's mower, since this meant that I didn't have to spend hours raking and carting the mess to the compost pile. But things have changed since the 70's, even mowing. About 30 years ago researchers from Texas A & M University studied lawn clippings and came to a number of conclusions. Unless they are clumpy, clippings don't hurt the lawn, but in fact add back a tremendous amount of nutrients, and they don't contribute to thatch. Leaving clippings on the lawn makes less work, and also keeps them out of the landfills. This was all big news at the time. In fact, one of my first tasks as a new Cooperative Extension agent in 1989 was to educate folks about "grasscycling," as we called it then. Some folks warmed to the idea, while others kept on collecting.

The big breakthrough came when manufacturers perfected the mulching mower. Using modified or multiple blades and new deck designs, these modern marvels chop up the clippings much finer than the mowers of yesteryear. My dad's old Simplicity made piles of debris, whereas my new John Deere produces very little. I haven't picked up clippings in years, and my lawn is all the better for it. My neighbor still collects, bags, and hauls it all to the town dump, but only because his wife makes him do it.

Of course, challenges remain. Mowing wet or tall grass can be problematic, and fast driving, dull blades or a clogged deck add to the misery. But blowing grass clippings onto sidewalks and roadways or into waterways or storm drains is my biggest pet peeve. Clippings are rich in nutrients, and end up polluting lakes and rivers. In fact, a recent University of Minnesota study found that up to 36% of water pollution from households came from two sources: grass clippings and pet waste. So watch where waste goes.

Text and photo by David Chinery

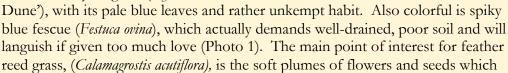
# TOUGH & Easy

Can something be "tough and easy" at the same time? I say "yes!" when it comes to gardening with perennials. Plants are said to be tough when they tolerate poor soil, drought, insect pests, and the other perils Mother Nature periodically reigns down. They're easy if you don't have to spend a lot of time staking, dividing, restraining, or otherwise futzing over them. At North Greenbush's Robert C. Parker School, where we have our Master Gardener Demonstration Garden, the wide open, full sun site and compacted, clay-and-rock growing stratum have provided excellent proving grounds for what grows in a tough place. We don't have delphiniums, for example, because, while stunningly beautiful, delphiniums need the



same constant nurturing as a preemie. But we do have some attractive plants which can allow you to have (is it possible?) a life in addition to the garden.

Nothing is easier, for example, than ornamental grasses. Some have incredible foliage, such as Blue Dune Lyme grass (*Elymus arenarius* 'Blue



reach five feet or so above a clump of green foliage. Many grasses, such as the switchgrasses (*Panicum sp.*), provide increased interest as the season progresses, as they flower and produce ornamental seedheads in late summer, and look snazzy well into fall. Sedges are also easy to grow but often overlooked. One of the most handsome (in my mind at least) is *Carex siderosticha* 'Variegata,' a low-grower and slow-spreader with green leaves edged in white. Flashier 'Banana Boat' has yellow leaves edged in green.

The 1980's wasn't just the decade of big hair, glasnost and The Yugo, but also marked the widespread appearance of three perennial biggies: Stella D'Oro daylily, Goldsturm rudbeckia and Autumn Joy sedum (Photo 2). This trio is still extremely popular, almost to the point of redundancy, because they are so long blooming, tough and easy. Stella was one of the first compact daylilies to re-bloom, and it is a rather vivid shade of yellow-orange (think processed American cheese). For some reason, it is often planted with pink flowers, with mind-bending results. Fortunately, newer, similar daylilies, such as 'Happy Returns,' 'Purple de Oro' and 'Little Business' have widened the possible color spectrum. Goldsturm (in English "gold storm") has golden daisy-like flowers with dark centers and

a sunny black-eyed Susan look. And while there is an entire wonderful world of sedums to explore, nothing compares to the joy of Autumn Joy's pink flowers in, you guessed it, the fall.

Would you like something more exotic? How about Culver's root (*Veronicastrum virginicum*) with its white flower spikes, pointy leaves and architectural stance. Or wine cups (*Callirhoe involucrata*), magenta flowers on a sprawly, geranium-like plant which combines well with lady's mantle (*Alchemilla mollis*) (Photo 3) and lambs's ear (*Stachys byzantine*). All are tough, yet easy.



### Surviving SHOCK! dener's passions run high. Most of us

In spring, along with rising sap, a garneed to get in the car, travel to several

nurseries and garden centers, and exchange some green (cash) for some green (plants). We tote our purchases home, plant them, then expect them to perform. What do the plants do? After realizing they aren't in Kansas anymore, some adjust to their new digs just fine, while others sulk, entering a phase some call "transplant shock." That's just what we want to avoid.

Plants live on a slower schedule than we do. It is not at all uncommon for a newly-planted tree to take three to five years to re-establish itself in a new location. During this long re-adjustment period, the tree may show a host of distress symptoms. These range from delayed leaf emergence in the spring, smaller leaves, off-color leaves, and early fall color to stunted growth, stem dieback, secondary insect and disease issues, and limited flowering. Of course, the ultimate expression of dissatisfaction is when the tree checks out and dies. Good gardeners can read these symptoms and possibly provide some corrective action, while the non-horticultural remain blissfully ignorant, become helpless or get angry. Unfortunately, there is no mandatory coursework required to enter plant parenthood, but maybe there should be.

The list of reasons why transplanted plants fail to thrive could fill a textbook, and since plants can't talk, we probably don't know the half of it. Consider that some nursery plants are of poor quality – with undersized root systems, or excessively pot-bound roots, or stresses from pest issues or poor handling techniques. Any sort of root damage along the way from the production farm to the sales lot to your home is likely to show up as dieback on top. Mishandling plants can have lasting results. I get a chuckle when I see trucks flying down the road, nursery stock hanging on in back, leaves blowing in a fifty mile-per-hour breeze. What foliage does hang on after that joyride is likely to become a desiccated mess.

Matching the plant to the site is critical. Some plants like shade, some like sun, some tolerate both. For example, a rhododendron is not a good plant for a hot, dry parking lot, but I've seen it attempted. Heavy clay soils are likely to retain a lot of water and have low oxygen content, so choose plants which can tolerate "wet feet" here. Sandy soils are likely well aerated but may lack moisture, so drought tolerant species are a must. It pays to stick a shovel in the ground and take a look at the soil before choosing what to put in it. Windy areas are typically difficult locales for



broadleaved evergreen plants, and even needled evergreens may have trouble establishing there. Places which are exposed to road salt require salt-tolerant plants. Even simply low spots and high spots have their challenges. While plant tags are helpful, there really isn't any substitute for knowing the likes and dislikes of the plants you bring home.

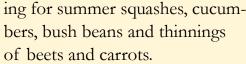
By David Chinery

### What to do in July

- \* Enjoy in season, local strawberries!
- \* Remove scapes from garlic plants. This allows the plant to put its energy into developing those tasty garlic bulbs instead of producing blossoms and seeds. Save the scapes for sautéing in a stir fry or chop and freeze for later use in soups and casseroles.



- \* Divide spring blooming perennials that are finished blooming
- \* Fertilize container garden plants with slow-release pellets or use a water-soluble solution every few weeks.
- \* Enjoy peonies and deadhead them when the blossoms are done.
- \* Thin root crops such as carrots, beans and radishes.
- \* Watch for garden pests. Aphids, mites and other pests become prevalent this time of year. Check the undersides of leaves, too, for egg cases and larvae.
- \* Tomato plants may show signs of Early Blight. Remove and discard (not in the compost pile) infected plants.
- \* Weed, weed, and weed some more. Add more mulch after your endless bouts of weeding, to keep some semblance of control over weed growth.
- \* Anticipate picking the first fruits of your labors, watch-



- \* Harvest the garlic you planted last fall. The leaves should have
- started yellowing and a test plant pulled from the ground should have fully formed separate cloves.
- \* Start planting fall crops. Carrots, beans, beets, chard and possibly cucumbers are among the possible choices.
- \* Enjoy fresh herbs such as dill weed, thyme, marjoram, parsley and mint.





Text by Rensselaer County Master Gardeners
Darwisah Burgess and Marcia Middleton

### Flea Beetles & Pill Bugs

As the rains continue, and the weather shifts from cool to hot, a number of gardeners have mentioned to me the appearance of the usual population of flea beetles in their gardens.

Flea beetles comprise a large group of leaf beetles of the family Chrysomelidae. Probably the



most common flea beetles that backyard gardeners encounter belong to the *Phyllotreta* genus and show up on brassicas (cabbage, broccoli etc.) and solanaceous plants (tomato, potato, eggplant etc.).

These varieties of flea beetles are about the size of pin heads, typically black, and have strong hind legs that they use to jump, like fleas, if disturbed. First signs of their presence frequently will be damage to the surface of plant tissue or small pin holes through leaves. Adult flea beetles leave their eggs at the base of their preferred plants. When the eggs first hatch, the young initially feed on the roots and root hairs of plants; and then, as adults, they migrate up to the foliage. There can be multiple generations during a growing season. Larvae overwinter in plant debris left in gardens at the base of the plants they lived upon.

A variety of organic techniques can be employed to control, but not eliminate, flea beetle populations. These include:

- adjusting planting times: sow seed early before flea beetle eggs hatch or delay sowing to let eggs hatch before larvae have seedlings to eat;
- tilling soils lightly in spring to disturb larvae;
- using trap crops. First, plant a crop attractive to flea beetles beside where you plan to plant you favorite crops, e.g. dill attracts flea beetles, and the dill can then be tilled into the soil to disrupt a portion of the flea beetle popu-
- interspersing companion plantings to provide flea beetles with alternatives: e.g. dill, marigold and pac choi;
- mulching with straw or grass clippings, which can interfere with egg-depositing female beetles;
- keeping planting beds free of weeds such as wild mustards, a favorite meal for the beetles;
- adding row covers these offer some relief, but soils need to be free of overwintering populations;
- placing sticky traps around plants also offers relief, but will also trap some beneficial insects; vacuuming may also reduce their numbers.

There are also some biological methods to control flea beetles. There is a common parasitic wasp, Microctonus vittatae, that specifically targets adult beetles. The wasps are a natural control, but not a quick solution. At the subterranean level, there are also some nematodes that devour flea beetle larvae as well as a fungal pathogen, Beauvaria bassiana, that will infect the beetles. Both of these should be present in healthy soil, but are available from commercial sources. Finally, some pesticides, like neem, that are approved for organic use could be applied. Contact your local Cornell Cooperative Extension office for help.

**Pill bugs**, (Armadillicidam vulgare), alias Rollie-Pollies, are not insects, but actually crustaceans and members of the woodlice family. Adults are usually between 1/4" and 1/2" in length, and black to grey in color. Pill bugs do not lay eggs; females have a pouch that first carries the fertilized eggs and then serves as home to the hatchlings for up to their first two weeks of life. Pill bugs are eaten or preyed upon by birds, toads, spiders and some wasps.

In gardens A. vulgari can be both good and bad. Pill bugs typically like damp or moist places and eat decaying plant debris - you will typically find them in your compost pile, under rocks and rotting wood. They are generally nocturnal, avoiding warmer daytime temperatures. However, if their population gets too large and there is a lack of decaying plant material in the soil, pill bugs will eat living plants including many of our favorite vegetables. Overly wet conditions, like this spring, also seem to engender their taste for fresh garden salads.

In small gardens and greenhouses the following control strategies can be used:

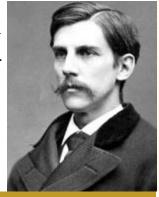
- placing plant collars around young plants;
- removing of plant debris to reduce habitant;
- reducing humidity levels and/or increasing air circulation (fans & dehumidifiers indoors; staking & pruning outside);
- vacuuming (place a cloth or cardboard sheet around a plant and shake);
- deploying sticky traps, or diatomaceous earth;
- trapping by placing wet, rolled newspapers in the garden at night (pill bugs will congregate under the newspapers after first eating your eggplants; and, of course, applying neem or other pesticides.



extension.umd.edu/hgic/topics/pillbugs-and-sowbugs

### And remember:

"On every stem, on every leaf,... and at the root of everything that grew, was a professional specialist in the shape of grub, caterpillar, aphis, or other expert, whose business it was to devour that particular part." - Oliver Wendell Holmes



Adopted from a June 22, 2019 post of the Rensselaer County Vegetable Blog by Irv Stephens, Rensselaer County Master Gardener. You can visit the Blog at: https://rensselaercountyvegetable.blogspot.com/

## You Can't Kill It, Right?



The cell phone photo was blurry, but it was clear to me whose mug it was. An odd character indeed is the clavate tortoise beetle (*Plagiometriona clavata*), this one feeding on eggplant foliage somewhere in greater East Greenbush. Picture a rounded body, translucent around the edges, with a bumpy, dark form in the center of the dome, and four dark "legs." Overall, somewhat turtle-esque. Even more bizarre is the larval form, a green mass encircled by toothed projections, carrying a mass of its own excrement as camouflage. Once thought to eat mostly obscure plants such as ground cherries and devil's

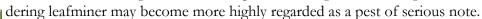
trumpets, clavate tortoise beetles seem to be increasingly interested in dining on tomatoes, peppers and eggplants, eating

neat rounded holes in the foliage. Most times, the damage is minimal, so gardeners can simply marvel at yet another wonder of nature and move on.

There is bad news in Banff. A traveling Master Gardener sent a photo of aspen leaves, still intact but with the green replaced by a translucent white, and marked with swirls of brown. Looking a bit like a shoji screen decorated with maple syrup curliques, I surmised this must be the work of a serpentine leafminer. And yes, it is, one with the delightfully straightforward name of aspen serpentine leafminer. Reveling in my smarts, I next learned that the adult phase is rather bedraggled moth while the juvenile is a yellow-green larva. This latter fellow lives sandwiched between the upper and lower surfaces of a leaf, feeds on the green cells responsible for photosynthesis, and travels in a roundabout pattern. The dark trail he leaves is, as you may have guessed, excrement. The damage is in a strange way somewhat aesthetically interesting,



and until recently was regarded to be of little harm to the aspen, the common thought being "you can't kill an aspen." But concern has been raised recently, since leafminer outbreaks are increasing and aspen health is decreasing in many locations out West. Given other stresses facing trees such as aspen, including climate change, this wan-





Halloween in June? The burning bush (Euonymus alatus) in the photo was completely engulfed in scary cobwebs, looking like something from a front yard haunted house display. Unfortunately for the bush, every leaf had been devoured by whomever created the heavy web of destruction. The international voyager involved, imported from Canada via Europe, is called the euonymus caterpillar, named for its favorite food. Starting as an attractive white moth with black spots in July, the adults mate and the females lay eggs on a host plant. These eggs hatch a few weeks later, the resulting larvae feed briefly, then settle down to overwinter. The explosion comes next spring, when the hordes of caterpillars (also white with black spots) spin webs and feed voraciously. Since "you can't kill a euonymus," plants will likely survive one defoliation session, but perhaps not more. Of course, burning bush is a notorious invasive, so the hungry hordes might be a mixed blessing.

\*\*Text by David Chinery\*\*

### Harvesting Memories

You might say planting a garden shows faith in the future.

I agree. This spring, when we populated our square foot garden with spaghetti squash, two pepper plants (one red; one green), tomatoes, beets, leeks, beans, peas and a salad bowl of various lettuces, spinaches and greens, I saw future suppers, soups and salads.

But I also found I was planting memories.

I have a long history of playing in the dirt. Somewhere there's a b/w photo of a skinny kid in shorts working a rake in a WWII "Victory Garden. That's me. A country kid.

As I placing this year's pea seeds a half inch deep in the soil in front of the trellis, I could almost hear my mother breaking my summer vacation slumber. "Donnie, go pick the peas before the day gets too hot." Or some other task she felt needed my young attention. That might have been the summer I started building my muscles by lugging milk cans of water to water the veggies that we planned on eating in the fall. It might have been the year my goat won a prize at a 4H fair. Or the year I invented the ultimate sandwich: fresh raspberries in a hot dog bun. We didn't call it gardening; it was a way of life.

My grandfather was also caught in my memory net. During the week, he was an accountant. However, on summer Saturdays, he became a suburban gentlemen gardener. His gardening togs were suit trousers unsuitable for office and a

white shirt soon to be re-

tired. His plot was about 10 X 10 and held his pride and joy: three teepees of Kentucky Wonder beans and ruler straight rows of Black Seeded Simpson lettuce. He also had a small compost pile for coffee grounds and other kitchen scraps. He and my grandmother enjoyed his harvest at a formally set table with white linen cloth.

Like I said, I've been playing in the dirt for a long time. And as I go through the daily routines of smelling the roses, pulling the weeds, scooping the

poop, I know I'm not alone. Sometimes I even talk to my mentors who, unknowingly, filled my gardens with memories.

Text and photos by
Rensselaer County Master
Gardener Don Maurer





"Let us be grateful to people who make us happy. They are the charming gardeners who make our souls blossom."

Marcel Proust (1871-1922, French novelist)



### **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 <a href="https://www.ccealbany.com">www.ccealbany.com</a>

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 <a href="http://counties.cce.cornell.edu/schenectady/">http://counties.cce.cornell.edu/schenectady/</a>

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 <a href="mailto:Dhc3@cornell.edu">Dhc3@cornell.edu</a>

#### Cornell Cooperative Extension of Rensselaer County

David Chinery (dhc3@cornell.edu and (518) 272-4210) Newsletter editor, designer and layout technician

#### Cornell Cooperative Extension of Albany County

Carole Henry (ch878@cornell.edu and (518) 765-3516)

#### Cornell Cooperative Extension of Schenectady County

Angie Tompkins (amj22@cornell.edu and (518) 372-1622)

"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.

"Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities." No endorsement of products is implied.

Cornell Cooperative Extension

Cornell Cooperative Extension of Rensselaer County's

# Summer Gardening Programs



### FREE Admission!

Rain/inclement weather at program start may cancel

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

### "Introduction To Straw Bale Gardening" Wednesday, May 15 from 7 to 8 PM.

Planting vegetables and flowers directly into straw bales may sound odd, but it provides many advanatges and amazing results! Master and Straw Bale Gardener Becky Raymond will show us this novel technique. Bring your garden soil for a free pH test, too!

"Starting Right With Tomatoes" Tuesday, May 21 from 7 to 8 PM. Tiny tomato plants are like puppies: they grow best with guidance. We'll discuss how to prepare the soil, plant, fertilize, water, stake and keep diseases at bay so your young tomato plants will produce a healthy harvest. Bring your garden soil for a free pH test, too!

#### "Perennial Plant Propagation: New Plants From Old" Wednesday, June 5

**from 7 to 8 PM.** Come watch Master Gardeners demonstrate various techniques to get new plants from your favorite perennial plants. We'll show simple division, softwood cuttings and other techniques you can employ at home, and giveaway some samples, too!

"Using Herbs Throughout The Seasons" *Tuesday, July 9 from 7 to 8 PM.* Explore the varied uses of herbs you can grow yourself, including for teas, medicine and cooking. The basics of growing herbs and of drying and storing them for future enjoyment will also be discussed by Master Gardeners led by Kathy Hartley and Janet Poole.

"Cooking In The Garden" Tuesday, July 30 from 7 to 8 PM. Back by popular demand! What can you do with summer's gorgeous produce? Using vegetables grown on-site Master Gardeners will prepare a variety of fresh and healthy dishes to share with the audience. Join us to learn new recipes and enjoy sampling some delicious summer foods! Master Gardener leaders will be Nancy Scott and Barbara Nuffer.

"Late Summer Is For Lawns" *Tuesday, August 13 from 7 to 8 PM.* Mid-August to mid-September is the best time for lawn weed management, overseeding, fertilizing, and renovation. Bring samples of problems (weeds, bugs, etc.) and we'll discuss options to improve your lawn for the future. Hosted by CCE Educator David Chinery.

"Great Tomato Tasting" Tuesday, August 20, from 6:30 to 7:30 PM. NOTE EARLIER START TIME! What's your favorite tomato? Come find out by tasting a wide variety of delicious tomatoes grown by Master Gardeners. We'll have some old favorites as well as some new top picks. We'll also talk about tomato growing challenges, so bring us your tired, your diseased, your dead specimens, yearning to be compost.

For more information, call Cornell Cooperative Extension's Horticulture Program at (518) 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.

"Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities." Individuals with questions or special needs requiring accommodation should contact Cornell Cooperative Extension at (518) 272-4210. CCE provides equal program and employment opportunities.

