Talk to anyone who has ever experienced Lyme disease and you will potentially hear what seems like a horror story come to life. Many unfortunate individuals have experienced life altering effects after exposure to this bacterial disease, often introduced from the bite of an infected deer tick (*Ixodes scapularis*).

Lyme disease was first identified and described in 1975 in Lyme, Connecticut, and made a reportable disease in New York State in 1986. In fact, New Your state comprises about 30% of all new cases nationwide each year. If that weren’t bad enough, it has recently been reported, in the *Journal of Investigative Medicine* (2014;62:280-281), that this tick-borne bacterial spirochete may be able to be transmitted sexually. The spirochete, *Borrelia burgdorferi*, is a type of corkscrew-shaped bacteria which resembles the agent of syphilis, that long recognized “poster child” of sexually transmitted diseases.

So now it seems that from a personal and a home landscape perspective, the best way to protect yourself from Lyme disease is to “practice” prevention. Modifying the landscape around your home can help protect you from exposure to ticks. This starts with keeping your property clean. Keep all leaf litter and brush away from the house, especially in the fall. This debris provides a safe, humid environment for small animals and a place for ticks to overwinter. Also, foundation plantings around the home should be mulched and include plants that deer don’t frequently brose, as deer are important tick carriers.

Away from the home, keep your firewood piles off the ground, dry (covered), and in a sunny area if possible. Storing wood in this fashion discourages small animals and insects from finding this a desirable place to take up residence. If you have a stone wall on your property, be aware that this is a place frequented by small animals like mice, chipmunks and squirrels which may also be carrying ticks into the area. Unfortunately, bird feeders can also be a source of tick introduction. The tiny ticks can feed on birds, which can carry them for many miles. If you are a birder, keep the feeder away from the home and away from play areas in the yard, as ticks could be inadvertently introduced by your favorite feathered friends.
Changing the behavior of larger animals, such as deer, can be a little trickier and much more costly. Putting up fencing as a blockade or specifically designed deer fencing to change the feeding habits of deer is a costly but effective way to keep them off your property. I have seen individual sprinklers set up on a motion sensing trigger to frighten deer away from their typical entryway into a home landscape. In fact, I too have been startled by such devices many times during site visits, so I know how effective these can be!

Keep your lawn mowed and your weeds and trees trimmed to allow sunlight onto your property, as this also provides an inhospitable environment for ticks. Lawns can be checked for the presence of ticks by a sampling method called dragging. A three foot by six foot rectangular piece of a light colored cloth is attached to a 6 foot pole and pulled by a string across the lawn. If ticks are present, they will attach themselves to the cloth looking for a blood meal. After traveling 50 feet or so, turn the cloth over and check for the presence of ticks.

Home landscapes that abut a wooded area are most at risk for the presence of ticks. Modifying the area by setting up a 3 foot mulch barrier around the perimeter will cut down on the ability of ticks to crawl onto the property. This mulched area should be maintained drier and sunnier than the wooded area and the turf that it separates. Another protective zone can be established by keeping all play equipment and garden areas 10 feet in from the wooded area as well. Research has shown that most ticks (82%) are found within 3 meters of the wooded area when dragging a lawn.

While outdoors you can also wear a repellent product on your clothing to help prevent exposure. If you find a tick and would like to have it identified, bring it to your nearest Cornell Cooperative Extension office. Cornell Cooperative Extension offices are not equipped to test for the presence of Lyme or any other diseases of ticks. Also, consult your medical care professional for all your medical questions.
You meet nice people in the world of horticulture. Years ago, a colleague and I visited a garden to examine some declining trees. We noticed the owner had an especially fine pot of agapanthus, which by the end of the visit was gifted to us to divide and share. I never did get my half of the prize, and I continued to desire an agapanthus, whose name appropriately translates to “love flower.” Although it is not well-known in upstate New York, there is much to admire about them.

Sometimes called “lily of the Nile,” agapanthus isn’t a lily nor is it from the Nile, hailing instead from South Africa. It features strappy green foliage and when ready shoots up a large naked stalk crowned with trumpet-shaped flowers. These are often a pretty pale blue, but can also be dark blue or white. Herein lies the attraction of agapanthus, given that we don’t have many true blue garden flowers. If we could grow them outdoors here, you could say a plant overall would have the size and shape of a stout daylily. Unfortunately for us, agapanthus are USDA hardiness zone 8 to 10 plants, although a few deciduous types may survive as far north as zone 6. A Yankee’s agapanthus is therefore a pot plant, placed outside in a spot with morning sun and afternoon shade in May, where it will thrive, then evacuated in October and placed near a window where it will stay green but slumbering through winter.

I acquired my own agapanthus through further good fortune, on a visit to another declining tree, this time a magnolia with a girdling root. After telling the lovely couple that their beloved tree would likely die, I tried to cheer things up by commenting on their agapanthus. This time, sans colleague, I drove off with it in my sole possession. While I consider myself lucky, the plant may have been better off at its original home, as I am probably the worst indoor gardener since the creation of the window. The agapanthus thrives all summer, when I water it faithfully, but once inside I turn my back, barely giving it a glance for months, despite that it sits not ten feet away here in the office. How does it respond? Faithfully it shoots up an amazing floral display in February, blooming its little heart out, making me look like a good gardener. So I can report that not only does the agapanthus not mind being root bound, it is tough as nails and thrives on neglect.

This past autumn proved more harrowing than normal for my agapanthus. I moved it into the garage before the first frosts, then forgot it behind a bicycle until early December. Looking rather frost-bitten, it was brought to the office, sheared it back to rhizomatous stumps, and given the windowsill. It’s re-grown a healthy crop of foliage, but I’m not sure it will flower this year. I certainly don’t deserve its favor, but I do love this plant.
It will come as a surprise to many that the designated “Perennial Plant of the Year” for 2014 is a grass, *Panicum virgatum* ‘Northwind.’ This year’s superstar is a switch grass whose virtues include ease of culture, an upright habit, hardiness in USDA zones 4 to 10, no serious insect or disease pests and a golden fall color.

The Perennial Plant Association designates a perennial plant each year that exhibits many good qualities that would make it a useful addition to a garden/landscape. The Association has been awarding this “Perennial Plant of the Year” designation since 1990 and each year gardeners wait to learn what the special plant will be. *Panicum* ‘Northwind’ is at home in a variety of situations; it can be an accent plant, a focal point or it can be mass planted in a native or meadow garden. Deep roots make ‘Northwind’ very drought tolerant and it is seldom eaten by deer. While most switch grasses tend to arch over as they mature, ‘Northwind’ stays erect. It is slow to spread and so needs division less often, but when it does, spring is the best time. It has slender steel-blue leaves that mature at about five feet which is a useful size in most gardens. As summer turns into fall, the foliage develops a haze of finely textured flowers that rise above the foliage by a foot or two. The flower panicles open a golden yellow that ages to creamy beige. Flower arrangers find the leaves and flower panicles useful in arrangements. I have been a gardener long enough to know that plant choice is a lot of “to each his own” but there is a lot to be said for a plant that has qualities that are displayed throughout the season, or that offers resistance to common diseases or pests, or that has a long period of bloom. ‘Northwind’ is just such a plant.
The superstars of past years that have proven to be worthy of their gold stars are listed according to year.

**Perennial Plant of the Year Index:**
- 2013 *Polygonatum odoratum* ‘Variegatum’
- 2012 *Brunnera* ‘Jack Frost’
- 2011 *Amsonia hubrichii*
- 2010 *Baptisia australis*
- 2009 *Hakonechloa macra* ‘Aureola’
- 2008 *Geranium* ‘Rozanne’
- 2007 *Nepeta* ‘Walker’s Low’
- 2006 *Dianthus gratianopolitanus* ‘Feuerhexe’
- 2005 *Helleborus* x *hybridus*
- 2004 *Athyrium niponicum* 'Pictum'
- 2003 *Leucanthemum* 'Becky'
- 2002 *Phlox* 'David'
- 2001 *Calamagrostis* x *acutiflora* 'Karl Foerster'
- 2000 *Scabiosa columbaria* 'Butterfly Blue'
- 1999 *Rudbeckia fulgida* var. *sullivantii* 'Goldsturm'
- 1998 *Echinacea purpurea* 'Magnus'
- 1997 *Salvia* 'Mainacht' (May Night)
- 1996 *Penstemon* *digitalis* 'Husker Red'
- 1995 *Perovskia atriplicifolia*
- 1994 *Astilbe* 'Sprite'
- 1993 *Veronica* 'Sunny Border Blue'
- 1992 *Coreopsis* *verticillata* 'Moonbeam'
- 1991 *Heuchera micrantha* 'Palace Purple'
- 1990 *Phlox stolonifera*

This list is a great starting point for anyone planning a perennial or mixed border as all of these winners meet the Perennial Plant Association’s criteria:

* Suitable for a wide range of climate types
* Low maintenance
* Easily propagated - easily comes true from seed or vegetative propagation
* Exhibits multiple seasonal interest

If you are planning a perennial garden, here are some more tips. First, visit established gardens for ideas. Summer garden tours offer that opportunity as do the gardens tended by the Master Gardeners of Albany, Rensselaer, and Schenectady counties. Your local Extension office has a myriad of factsheets on all aspects of perennial gardening, so be sure to add them to your resource list. And lastly, some general garden advice: do not take on more than you can manage so that your garden is always a source of enjoyment and pleasure.

Source: www.perennialplant.org/education/plant-of-the-year. Photo on page 4 also came from this website
It's Not Easy Being Green:

Pruning revisited: What can I cut, and when?

Text by Rensselaer County Master Gardener Don Maurer

By definition, good pruning is “the selective removal of branches without changing the plant’s natural appearance” and done to “increase the plant’s growth, health, and improve the quality of the fruit, flowers, foliage or vigor.”

Sounds simple! But plants, like people, are different with individual quirks and needs. So take a quick look at some of the most popular customers who may need a shearing in the near future.

**Spring bloomers:** They get trimmed very soon after they stop flowering. Why? Because next year’s flowers are set on the new growth. So wait too late to prune and, for example, your forsythia won’t be blooming next spring. Other plants that are in line for early trims include: Eastern redbud, Japanese quince, honeysuckle, star magnolia, azalea, rhododendron and rambling rose.

**Late bloomers:** Later flowering plants bloom on wood produced during the current growing season or this year’s growth. So you can wait till they are dormant in late winter. Keep those shears away from these until it’s frosty: butterfly-bush, Japanese beautybush, shrub althea, spirea, bluebeard and hills of snow (*Hydrangea arborescens*).

**Trees:** Again we’re looking at the dormant season – between leaf fall and new growth. However, spring flowering trees should be trimmed near the end of their blooming season. But remember, light pruning or removing dead or diseased branches can be done anytime.

**Evergreens:** Except for pines, late winter or early spring is preferred. The key again is before the new growth starts.

**Vines:** Let’s get to them before new growth begins. But different plants have varying tonsorial requirements.

- **Bittersweet** – Leave three or four buds to promote new growth.
- **Clematis** – if a spring bloomer, prune after flowering. If they bloom later, then clip them while dormant.
- **Honeysuckle** – thin stems or branches to encourage new growth or, if it’s really overgrown, it can be cut back to the ground.
- **Wisteria** - prune back to three or four buds each year to promote new growth and flowers. Tops can be shortened to encourage branching.

**Hedges:** As with some of the others, do the trimming during dormancy, before new growth starts. If you miss this deadline, you can wait till the new growing stops – either in late May or June. This will work for slow growers. The faster growers may need two or three trims during the season to retain their shape.

**But what about the roses?** Here’s a guideline to remember: wait until the forsythia blooms. Hybrid tea, grandiflora, floribunda, and large flowered repeat blooming climbing roses are eligible for late winter or early spring pruning around the time the buds break.

Hope this overview helps. But more specific information is only a phone call or click away. See page 11 for how to reach the Master Gardeners in your county.
A big sign at a local car wash reads “Salt Eats Cars.” As a horticulturist, I can tell you it doesn’t do much for plants, either. The coming early spring will reveal just how bad the winter was judging from the extent of damage to roadside plants. So how does salt damage plants, and can it be avoided?

Salt harms plants in several ways. When your salt shaker clogs up in the summer-time, it is because the salt has absorbed atmospheric moisture. Salt in the soil does the same thing, binding with the clay in soils and causing them to swell and become more compacted. Compacted soils offer less air and water, poorer drainage, and reduced rooting space to plants. As a result, plants can actually experience drought stress even when there appears to be moisture in the ground. Secondly, salt is composed of sodium ions and chloride ions. Plants can absorb large quantities of chloride ions through their roots, faster than a dieter can inhale chocolate in a late-night binge. The chloride ions travel to the leaf and shoot tips, causing “marginal scorch,” which is a fancy way to say the edges of the leaves turn brown. On deciduous trees, this may not show up until spring, but on a white pine, the needle tips turn brown by late winter. The sodium ions are no kinder; they can block the plant’s uptake of magnesium and potassium, causing a deficit of these nutrients. Lastly, if salt is splashed directly on foliage and twigs, it can enter the cells and make the plant less cold tolerant. All this makes salt damaged plants less vigorous and more prone to insect or disease attack. Often, the greatest injury is on the side of the plant facing the road.

Unfortunately, this tough winter has shown that life in upstate New York would not be able to go on routinely without road salt, or some other alternative, to keep our cars and trucks moving. Alternative ice melters are available, but their cost remains high, so we’ve got to adapt our landscapes accordingly. The primary remediation for salt is rainfall or irrigation. Luckily, salt moves out of the soil easily, so some early spring, soaking rains can do much good. If the spring proves droughty, irrigating a salty soil with one to two inches of water each week for two weeks would help. Incorporating organic matter into new planting beds, to improve soil structure and drainage, would also help. For small plantings, a burlap-covered fence, erected in autumn, can at least physically block salt spray, although runoff may still be a problem. Plant only salt-tolerant species near roads, parking lots, sidewalks and other such salty places. Honeylocust, white spruce and white oak are all fairly salt tolerant, while red maple, white pine, and linden are less tolerant. A good list of the relative salt tolerance of common New York State woody plants is available from Extension offices while similar lists can be found on-line.

For a Cornell fact sheet on the relative tolerance of trees and shrubs to salt, see: http://www.gardening.cornell.edu/woodies/pdfs/saltinjury.
Green Shots: The Gardening World in Pictures

This month’s photos come from Rensselaer County Master Gardener Joan Grusensky. She writes, “These are photos of some of the Asiatic lilies that grew in my garden this past summer. It was a constant daily battle with the red lily beetle (*Lilioceris lilii*) - both with the adults and the excrement covered larvae - but with persistence you can win the war.”

Yikes! What’s Happening Here?

Although it may be handy to use trees as signposts, fenceposts and, in this case, a lighting fixture, it is a big no-no. Trees grow not only in height but also in circumference, so when a man-made object is attached to the trunk, it interferes with the trunk’s expansion. Bark and interior tissues have no choice but to grow around and over the obstacle. As a result, the bark, which normally shuts out pests such as fungi, bacteria and insects, is compromised, allowing all these nasties quick access inside. So not only does the attached item insult the dignity of the tree, it also ensures an ugly demise. On the bright side, at least the mulch ring keeps the lawnmowers and string trimmers at bay!

Text and photo by David Chinery
What to do in March?

Cheer Up! When (not IF) the snow melts, we’ll be able to give a nod to the crocus and venture forth into an entirely new gardening year.

* As the days get longer, you can begin to divide, re-pot and fertilize your houseplants. Prune scraggly coleus, geraniums, oregano, and wandering jew to stimulate rejuvenation. Plant removed tips to start new plants.

* Pot up tuberous begonias, caladiums, gloxinias, dahlias, and cannas now for a longer season of bloom.

* Check gardening supplies: potting soil, seed starter packs, fertilizer, bird netting, row covering, etc. Check pesticides for expiration dates and replace as necessary. Consult your town’s waste department for proper disposal.

* Think seeds! Read on the seed package the number of growth weeks required and count back from the last two weeks in May to decide when to start different seeds. Now is a good time to start petunias, snapdragons, blue salvia, sweet William, stock, nicotinia, hollyhock, onion, celery, cauliflower, broccoli, cabbage, Brussels sprouts, beets, turnip, eggplant and kale.

* Late in the month peas, radishes, lettuce and spinach can be sown outdoors.

* When the ice melts or during thaws, check to see if your winter protection for roses was adequate. Make sure they are not heaving out of the ground. If they are, replace as much soil as possible around the roots and bud union.

* Prune blueberries, raspberries, and apple trees while they are still dormant. Ornamentals can be pruned but do not prune spring blooming plants such as forsythia, cherries and magnolias. On most trees, it is fine to remove diseased, broken or old branches and crossed limbs to open the tree to allow more sunlight and air circulation.

* Check the soil pH around blueberries—they like it acidic. Use ground sulphur to lower the pH, if necessary.

* If your back is feeling up to it, give your compost pile a turn to stimulate decomposition. A little nitrogen fertilizer thrown in may also help.

* Attend the Capitol District Garden & Flower Show at Hudson Valley Community College March 21-23 to get your Spring on! Bring soil samples to drop off for pH testing ($1.00 per sample) at the Master Gardener booth.

Text by Master Gardeners Liz Holmes and Pat Thorne
Too much of a good thing can be bad, even when it comes to horticulture. While phosphorous (abbreviated as P) is crucial for plant life, degraded water and burgeoning algae populations in recent times indicate that too much of it is migrating downstream into waterways. To slow the flow, New York State passed the Dishwasher Detergent and Nutrient Runoff Law in 2010, which in part decrees that existing lawns and turfgrass areas cannot receive phosphorous-containing fertilizer unless a soil test indicates a need. It promised to be a winning situation for everyone, except perhaps the P salesmen, but what, as Paul Harvey used to say, is the rest of the story?

I haven’t heard if Lake Champlain, the Hudson River and other water bodies are any better – perhaps it is too early to tell. But I do know that fertilizer companies are complying with the rules, as most lawn fertilizer sold in stores does in fact have a zero value listed for P. And since it is a lot easier to skip the soil test and just fertilize with the materials available, most lawns are indeed not getting more P. My skeptical side says this might spell trouble down the road in suburbia, since a recent Cornell study of 3,300 home lawns and 500 sports fields found that almost 40% of these actually needed P. In fact, last summer’s detective work unearthed instances of P deficiency.

The first case was a trophy house in Colonie. Living in a development just a few years old, the lawn was extremely thin, yellow-green and wispy. I wouldn’t be exaggerating if I told you there was more soil visible than grass. And the soil itself was more sand than silt or clay, a soil that wouldn’t be out of place hundreds of miles east on Cape Cod. From an environmental standpoint, thin lawns or bare soil are much more damaging than a thick stand of turf due to the reality of erosion. Exposed soil washes out onto the pavement and into the storm drains, a very poor situation, since not only are nutrients flowing along with the water but soil particles as well. I sent a soil sample to the lab at University of Massachusetts, and I wasn’t surprised at the results. The P level was 2 ppm (parts per million), half of the minimum of 4 ppm needed for quality turfgrass growth. Potassium, calcium, magnesium and organic matter levels were all also low. Quite simply, this lawn needed fertilizer, including a good dose of P, to move it from an environmental threat to an asset.

A second case involved a Troy sports field. Subject to much wear and tear, the field had degenerated into a sad stand of crabgrass, despite routine fertilizer applications. Testing showed that P was at 2.7 ppm, and potassium, calcium and the pH were all too low. A denser turfgrass stand would not only benefit Mother Nature, but also anyone who fell on it while playing a game.

* To read a summary of the Dishwasher Detergent and Nutrient Runoff Law, see our website at: http://www.ccerensselaer.org/Libraries/Hort_Lawn_Fact_Sheets/How_To_Comply_With_The_New_Phosphorous_Law_For_Lawns_And_Other_Turfgrass_Areas.sflb.ashx
* For more environmentally-friendly lawn care tips, see Cornell’s publication, “The Homeowner’s Lawn Care Water Quality Almanac” at http://www.gardening.cornell.edu/lawn/almanac/

Text and photographs by David Chinery
If winter comes, can spring be far behind?

Percy Bysshe Shelley, English Poet

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 Mondays and Thursdays from 9:00 AM to Noon, follow the prompt to speak to a Master Gardener and press #1. You can also email your questions by visiting their website at http://counties.cce.cornell.edu/schenectady/

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

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“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.
This hands-on workshop, held Thursday, April 3, starting at 6:30 PM, will provide instruction and materials for growing tomato transplants. Learn the four stages of a transplant and understand the conditions required for each. We will work from station to station as we fill plug cells, seed, cover and water. You will take home your seeded tray. Rensselaer County Master Gardener Doug Pratt will draw from years of wholesale greenhouse experience to help you grow like a pro. Workshop fee will be $10 per person which includes all materials. This program will be held at Cornell Cooperative Extension, 61 State Street in Troy, NY 12180. Questions? Contact Marcie at 272-4210 or mmp74@cornell.edu. To

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Make check payable to Cornell Cooperative Extension and return to: Cornell Cooperative Extension, 61 State St., Troy, NY 12180. Registration deadline is March 27, 2014 or when class is full.
Save the date

Saturday, May 17, 2014
9am – 1pm
Cornell Cooperative Extension
24 Martin Road
Voorheesville, NY

Garden Education Day
An opportunity to buy plants, learn new things about gardening, and visit the demonstration gardens!
So You Want To Start a Vegetable Garden?
Saturday, April 12, 9 AM—12 PM

Participants will develop skills to map and plan a vegetable garden. Activities include starting vegetable seeds and propagating herbs. Learn about organic fertilizers, irrigation and mulches. Bring measurements of your intended garden space and a sample of soil (1 cup of dry soil). Each participant will receive a flat (roughly 50) of vegetable and herb transplants to be picked up May 3 during our Earth Day Celebration.

Cost $40.00 per person.

Class size is limited. Please register with payment by April 4, 2014.

Visit our website:

 Individuals with special needs requiring accommodations should contact our office prior to the event at 518-371-1622.

Reduce Your Waste, Improve Your Garden
Thursday, May 15, 6—7:30 PM

Composting and Vermicomposting is a great way to reduce kitchen waste and produce nutrient-rich fertilizer for your garden or house plants. The workshop will cover all you need to know to start composting and vermicomposting at home. Cost $20.00 for program and book “Let It Rot”.

April Break Week Programs for Children Ages 5-10

Start your Own Veggie Garden
Tuesday, April 15, 9:30—11:30 AM

Join us for a morning in the greenhouse and learn all about the fascinating world of plants. Students will start their own vegetable seeds to take home. Garden exploration, art activities and healthy snack included. Cost: $15.00 per child.

Natural Egg Dyeing
Thursday, April 17, 9:30—11:30 AM

Join us for this fun, hands-on class and learn about plants that contain colorful dyes. Educators and students will work together and make dyes from plants such as cabbage, onions, cranberries and more. Students will then decorate their own eggs to take home. A healthy snack will be provided. Cost $15.00 per child.