Get Your Trees off to a Good Start With Proper Planting

- Chuck Schmitt

Did you know that most tree problems begin at the time of planting? We often focus on the leaves or crown to determine what’s ailing our trees when, most of the time, the answers are hidden in the soil. I have seen 15 year old trees die due to improper planting. Imagine your shade tree growing to the perfect size only to watch it die because it was not planted correctly. It’s true, it can happen. It’s imperative that we get trees off to a good start to avoid problems developing down the road.

Consider these factors at planting time to avoid future problems:

◊ Select the “right tree for the right place”. If your native soil is clay, choose a tree that can survive under these conditions. If your area is constantly moist or dry choose a species adapted to these conditions. Don’t fight an uphill battle, choose the proper tree for your site. Remember, all sites have limitations and all trees have limitations. Making a good match from the beginning will ensure a greater chance for success.

◊ Dig the planting hole 2-3 times the width of the rootball or the container the tree is currently occupying. This loosens the soil that new roots will grow into to establish the tree.

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◊ Be sure not to plant too deep. The proper planting depth is where the trunk of the tree flares out to become the root system. This is called the root flare. When planting balled and burlapped trees you need to unwrap the burlap and scrape away the soil from the top of the ball until you find this flare.

◊ Containerized trees need to be checked as well, as each time a plant is shifted up in the nursery it is generally planted a little deeper. Research has shown that it is better to err on the side of planting a tree too shallow rather than too deep.

◊ Once the planting hole is established and the tree is set at the proper depth, unfold the burlap and lay it back in the planting hole.

◊ If a wire basket is involved, be sure to cut away as much of it as possible. If roots grow through this wire and expand in diameter, they can girdle the tree many years down the road.

◊ If the tree is taken out of a container and the roots are circling, break them up and orient them away from the trunk. Roots that grow toward the trunk will expand in diameter over time and girdle the tree. Norway, sugar, and silver maples are commonly girdled by their own roots as well as some pines, poplars and little leaf lindens.

◊ Once the top of the burlap is folded back or removed and the wire cage is cut away, begin to backfill the hole with the soil that was removed. Use the native soil without amending to prevent the formation of a tea-cup effect in the planting hole. This tea-cup effect discourages the roots from establishing beyond the planting hole and is a detriment to the survival of the tree.

◊ Once the soil is backfilled into the planting hole, be sure to water it well. Good deep watering will eliminate large holes in the soil around the roots that will prevent them from growing beyond their current spread.

◊ To protect the tree and give it an advantage, we recommend placing 2-4 inches of mulch around the base of the trunk to keep mowers, trimmers and other plants from competing with the new roots as they get established. Remember to keep the mulch from direct contact with the trunk to avoid rotting of the bark. Spread the mulch at least to the drip line.

◊ The most important factor in assuring the success of your tree will be an adequate supply of water for the remainder of the season. It is recommended that 1” of water be supplied per week, either naturally or through irrigating regularly. Soaker hoses or treegators are very helpful in supplying water to the targeted area in a timely fashion. Helpful irrigation tools can be purchased from local garden centers. Proper planting will increase your chances for successful establishment of your trees.
Gardeners need to be Climate Smart!

Climate scientists are telling us that extremes of weather are becoming the norm; water quality and supplies of water are diminishing, and the increase in CO2 is contributing to more pests, weeds, and illness. For Northeast gardeners this means a longer and warmer growing season, short term droughts, and an increase in heat stress for plants and humans.

All of these changes bring with them another layer of change such as an increase in ticks carrying diseases, an increase in asthma due to diminished air quality, and a change in the tree species as the temperatures warm and insects are able to reproduce more often and diseases proliferate. Add to this mix the myriad of invasive plants and insects on our doorsteps and the balance as we knew it is out of sync. Take note: these are no longer predictions but realities for all of us, especially for farmers and gardeners and the key to adaptation lies in taking responsibility for one’s actions by being climate smart.

Consumers need to be as energy efficient as possible leading to a low carbon footprint. That means changing habits for shopping, traveling, and even comfort levels at home. Recycling and reuse of items must become part of our lifestyle. Promotion of local sustainable economic growth will be key.

For gardeners, gardening in the “new normal” will prioritize conservation of resources by using mulch to conserve water and mitigate weeds. This will also conserve the energy of the gardener and lessen the effects of heat stress on both the plants and the gardener. Using soaker hoses rather than overhead watering and collecting rain water for garden use are best practices. Composting will keep food scraps (no meat or dairy) and plant trimmings out of the landfill and producing a soil amendment rich in nutrients and microorganisms that will boost soil health and productivity while lessening the need for fertilizer. Planting native plants that are drought tolerant and a part of the local eco-system will lessen the maintenance needs of the garden and landscape.

Fall planting of “cover crops” in vegetable gardens that get turned under in spring will enrich the soil and sequester carbon. Plant more trees, as they are a great way to store carbon and to add oxygen to the atmosphere. In your food garden plan, consider perennial crops such as asparagus, berries, and dwarf fruit trees if space allows. Look into permaculture techniques for ideas on low maintenance plantings and design ideas for your own edible landscape. Backyard growing of food is ideal whenever possible, as it gives the gardener control over how the food is grown, lower costs, and a lower carbon footprint. It does not get more local than that!

Sources: [http://climatechange.cornell.edu](http://climatechange.cornell.edu)
It’s that time of year, when growers must make decisions about which plant stock they will overwinter and which must be liquidated. Limitations of space, materials and labor often influence this decision making process.

By September most plants have stopped “growing”. Even though they have stopped increasing in size, they still have a constant need for water. Moisture availability is an important factor in the winter survival of nursery stock, regardless of the overwintering method used.

Plant shoots and roots develop the ability to survive winter temperatures following exposure to decreasing air temperatures and shortening day length in a process called acclimation. Most references advise insuring your plants have achieved maximum cold hardiness, delaying the use of any type of protective covering as long as practical to allow the plant to perceive natural environmental cues.

So, when should nursery stock be covered? One useful guideline involves following the F-date. The F-date is defined by the date of first frost (F) plus 30 to 45 days. The exact date will vary with the latitude of the nursery and the typical seasonal variation you experience. For Example, if your first frost date is Oct 15, you would cover your stock between November 15th and November 30th.

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Growers normally consolidate containerized stock when setting up their overwintering beds. All plants should receive a heavy watering one to two days prior to being covered. A broad spectrum fungicide is also recommended at this time. Rodent bait must be placed throughout the covered area. Place one bait station for every 25-50 square feet of covered area. If the plants are laid flat and containers are stacked, be sure the ground is free of plant debris. This area must also be well drained to keep water from puddling under the cover.

A variety of overwintering systems have been used over the years, including coverings of clear or white plastic as well as poly houses. My personal preference is the sandwich method, which involves placing the containers on their sides and covering them with a poly-coated plant foam, white plastic, clear plastic, straw and a second layer of clear plastic. The sandwiched straw layer acts as an insulating temperature buffer zone.

For more details about overwintering or the specific temperatures at which nursery stock is injured, contact your local extension office.
We have been enjoying an extended warm spell so far this fall - don’t let that lull you into a sense of complacency regarding the power of winter weather in the Northeast.

Preparing for winter weather in the greenhouse industry begins with selecting sturdy structures that can stand up to snow and wind loads. However, in my tenure working with the green industry, I have been surprised at the damage snow, ice and wind can do to even sturdy greenhouse structures. Structural integrity alone might not be enough protection for your greenhouse during a severe Northeastern winter.

Prepare for winter now by inspecting your greenhouse structure. Is the cover in good condition, including at the ends of the structure? Loose covers or ends, including doors and vents, allow winter winds inside and can cause the cover to lift and tear away from the frame. Despite the cost of greenhouse covers and the labor to install them, it does not make economic sense to delay replacement of poly covers beyond their manufacturer’s rating. Keeping greenhouse covering in service too long can lead to catastrophic greenhouse failures.

In extreme winter weather conditions, snow and ice accumulation on top of or alongside greenhouses can crush the structure from the top or sides. The most efficient way of eliminating this wintry buildup is by melting it. If heavy snow or ice are forecast, turn the greenhouse heaters on to warm the glazing. This will help to minimize snow and ice accumulation.

In the event that electric power fails, do you have a backup heating plan? This might include generators that will supply enough electricity to power your heating equipment or some type of portable heat source and fuel supply for several days’ operation.

It makes great sense to have emergency bracing available to supplement the ridgelines of cold frames and greenhouses that do not have ready heat sources. The availability of emergency bracing proved crucial to minimizing damage in several Connecticut nursery operations over the course of last winter.

Start thinking now on how you might improve your preparedness around the nursery or greenhouse for the upcoming winter season.
EDUCATIONAL OPPORTUNITIES:

November 17, 2015
Leadership Forum on Strategic Planning
When: November 17, 2015
Where: Saratoga Springs, NY
Mark your calendars now for the 2015 Leadership Forum, which has a new home and a new focus this year. It will be in Saratoga Springs. The topic will be "Strategic Planning."

Leadership Forum is where company owners and managers further their knowledge of subjects related to running a business, but all NYSNLA members are welcome, especially if you're interested in becoming an owner or manager someday.

For the first time in many years, Leadership Forum will be a self-contained, one-day program not held in conjunction with any other NYSNLA event. We chose Saratoga Springs as the new location because it is easily accessible from anywhere in the state. (It's also gorgeous!)

Register online at:
http://www.nysnla.com/index.php/leadership-forum-home

December 8, 2015 Healthy Soils, Healthy Plants: Laying the Groundwork for Success
8:00am to 1:00pm
Westchester County Center 198 Central Avenue
White Plains NY
Most plants can’t survive without soil, and people can’t survive without plants. In recognition of the importance of soil, the United Nations has proclaimed 2015 to be the International Year of Soils. This workshop will focus on the relationship between soil and plants and how soils can be improved for the benefit of plants.

Program:
Start with the Soil: The Groundwork for Healthy Plants
Weird Science: Addressing Plant Symptoms Related to Soils
Strategies for Remediating Compromised Soils in the Landscape
Composting to Reduce the Waste Stream and Make a Great Soil Amendment

Cost: $35 (pre-registration required)
Contact Name: Robert Doscher, 914-995-4423, rd1@westchestergov.com

January 3 - 7, 2016, Northeastern Plant, Pest, and Soils Conference
Sheraton Society Hills Hotel, One Dock Street, Philadelphia, PA 19106
The first Northeastern Plant, Pest, and Soils Conference (NEPPSC 2016) will be hosted by the Northeastern Weed Science Society.

The goal of this meeting is provide a venue to bring together people with interests in entomology, plant pathology, weeds, horticulture, agriculture, agronomy, and soil science for the purpose of sharing of ideas and the presentation of the results of scientific studies and outreach programs.

More information: NEPPSC 2016

January 26, 2016, Bedding Plant/Nurseryman’s Education Day and Trade Show
Save The Date! Snow date January 28, 2016.
Learn about innovations in greenhouse production, New York State DOT rules and regulations, growing media, pest management, fertilization and other trends.
# Emergency Responder Information On Pesticide Spills and Accidents

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<th>CHEMTREC:</th>
<th>Poison Control Centers</th>
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<tbody>
<tr>
<td>800-424-9300</td>
<td>Poison Control Centers nationwide: 800-222-1222</td>
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<tr>
<td>For pesticide information</td>
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<tr>
<td>National Pesticide Information Center: 800-858-7378</td>
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<tr>
<td>To Report Oil and Hazardous Material Spills in New York State</td>
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<tr>
<td>NYS Department of Environmental Conservation Spill Response: 800-457-7362</td>
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<tr>
<td>(in NYS) 518-457-7362</td>
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<td>(outside NYS)</td>
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## Pest Management Guidelines

**Available upon request**

- Guidelines for Commercial Turfgrass
- Guidelines for the Integrated Management of Greenhouse Floral Crops
- Guidelines for Commercial Production and Maintenance of Trees and Shrubs
- Guidelines for Production and Maintenance of Herbaceous Perennials

**Guides for:**

- Berry Crops
- Grapes
- Vegetables
- Tree Fruit
- Field Crops

**To order online:**

Cornell University Bookstore

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Individuals with questions or special needs requiring accommodation should Contact Cornell Cooperative Extension of Albany County at (518-765-3500)