

## Hello!

Welcome to the Fall 2011 issue of Growing Together!

## Chlorosis Treatment for Urban Trees

Chlorosis is a condition where leaves cannot produce enough chlorophyll, the pigment which gives leaves their healthy green colour and plays a critical role in photosynthesis. Without sufficient chlorophyll, leaves are a pale green to yellow, and more critically, photosynthesis becomes impaired, which can kill the plant. Chlorosis can have a number of causes, but in our area, the usual culprit is a high soil pH that can prevent a tree's root system from uptaking iron—a mineral essential for the creation of chlorophyll. Certain trees are more sensitive



to alkaline soils: oaks, particularly Pin Oaks, often suffer from alkaline-induced chlorosis, and amongst evergreens, Fraser firs and hemlocks are the two most commonly affected. The established treatment protocol for chlorosis is to immediately provide supplemental iron to the tree through a trunk injection, and to take measures to lower soil pH.

In the past, chlorosis treatments were usually done in the spring, but they sometimes caused severe leaf burn and/or defoliation. Recent studies and tests at Michigan State University in Detroit, however, have found that fall treatments resulted in a complete green up of foliage the following spring with good persistence for up to three years, without any reported side effects.

## Fall Fertilization Pays Dividends Next Spring

Fertilizing trees is not feeding them. Many people confuse fertilizing with feeding, believing that fertilizer starts working immediately upon application to help plants grow bigger. Rather, fertilizing adds necessary elements to the soil that trees require to make their own food by photosynthesis. Trees absorb these elements through their roots. Because it is a tree's roots that take advantage of fertilizing, fall fertilizing has many benefits. Roots remain active beyond leaf drop in autumn, and they revive activity in the spring, six weeks before leaves bud. Fall fertilization will provide the root system with a ready source of nutrients—trees will emerge from dormancy in the spring lush, healthier, and with robust growth. It's a small investment that pays big dividends of more beautiful trees.



Fertilizing with Davey Arbor Green Pro in the fall is possible until December, or as long as the ground stays unfrozen. Arbor Green Pro is a slow-release fertilizer that remains in the soil for a full year.

## Sapsuckers and Woodpeckers

They both peck holes in trees, but the closely related sapsucker and woodpecker have different goals when they drill into wood. Sapsuckers feed on sap — hence the name — from the small holes that they excavate in living trees. Because they often feed repeatedly on the same tree, leaving behind characteristic horizontal rows of holes, sapsuckers can cause tree stress.

Woodpeckers, however, do not damage trees. They drill large holes into already decaying wood to feed on insects. Woodpeckers actually help arborists diagnose tree problems, because their presence signals insect populations and tree decay.

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## Fall Dormant Oil Application to Control Insects



*He's not the only critter in your trees.*

For controlling the other, less welcome, creatures, dormant oil is one of the most valuable treatments because it is effective against a wide range of pest insects. While they may have fairly complex life cycles during the rest of the year, most insects survive the winter the same way: either by going dormant, or by leaving eggs to hatch a new generation in the spring. Applying horticultural oil during this period takes advantage of their low activity. The oil coats and smothers insects and eggs, reducing the population that will survive into the spring.

Moreover, dormant oil is particularly environmentally friendly. No harsh chemicals are used, and when applied during the dormant period, trees don't have leaves or tender new growth that could be at risk of damage.

A Davey Tree expert will identify your trees and shrubs to make sure a dormant oil spray is appropriate. Some trees such as Japanese maple and Blue Spruce should not be sprayed. The foliage (needles) of the Colorado blue spruce can be discoloured (change from blue to green) by dormant oil applications.

## Why Winter Pruning Makes Sense

Pruning during the winter—once trees have gone dormant—has advantages for trees, for tree owners and for arborists. It's less stressful on trees, which have their highest levels of reserve energy during the dormant period, and are under less strain from insects and disease. A tree's structure is also more visible without leaves, making pruning easier and more efficient. Additionally, frozen ground facilitates access for our crews and specialized equipment, while it minimizes the chances of damage to your landscape.

*Contact us now for a winter pruning estimate and get your trees into healthy shape for next year's growing season.*



### *Meet Chris Paribello, your local arborist.*

A proud employee of Davey Tree for over 6 years, Chris' certifications include ISA Certified Arborist, ISA Certified Tree Worker, Ontario Certified Arborist and Ontario Utility Arborist. Chris is also a NFPA certified high angle rescue technician who also earned his Tree Science Diploma from the Davey Institute of Tree Sciences.

*Call on Chris and his team of experts to handle any of your tree care needs.*

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