



Winter Shower

The late fall-winter season is the preferred time for pruning most shade and ornamental trees in New England. There are several advantages to giving your trees a "winter shower" pruning during the dormant season.

First, a tree's structure is unobstructed by foliage at that time so the branches are easier to inspect. An exposed frame allows our arborists to quickly evaluate a tree's structural integrity. If corrective action is required, clean-up is reduced because only limbs are removed, not heavy foliage—a savings of both time and money.

Frozen ground and snow cover provide great opportunities to work over lawns, gardens and other delicate areas. Fragile flowers have gone and perennials are dormant so work can proceed without damaging them. Additionally, large tree pruning and removals can be accomplished efficiently because equipment can be positioned easily.

Hartney Greymont provides work year-round for all employees and this commitment to the staff allows us to assemble and retain the talented and experienced professionals that skillfully and consistently tend to your property.

Dormant pruning is a stimulating process for the trees. Proper pruning enhances a tree's natural form, improves its health, manages its size, and will reduce many potential hazards. Trees in our

region respond to dormant care with consistent growth.

Caring for the health and safety of your landscape trees during the dormant season provides decided benefits and value. Let us prune your trees for their health and your peace of mind. Schedule your dormant tree care soon. 🍁



Dormant care benefits your trees throughout the year.

A Record Not Worth Repeating

Record heat plagued parts of the U.S. this summer. In our area, Boston recorded its second driest August in 122 years and this weather caused tremendous stress on our trees and other landscape plants.

Horticultural drought can lead to multiple short-term problems. When combined with the past several years of damage and defoliation caused by such insects as the winter moth, there can be major consequences.

Water is often the most limited ecological resource available to plants. As soil water content declines, plants become stressed and plant tissues and processes are damaged. Long-term lack of water eventually leads to catastrophic biological failure and can ultimately lead to plant mortality.

Weather-stressed plants often exhibit marginal leaf scorch and browning initially. These signal that the plant is not receiving adequate moisture. Leaf scorch follows periods of dry, hot weather and occurs because tree roots are unable to adequately supply leaves with water. When water is lost from leaves faster than it can be replaced from the soil, leaves become dry and scorched, leading to premature leaf-drop. Severe defoliation often accompanies extended drought stress.


Trees which have sustained root damage from past construction activity or compacted soil, both of which prevent water absorption, can be at further risk during this time.

The time for a tree to produce its food is about three months. When drought interrupts this time, problems are created. Older trees are more likely to be in trouble as they are better hosts for insects and disease as a result of drought conditions. So, mature as well as recently planted trees, are especially venerable.

As drought intensifies, its harmful effects may be seen in the death of twigs and branches. Branch ends generate the lowest water potential and leaves there, having the least amount of water available, decline and die. Drought also reduces the production of an extensive root system which can change tree wind-firmness.

Pruning of weak, dead and dying limbs will enable trees to concentrate their limited resources on stronger more vital limbs, establishing a base. The presence of dead limbs in the future indicates further decline.

It is probably too early to tell which trees will ultimately survive and which will be lost this year. Sound horticultural practices will save as many as possible and extend the shortened life of others.

A drought-damaged tree must be treated like a newly planted tree and needs to be helped to regenerate its root system. On your property, be sure to deeply water each week to encourage this. Often supplemental watering and prescriptive fertilization are the best courses of action, but each plant needs to be individually evaluated to craft the best prescription for care to maximize its health and longevity. 



Early fall color, defoliation and branch death often accompany drought.



PHOTOGRAPHY: SEYMOUR LEVY



Detection and Evaluation

Ever wonder if the big old tree in the backyard, the one with the hole that the squirrels run in and out of, is actually a safe tree? You know the cavity is big enough for a family of critters, but how can you know the extent of the decay?


Hartney Greymont has a new tool that allows us to accurately detect and measure hollow pockets and decay within the trunks of trees. The Resistograph is a device that measures, electronically, the resistance of interior wood using a small needle (3 mm in diameter) that is carefully inserted through the trunk. In general, resistance varies with tree species, but is reduced as wood decays. The results, which are recorded instantly and look very similar to an EKG reading, are printed on a strip of paper at a scale of 1:1 and show variations in wood strength and the presence of decay.

In keeping with our commitment to continuing our education, we recently held an arboriculture training program designed to enhance the decay detection and evaluation skills of our field crews and arborists. Dr. Christopher Luley, a nationally recognized urban forestry researcher, joined our company for a day of classroom and field lectures.



Dr. Luley quickly earned the nickname, "Mushroom Man," as he gave an in-depth lecture and demonstration where he identified the most important and destructive decay organisms affecting trees in our area using a visual assessment protocol of their vegetative fruiting structures. He incorporated the use of the Resistograph on trees with mushrooms and conks and showed us how to accurately interpret the data collected.

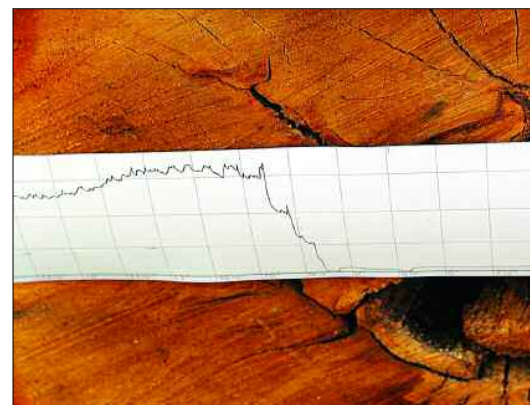
The Resistograph is reliable and provides a clear picture of the condition of the wood in trees. While experience and observation will continue to be critical, this instrument gives our arborists a way to measure the structural integrity of trees.

So if you have ever wondered just how big that squirrel condominium is or what that big orange mushroom along the trunk means for the health and safety of your tree, ask your arborist. 

Dr. Luley shares his plant pathology knowledge and expertise with our staff.



A Resistograph measures and records the variations in wood strength and allows the detection of decay within trees.



Curious Discovery

Recently, while on a plant health care visit in Burlington, Massachusetts, one of our Arbor Track monitors, Phil Perron, discovered a honeylocust tree with unusual growths or galls on its branches. We had not previously observed these odd growths and consequently samples of the galls were sent to the University of Massachusetts for further evaluation. Through laboratory analysis, a bacterium (*Pseudomonas syringae*) was eventually isolated and identified as the disease-causing pathogen.

At the present time, the infected honeylocust in Burlington is the only one in Massachusetts. This particular strain of *Pseudomonas syringae* has been

observed on honeylocusts in Ohio and Michigan. Galls are rough, textured growths ranging in size from peas to golf balls and often appearing at the nodes of branches and twigs and near branch tips. Researchers at the Ohio State University are currently researching the DNA of the gall-causing pathogen to learn more about its genetics and any potential damaging effects.

In general, most bacteria require a wound (such as bark cracks and cuts) to enter a plant, although some are able to enter through natural small openings in branches called lenticels. Injuries resulting from extremely cold temperatures like those experienced during the winter of 2004, can provide sufficient entry points



This infected honeylocust is the only known case in Massachusetts and was discovered by one of our arborists during a property visit.

Continued on page 4




Curious Discovery *Continued from page 3*

for such pathogens. Unlike other bacterial diseases, *Pseudomonas syringea* does not travel well in wood tissue. Fortunately, this means that infections are not likely to kill entire plants. It is not known if this particular bacterial strain will become widespread in Massachusetts.



The observational skills and inquisitive nature of Hartney Greymont's arborists have lead to other insect and disease dis-

coveries in the past. Over 20 years ago, a curious arborist observed a fungus affecting flowering dogwoods; those trees in Weston had the first confirmed occurrence of dogwood anthracnose in the state. An insect that most are familiar with, the hemlock woolly adelgid, was first found in Norfolk County by another of our arborists who was monitoring a landscape.

Part of maintaining the health of landscapes is the timely identification and diagnosis of insects and diseases. Our perceptive and knowledgeable staff members continually work hard to see that your landscape is well cared for and protected. 

EXPERIENCE OUR GUARANTEE

If you are not satisfied with any treatment or completed job, let us know. We will resolve the situation to your satisfaction, no questions asked. Our goal is not only to make sure your trees, shrubs, and lawn are as healthy as possible, but also to provide you with the peace of mind a satisfaction guarantee can bring.

Calendar of Care

	SEP	OCT	NOV	DEC
Review trees with arborist for dormant care				
Plant Health Care visits & treatments				
Apply antidessicants to evergreen foliage				
Subsurface fertilize ornamental & shade trees				
Naturally prune ornamental trees & shrubs				
Structurally prune & remove shade trees				
Transplant & plant trees & shrubs				
Compost topdress, aerate & overseed lawns				
Plan landscape design for spring projects				



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