

# Letters and stories

*If you have a story about trees that you would like to share with us, please write to us at our mailing address or e-mail your story to [info@arborguard.com](mailto:info@arborguard.com).*

Dear Spence,

We at Callaway Gardens continue to be very impressed with your Company and the high level of professionalism and customer service you afford to your clients. It is clear that your Company values are very parallel to ours. We firmly believe in having a faithful respect for our environment, dedication to our guests, and a commitment to sustainability. We pride ourselves in partnering with "like minded" people and believe that we have found that in your Company.

The projects you have recently completed on our property demonstrate your commitment to quality workmanship, caring staff, and a genuine concern for our shared environment. It would not be accurate to classify your Company as merely

"timber management" or "tree surgeons," but truly arborists committed to the environment. We need more people like you around our mission to help us "make a difference."

Thank you for helping us to take care of our small part of this big world, and we look forward to our next project together. If there is anything we can ever do to assist you in your mission, please do not hesitate to call on us.

Sincerely,  
Richard J. Waterhouse, AIA  
Vice President  
**Callaway Gardens**

## TREE TALES

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## ANNUAL TREE CARE PROGRAM

It's time to check your trees. Look for your annual tree care program for 2004 in December or January. Otherwise, please call Customer Service to schedule an appointment with your arborist. Winter is the best time to inspect your trees, while the leaves are absent, and cracks, dead wood and defects are obvious. Your arborist is available by appointment anytime you have concerns.

## President's Message

Let's face it. Trees are great. Yes, we have to deal with leaves, acorns, sap, falling twigs and other debris. But their beauty, character, and the shade are worth it.

Personally, I adore trees. Sometimes when the wind blows I watch their leaves twist about in an amazing display of texture and color. I also enjoy how they change with the seasons – natural but dramatic at the same time. In the summer, I can't imagine a world without leaves. In the winter, I can't visualize how the trees looked a couple of months ago. The changes are so natural we barely notice them. The difference is so dramatic we can't imagine what actually happened. Trees can help us connect to the temporal nature of our world. They help us measure the pulse of life itself.

Trees can also be dangerous. It's actually almost unexplainable how trees stand up. Their roots are shallow and only grow where conditions are favorable. In the urban environment, roots are restricted so trees have an even harder time anchoring to Mother Earth. Trees also have an interesting response to wounding. When a tree gets hit and bark is broken, an infection develops called decay. Decay erodes wood, which provides structural support. Decay can advance to the point where a tree can no longer support itself. Limbs can break. In fact, entire trees can break. And they do.

In the urban environment where trees are most vulnerable, the targets are concentrated. Targets are what trees or limbs fall on. These include cars, buildings, roads, parking lots and people. Gravity never stops. A weakened tree will eventually fall. Trees don't understand targets. They will fall on whatever surrounds them. I've seen a lot of it over the past 30 years of my career. I've seen too much.

Too many times we take trees for granted. Few of us understand them. At the same time, trees are one of our greatest assets but also one of the only physical entities that could cause sudden and catastrophic harm. Please have your trees inspected. Almost all disasters are caused by trees with obvious physical deficiencies. These deficiencies, however, are often only obvious to a professional arborist. Call an arborist to inspect and take care of your trees. Remove hazards. Live in peace. Be happy. You're worth it!

Spence Rosenfeld  
President

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*For People Who Love Trees*

*Fall/Winter 2003*

# TREE TALES

## LIVING WITH THE RISK OF TREE FAILURE

**N**ow that summer is officially over, neighborhoods are abuzz with the activity of our daily routines. Children are up early to catch the bus, and parents are off to work on their morning commute. Not much thought is given to the dangers that we face in our daily lives, until tragedy strikes. But everything in life has an element of risk. Intentional or not, we accept a certain level of risk with all of our life's activities. Likewise, we enjoy the beauty of trees and the benefits they provide to our homes and cities, and so it is easy to forget that trees pose a risk to our lives. These risks are compounded by the structures that surround us, both natural and manmade, that place us in proximity to the trees' living space. Our activities also impact their health, stability and structural integrity, compounding the risk even more.

The only way to completely eliminate all risk associated with trees, would be to remove all trees that have the potential to fall and harm any person or property. Clearly, this is not acceptable. Ordinances and laws are in place to prevent this (or we would hardly have any trees left). So, how can we be assured that the trees we dearly love and protect will not harm us?

Within our industry, research and quantitative data have been used to establish methods to help us determine how much risk is acceptable so that we can safely interact with trees. The process of determining the risk, or likelihood, of tree failure is called risk assessment. Risk assessment involves several procedures including a visual inspection to look for tree defects and symptoms of tree decline. The site conditions and the targets (people or

property) are also examined to identify dangerous conditions. A mechanical device called the Resistograph® may be used to determine more about the internal structure of the tree. Additional information such as maps, photographs, and samples may be collected. All of the information is considered in formulating a recommendation and in preparing a report advising the tree's owner of the steps required to manage the tree's safety.

There are different levels of risk associated with tree defects. The risk assessment will identify the elements of risk and help determine the action needed to reduce or eliminate the risks. In some cases, pruning and/or cabling will reduce the risk to an acceptable level. When practical, removal of the target may reduce the risk. If for any reason, the tree exceeds the parameters of what is considered an acceptable risk, then steps should be taken immediately to remove the tree. Any advice should be sought from a competent arborist experienced with the current techniques and standards of the industry in this area of expertise.

Regular inspections will help identify hazardous trees and the risk they present. Also, proper tree care will help diagnose and prevent tree problems that can cause tree decline and failure. The benefits of trees far outweigh the risks in most cases. To successfully live with trees requires knowledge of the inherent risks associated with trees, and acceptance of our responsibility to prudently manage the risks at an acceptable level. **AG**



Photo by D.J. Moorhead, The University of Georgia



### Contents

#### **Risk of Tree Failure**

– And Managing Those Risks *Page 1*

#### **The Resistograph**

– Consultant's Corner *Page 2*

#### **Community Roots**

– Neighborhood News *Page 2*

#### **Tree Hazards**

– And Recognizing Them *Page 3*

#### **Client Profile**

– Ardan's Garden..... *Page 3*

#### **Letters and Stories**

– Callaway Gardens Writes..... *Page 4*

# Special Tools Make Trees Safe: The Resistograph

The early diagnosis and evaluation of internal tree defects can help prevent accidents, injuries and property damage caused by tree failure. The Resistograph® is a drilling device used by a technical arborist to detect structural defects within a tree and to estimate the amount of decayed wood versus sound wood at the drilling points. The instrument was developed and patented by a German research group. Its measurements are scientifically acknowledged and are recommended by researchers and professionals as objective and reliable analytic tools.

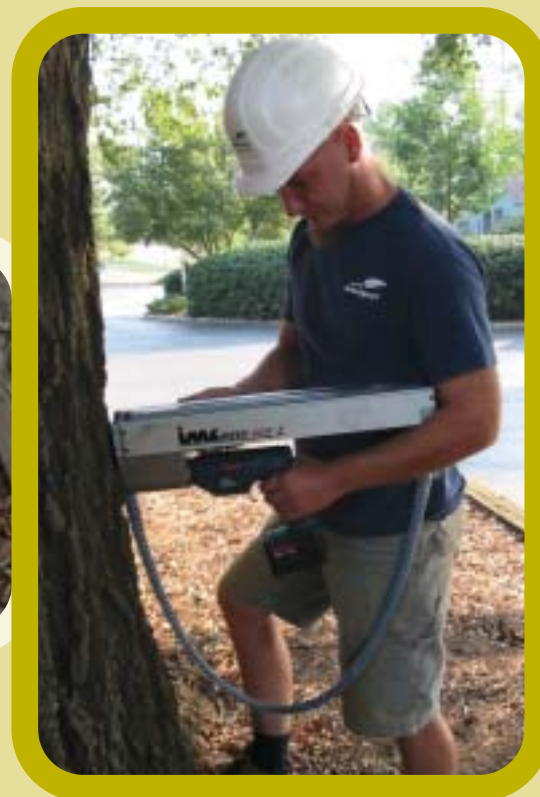
The process involves driving a needle into the tree through the bark, perpendicular to the annual rings. The drill hole is tiny, unlike conventional 5/8-inch core extractions. The varying densities of wood are measured in the form of resistance. The measurement results are recorded on a strip of wax paper in a 1:1 scale, which is visible on the instrument. Taking into account specific characteristics of different trees, an informative drilling resistance profile is created, and the ratio of sound wood to decayed wood, or the strength loss, is calculated.

A real advantage of the Resistograph is the immediate visual feedback that allows for quick diagnosis and prevention of a potential failure. Although the strength loss calculation is only one part of the risk assessment process, in some cases it provides enough evidence to immediately determine whether a tree is hazardous. *AG*



*Right: Arboguard's Technical Arborist, Lukas Ball, drills a tree with the Resistograph.*

*Above: Measurement results are output to paper for instant analysis.*



## COMMUNITY ROOTS GIVING BACK TO OUR TREES

### HELP CLEAN ATLANTA'S AIR...

If you missed the October 18th tree sale sponsored by Tree's Atlanta and Arboguard, there are many other opportunities to protect our metropolitan environment by planting and conserving trees. Each year, Trees Atlanta volunteers, and contractors plant over 2,000 trees in Atlanta neighborhoods. For more information, call Trees Atlanta at 404-522-4097 or visit their Web site at [www.treesatlanta.org](http://www.treesatlanta.org).

### ATLANTA FIREFIGHTERS LEARN CHAINSAW SAFETY...

Seconds count in an emergency situation where a tree or limb needs to be removed. Also fallen trees and limbs can be hazardous to rescue professionals. Arboguard will offer a training program this fall to representatives of each Atlanta fire station. Standard chainsaw operation, safety and maintenance will be the focus.

### IN PARTNERSHIP WITH PIEDMONT PARK CONSERVANCY...

Arboguard has joined forces with Piedmont Park Conservancy, a private nonprofit organization dedicated to the restoration and preservation of Piedmont Park, to form a tree watch task force. Tree advocates received instruction and field training this fall to become tree survey technicians, educated in the identification, healthcare and management of trees. Arboguard will offer this training again next year in this continuing effort to preserve and restore park trees. For more information about Piedmont Park Conservancy, please call 404-875-PARK.

### FEBRUARY 20TH IS GEORGIA ARBOR DAY...

Did you know that a single tree produces \$3,000 to \$5,000 worth of benefits per year? For additional tree planting ideas and events, visit the website for The National Arbor Day Foundation at [www.arboday.org](http://www.arboday.org).

### PARK PRIDE...

Park Pride's Adopt A Park program provides an opportunity for volunteer groups, neighborhood associations and businesses to take an active role in the maintenance and improvement of local parks and greenspaces. For more info, go to [www.parkpride.org](http://www.parkpride.org) or call 404-817-6761.

### GREENVILLE AND BEYOND...

We are starting our 5th year in Greenville. Arboguard is involved in a project currently underway to preserve and install trees at Reedy River Falls Park in downtown Greenville, SC. Also, a major tree renovation and pruning was just completed for the City of Charlotte, NC.

# Recognizing Tree Hazards

**W**hen a tree falls and damage is done to life or property, who is responsible? Recent Georgia case law has determined that it is the owner's responsibility to provide for the safety of trees on his/her property. If a tree fails and causes damage, and its failure could have reasonably been prevented, the owner or property manager can be held negligent and liable for the damage.

Fortunately, one can often read the clues that indicate if a tree is prone to failure. For instance, if a tree has large branches attached with tight v-shaped forks, it may need to be cabled or its weight lightened. Other warning signs of structural instability include cracks in the trunk or major limbs, hollow and decayed areas, extensive dead wood, or an unnatural lean. Mushrooms growing from the base of the tree or under its canopy may be a sign of root decay. On the other hand, just because a defect is not obvious does not mean the tree is safe. And just because there is a large hollow or some other defect does not necessarily signify a hazardous tree.

"It pays to be highly suspicious of any tree that has had nearby construction activities," says Arborist and Construction Specialist Jesse Milton. "Trenching, addition or removal of soil, digging or heavy equipment movement anywhere under the canopy can cause root death, which in turn could lead to the structural failure of the tree."

If you suspect your tree might have defects, call a professional arborist who can more fully evaluate your tree and recommend ways to reduce your risk. Recognizing and reducing tree hazards not only increases the safety of your property and that of your neighbors, but may also improve the tree's health and may increase its longevity! **AG**

*Wood decaying fungi (*Ganoderma applanatum*) on living birch.*



Photo by T. Laurent, USDA Forest Service, © 1999 Bugwood and The University of Georgia

## Client Profile: Ardan's Garden

Laura Ardan sat on her porch studying her favorite old oak on the evening of July 10, 2003. She was thinking about a Mozart concerto that she had just performed with the Atlanta Symphony Orchestra and was going over the events of the day in her mind. When the storm had hit that afternoon, she had taken her 2 cats and headed for the basement. She was worried about her trees and hoped they would be alright. Afterwards, the shocking and devastating news of the family killed by a falling tree had swept through the community. She was stunned, and wondered how something like this could happen. "I wouldn't want my trees to harm anyone," she thought.



*Corner view of Laura's garden.*

Laura had bought her home in Virginia-Highlands over 10 years ago with the intention of being there for a lifetime. The trees in her backyard are beautiful old poplars, oaks and hickories with character that had originally attracted her to this property. "My trees are some of the largest on this street," Laura says. "I love these trees!" However, due to an unexpected turn of events, and increasing responsibilities with this property, Laura has not been able to take care of them as planned. Before Laura found Arboguard, she had talked to a few so-called tree experts, but had been left with an uneasy feeling that they were only interested in taking the trees down for the money, instead of looking after their health and trying to extend their lives. When Arboguard's Nick LeCroy showed up to look at her trees, she could tell that he was genuinely concerned about a few of them. The Risk Assessment service he recommended would give her some concrete information that would help her decide how to take care of her trees.

"Most of Laura's trees were actually very healthy," Nick said. "There were just two that had some suspicious looking defects that we needed to check out a little further." As part of the Risk Assessment process, we were able to more accurately evaluate the structural integrity of the two trees in question by using the Resistograph. Laura received good news and sad news. Her favorite oak tree next to the deck will not need to be removed for now. But one of the largest trees, a 42" tulip poplar, has a defect that presents an unreasonable risk. "I knew that this news would be difficult to handle," she said. "But at least I know now what I need to do to help my trees remain as safe as possible."

**AG**