

# 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,

I want to thank and compliment your company and one of your employees for going beyond the call of duty.

For the past year or more, Jim Foote has been advising us on a course of action for three large oak trees in our front yard. I have been hoping to save the trees ever since we moved into the house three years ago but, unfortunately, because they were hollow and cracked, the recommendation was to remove at least two of them. When Jim visited us in January, a crack in one of the trees nearest the street had grown to the extent that it was now a significant hazard to pedestrians and traffic.

We had tried on previous occasions to have Georgia Power trim the overhangs, but to no avail. This time Jim called and advised them that unless they did their work on the trees immediately he would have no option but to advise the city of the hazard. Georgia

Power inspected the trees and within 48 hours had their own contractor cutting the two trees nearest the street down to the lowest cable level, thereby incurring the major part of the cost.

The irony is that all of Jim's efforts have resulted in no revenue so far for Arboguard. However, I want to assure you of the value of these efforts, firstly because we want to work with your company in saving the third tree, and secondly because Jim's professionalism and integrity will go a long way in our discussions with friends and neighbors in this highly wooded neighborhood. Please pass on our thanks to him.

With best wishes for your continued success,

Yours sincerely,  
Brian Hailes



An Arboguard

Special Publication

For People Who Love Trees

Fall/Winter 2002

# TREE TALES

## WHEN IN DROUGHT...

How you can minimize the impact of our ongoing drought

We are in the fourth year of the driest period on record in 100 years. How can trees cope with a continued drought or recover once it has ended? Well-established trees have the mechanisms to deal with cycles of drought, but during extreme periods, all trees are vulnerable. Drought stress may appear suddenly, but is often a slow decline that may go unnoticed for years. The causes and effects of drought stress are important to understand before efforts can be focused to reduce stress factors.

The first damage occurs below ground in the root system where environmental changes are taking place. Dry soil becomes hard and compacted, with reduced air space for oxygen and water movement. Beneficial fungi such as Mycorrhizae that assist in absorption are reduced. Fine roots unable to receive enough moisture shut down and eventually die. The visual effects of root damage may not be seen for quite some time, but if water is scarce long enough, signs of drought stress will eventually appear in the tree crown. Leaves will turn brown, wilt and drop prematurely. More dramatically, the tree crown may thin out or die back enough to stress the tree even further.

Weakened trees are then invaded and killed by insects and diseases that usually do not affect healthy trees. Bark beetles and borers have steadily increased over the last five years, with more frequency and intensity as the drought has progressed. Diseases such as anthracnose and canker as well as opportunistic fungi are accompanying the insects in increasing numbers. Ultimately, insects or disease may kill the tree, but drought is the initiating factor in this complex interaction of environmental stresses.

As a result, many of our trees are on the brink of decline. What can be done to minimize or prevent losing valuable trees? Once drought stress sets in, many resources are needed to restore a tree and the recovery period is lengthy.

Prevention starts with landscape planning. Designing your landscape

around the environmental requirements of your trees and plants will increase a tree's survivability. Provide enough space for root and crown spread of a mature tree. A red maple (*Acer rubrum*) can grow 50-80 feet tall with a 40-60 feet crown spread. Also, protect the tree and its root zone during construction and landscape installation to minimize soil compaction and prevent injury. Trees with root damage are more susceptible to Hypoxylon canker and other harmful agents.

Take time to research the site and soil conditions. Moisture requirements can be substantial for a large tree. A tree needs two gallons of water per day for every inch of trunk diameter. That's 20 gallons per day for a 10-inch diameter tree, or 140 gallons a week. A typical garden hose will put out five gallons of water per minute. Dr. Kim Coder recommends watering every three days when it doesn't rain. Water the tree's root system slowly and deeply so that water can soak in. And of course, adhere to the watering restrictions in your area. Keep the turf and competing vegetation away from tree trunks and out of the critical root zone to eliminate direct competition with the tree for water and nutrients. Mulch the root zone with 2-3 inches of mulch to help retain moisture and improve soil structure. Add supplements and amendments to the soil to help attract and retain water. Prune to remove dead, diseased and weak limbs to help the tree conserve energy.

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Photo by F. A. Baker, Utah State University  
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## Ladies and gentlemen, the beetles

### NO MAGICAL MYSTERY INVOLVED IN BEETLE INFESTATIONS

Beetle damage is no longer just a threat to our nation's timber supply, but a reality for many suburban property owners. The U.S. Forest Service estimates that 90 percent of insect-caused tree death in the United States is caused by bark beetles. The beetles wipe out thousands of acres a year, creating millions of dollars worth of damage. Whether the beetle is munching away back in the forest or in our landscape, it is a nuisance and must be controlled.

There are five species of pine bark beetles native to the South—three species of Ips engraver beetles, black turpentine beetle and, the most commonly known, Southern pine beetle (SPB). Different species may strike at the same time. The SPB is tiny—only about 3/16" long. The boring beetles travel along corridors and lay eggs on the bark of a weakened tree. Eggs hatch in about 10 days. The larvae bore through the bark and tunnel between the inner bark and outer wood, girdling the tree's vital life source. The beetles emerge and travel to other trees and repeat this lifecycle throughout the growing season. Once established, the beetles will attack seemingly healthy hosts.

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## Arboguard Announces Annual Tree Care Program

We will be reviewing our clients' tree care needs for the upcoming year and sending out annual tree care plans in December and January for 2003. If you have any questions about your annual tree care program, please call your arborist. Regular inspections and maintenance are important to tree health. Customer Service can assist residential customers anytime with arborist appointments. Tree inspections are always complimentary for our clients.

### DEALING WITH DROUGHT *continued from page 1*

Monitor your trees frequently for symptoms of stress. Follow good cultural practices and promote healthy environmental conditions. Your arborist is an ally in the process and can diagnose and treat any insect or disease problems. The best deterrent for drought stress is an ongoing program of monitoring and care to keep the trees as healthy as possible.

#### Arboguard Tree Specialists

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## TREE TALES

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## Letter from the President

Dear Friend:

I recently had my 50th birthday. It's quite a milestone. My life has been rich with experiences, both good and bad. I've learned a lot – patience, tolerance, listening, understanding, compassion, kindness, and appreciation. These have somehow replaced the blind ambition and aggressive self-centered qualities of youth. People seem more important to me than things.

I chose a profession working with trees. It has become a passionate endeavor of working with people. Yes, we save trees and bring out their natural beauty. But it's the pleasure and positive experience of our clients that make it worth the effort. It's that spark of human joy that we work hard for every day. Real rewards come from creating a positive effect on the lives of those we serve.

From that perspective, Arboguard does things a little differently.

- ◆ We listen carefully to the client and provide effective solutions to their problems, not ours.
- ◆ We are true partners and teammates with our clients and each other. Never let the team down.
- ◆ Quality tracking and analysis for every job is critical. We want and request real feedback.
- ◆ Mistakes are opportunities to learn and improve.
- ◆ Hiring is a process of hand picking the best people from around the world who share our passion.
- ◆ Training is structured, continuous, and a critical part of everyone's career. We invest heavily in each individual.
- ◆ Everyone is empowered to take action towards effective results.
- ◆ Everyone knows their responsibilities, understands what is expected, and has a back-up.
- ◆ A live person who is ready to help will always answer our phones.
- ◆ Perfection is our standard, not our goal. Never compromise that standard.

What about business profits, cash flow, and balance sheets? Yes, all that's important. But without clients and a dedicated staff who can provide solutions, none of that would really matter. It's the people that must come first. The numbers that are most important are a customer satisfaction rating of 100% and a turnover rate of 0. Perhaps that's why we have beaten the odds in business for 23 years.

Thanks for your continued support!

Spence Rosenfeld, President, Arboguard

Meet the Beetles *continued from page 1*

In Georgia this process can start in April and last through November, with up to eight generations produced.

As a result of the damage to the inner bark, the foliage turns from light green to yellow to reddish-brown. The discoloration can take between a month to a year depending on the severity of the attack. Close inspection of the tree trunk will reveal pitch tubes, popcorn-like deposits consisting of resin and sawdust. The pitch tubes or boring dust in the bark crevices are often the first sign of bark beetles. Bark removed from the tree trunk will reveal egg galleries.

Stress can reduce a tree's defenses, inviting infestation. Drought, lightning strikes, old age and overcrowding are known to lower pines' defenses by reducing their ability to produce protective resins, helping trigger a massive beetle onslaught. The best defense against beetle attacks is a comprehensive and proactive approach. First, the species of beetle must be identified to help determine the tree's chances for survival. Identification can be difficult because the beetles are similar in size. Other differences are distinguishable by a trained arborist. For instance, the Southern pine beetle prefers the middle third of the tree, while the Ips engravers prefer the upper third, and the black turpentine prefers the lower third of the tree. There are also differences in gallery formations. Successful attacks by Southern pine beetle or by more than one species almost always kill the tree. Black turpentine beetle attacks are usually less concentrated in number and duration. Quick action can sometimes help trees survive attacks of the black turpentine beetle.

Sanitizing is the next step in treating an infested area and controlling the spread of the pine beetles. Ideally, infested trees need to be removed and hauled away, then properly disposed of. The remaining healthy trees need to be sprayed with an insecticide several times during the growing season. "We have seen tremendous results with this type of program," says consulting arborist Chris Hall. "There was a beetle infestation at the Capitol City Crabapple Club. We removed the infested trees and treated the remaining trees. We also put their trees on a soil therapy program. We have not seen any recurring problem since then."

The best way to protect pine trees is to prevent an attack in the first place. Keep trees healthy by watering and soil therapy, and reduce any predisposing factors such as root damage to reduce the risk of an attack.



The southern pine bark beetles. From top to bottom: *Ips avulsus*, *Ips grandicollis*, *Ips calligraphus*, *Dendroctonus frontalis* (southern pine beetle), and *Dendroctonus terebrans* (black turpentine beetle). Photo by Gerald Lenhard, LSU © 1999 Bugwood and the University of Georgia

# A Healthy Tree IS A HAPPY TREE

Extending tree life through a comprehensive approach

**F**all through early winter is one of the best times to perform any kind of a tree health check. An arborist trained in plant identification, tree physiology and diagnosis can easily detect deadwood and other defects when the leaves are not present. Nutrient deficiencies, diseases and insect infestations can also be detected during winter on bark and twigs.

After inspection, the arborist may recommend a tree health care program, including soil therapy, and treatments to control insects and suppress diseases. Lifecycles of insects and diseases are carefully considered for the most effective application results.

A soil therapy program is necessary to create a healthy soil environment where roots can regenerate and grow. Our program consists of fertilizers such as Nitroform®, a gentle, slow-released form of nitrogen that will break down in the soil and be available to the tree over time. Also, biostimulants and sea kelp increase the organic material in the soil and provide a natural source of nutrients for the tree. Hydra-gels such as

TerraSorb® and yucca increase the soil's water holding capacity and also make water more available as needed. Mycorrhizal inoculants increase beneficial fungi that adhere to roots and absorb water. Other micronutrients are added if needed to treat potassium and iron deficiencies.

The appearance and structural form of the tree are also addressed in the tree health care program. Pruning will remove any dead, diseased or weakened limbs to improve the structural appearance and health of the tree. Cabling will support weak branch formations and help prevent breaking and splitting.

A tree health care program can extend the life of a tree by increasing nutrient and water uptake. It can also improve structural integrity and decrease risk of property damage and personal injury, as well as increase property value by 5-20 percent.



## COMMUNITY ROOTS GIVING BACK TO OUR TREES

**PARK PRIDE** – Arboguard President Spence Rosenfeld completed his service as president on the Board in 2001 but will continue to support Park Pride as "Official Park Pride Visionary" for Parc 911 and other projects. If you are interested in volunteering with Park Pride or joining their group, call 404-817-6760 or visit their web site at [www.parkpride.org](http://www.parkpride.org).

### TREES ATLANTA

Volunteers have planted thousands of trees in the City. For more information or to join Trees Atlanta, call 404-522-4097 or go to their web site at [www.treesatlanta.com](http://www.treesatlanta.com).

### NEIGHBORHOOD NEWS

• **Brookwood Hills** – Arboguard was pleased to sponsor the Acorn Auction held April 20th. The Brookwood Hills Garden Club raised a record \$46,000 through their auction for tree replacement and other beautification initiatives.

• **Ansley Park** – On September 28th Arboguard sponsored the fifth Art in the Park Auction benefiting the Ansley Park Beautification Foundation. Proceeds from the auction will provide a maintenance program for monumental trees in the neighborhood.

### TREE ORDINANCES AROUND ATLANTA

More changes are expected in the Atlanta and DeKalb County tree ordinances, to address provisions for existing trees. The City of Stone Mountain expects to issue its final tree ordinance by year-end.

### 2003 FLOWER SHOW

Arboguard is once again hosting a garden exhibit at the Southeastern Flower Show February 5 – 9 at the World Congress Center. Discounted advanced tickets can be purchased through Arboguard for \$13 each. Tickets are \$17 at the door. Please call 404-299-5555 to order or send a check with your request.

• **GREENVILLE, S.C.** – Our Greenville office is beginning its 4th year. Arboguard will sponsor Arbor Day again this year on December 2. Greenville County recently adopted its first landscape ordinance (NO. 3229, Sections 4 and 6.9). New and existing trees in parking lots must be protected, maintained in good health, and replaced if they die or become unhealthy.

# Piedmont Atlanta's Green Heart Park

## Piedmont Park is Atlanta's oldest and most popular park.

The land is rich in tradition and history. It was a battleground during the Civil War. In 1892, the first inter-collegiate football game between Auburn and Georgia was played there. It was the site of the 1895 Cotton States Exposition where Booker T. Washington delivered his famous "Cast Down Your Buckets Where You Are" remarks. At one time the Park was in part a golf course. For the past 98 years, Piedmont Park has been owned by the City of Atlanta and used as a center of activity for millions of visitors.

Frederick Olmsted, Jr. and John Charles Olmsted, sons of Frederick Law Olmsted, the famous landscape architect, were responsible for the current layout and design of the Park in the early-1900s. Their famous father, Frederick Law Olmsted, designed Central Park in New York, The Biltmore Estate, Grant Park in Atlanta, and Druid Hills and The Olmsted Linear Parks along Ponce de Leon Avenue in Atlanta. His vision and ability to integrate natural site features into the design process still set the standard for today.

Since 1989, The Piedmont Park Conservancy, a private, non-profit organization dedicated to the preservation and restoration of the Park, has been busy. The Conservancy has coordinated and funded numerous projects including:

- Renovation of the old Boat House and the 12th Street Entrance
- Construction of the Education and Administration Complex
- Landscape improvements and maintenance for Oak Hill
- Restoration of the Lake, Clara Meer, including a new bridge and historic gazebo
- Renovation of The Meadow
- Reconstruction of the American Legion Building
- Park-wide tree planting, pruning, and maintenance

Piedmont Park hosts a tremendous volume of activity. Over 2 million people a year visit Piedmont Park. This leads to high

levels of environmental pressure. The trees are affected more than any other feature. Soil compaction from foot traffic damages tree roots, crushes pore space and inhibits soil moisture penetration. Out of necessity, natural organic material from falling leaves is swept away. This prevents the recycling of organic biostimulants. In addition, dead limbs, some weighing hundreds of pounds, accumulate regularly and threaten Park visitors. The drought, combined with poor soil conditions, resulted in a high level of tree mortality. Something had to be done.

By the Fall of 1999, it became evident that a concise and focused action plan was needed to provide solutions. In addition, the Conservancy needed budgets to secure funding. Arboguard was asked to get involved. Arboguard reviewed the situation, divided the Park into zones, and prescribed remedial care on a tree by tree basis. Pruning and soil work proceeded for several months on over 1,200 trees. The initial tree care plan was completed with rave reviews and the Park was transformed.

Subsequently, Arboguard completed a state-of-the-art computerized tree survey. This will be used to monitor the trees and as an educational tool for the community. In addition, Arboguard has remained on-call to help with diagnostics, tree protection during construction, development of a Park-wide tree ordinance, and to donate wood chips for mulch.

There is still a long way to go to fulfill the vision and potential for what has become "Atlanta's Green Heart." This project can only be completed through effective public/private partnerships, the efforts of volunteers, and donations and contributions of all types. To find out how you can get involved, check the web site at [www.piedmontpark.org](http://www.piedmontpark.org) or call 404-875-7275.

## Safety First!

Recently, another tree climber was killed in Atlanta. That makes three local fatalities this summer alone. There was a small write up in the back of the paper. The media glossed over this tragic event. Our condolences reach out to the families and loved ones of these unfortunate accident victims. It seems, however, that tree climbers are hurt or killed with regularity. This is an extremely dangerous business.

A new report from the Occupational Safety and Health Administration lists 387 fatalities in the tree care industry. Hundreds more have been seriously injured. These are horrific numbers. OSHA calls these events "accidents" and investigates to find out what happened. Most can be traced to a failure to follow proper procedures. But what does that really mean? Did the workers know the proper procedures? If so, why weren't they followed?

Safety must become part of a company's culture. It begins when management establishes safety as the number one priority for all activities. It comes to life with training. Training requires an investment in time, effort, and money. These translate into expenses, which to some businesses may seem optional. Reductions in training to cut costs proportionately increases risk. That's when it becomes "ok" to violate a procedure. That's when accidents happen. That's when people get hurt or killed. Saving money while increasing the chances for a tragic event is not just unacceptable, it's immoral.

At Arboguard, we train each worker at least 160 hours per year. That's an entire month! There are well-organized weekly and quarterly training seminars. Thirteen people comprise a

safety committee that reviews our performance and creates directives for improvement. Drug testing, spill kits, fire extinguishers, MSDS training, personal protective equipment, electrical hazard awareness programs, etc. are all part of daily routines. We certify our own drivers and even teach First Aid and CPR classes. Every near-miss or accident is rigorously investigated. Information derived from these investigations is integrated into even more training sessions.

We recently had an unannounced drop-in inspection by an OSHA investigator. OSHA was quietly targeting our industry. It took all day. Every aspect of our safety program was analyzed. Two items were discovered and recommended for correction. First, we were instructed to add reflective tape to a low ceiling in the basement. Second, a "No Smoking" sign on the storage shed required another nail to secure it. The inspector just had to find something. Both items were quickly addressed. Their final summary described Arboguard as a real-world model for industry safety standards. We weren't just relieved when it was over; we were proud of the results. We've received numerous national awards for safety. None, however, has been as gratifying as that inspection.

Safety costs money. These expenses are added to our budget and used to determine pricing. We do not price our work based on our competition. They may be cutting prices by cutting costs. We establish pricing by how much it costs to do a safe, effective, professional job to our own rigorous standards. It's not simply about "you get what you pay for." It may be about saving people's lives.