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Digging Deep ...

I’ve watched tree care companies go through all kinds of ups and downs. Sometimes, it’s the full industry wandering through unknown territory as we did after 9/11. Occasionally, it’s an area of the country that gets sandbagged compared to what is happening in the rest of the nation or the world. Once in a while, we wonder whether we are going to go into tough times, such as the “R” word that no one really wants to utter right now. Sometimes, one of us loses key people who we never thought we could do without, and we feel like a freight train just ran us down.

What has constantly amazed me is the sustainability of arborists – people for whom living another life isn’t even something they would consider. Sometimes, it means adding on a new division, such as PHC. Other times, it means scaling back and riding through the storm. Others add on Christmas lights or snow plowing or landscaping. A few decide that it’s close to the time when they imagined activating their succession plan, and they step aside or sell. For those who see many more years yet to go, the alternative of doing other things simply doesn’t seem to cross their minds. It really is in the blood, and arborists would rather dig deep than contemplate another existence.

In many respects, it is one of the strongest characteristics about those who choose to live their lives caring for trees and running a business. It’s the stick-to-it-iveness that ensures success. Persistence is one of the most important qualities in achieving any goal. It’s also very different from the negative concept of continuing to do what you’re doing and getting the same thing. Persistence is about seeking the right talents to complement your own. Persistence is about finding new angles from which to look at challenges and turning them into opportunities. Persistence requires believing in yourself – a confidence that you ARE capable of achieving your vision. Persistence is something that your team has to latch onto and carry into every day.

Moving the pride that all arborists carry about their work into action that goes beyond ego to sustainable winning behavior is all about the confidence that you build through persistence. It’s also very different from the negative concept of continuing to do what you’re doing and getting the same thing. Persistence is about the confidence that you build through persistence. It’s about new angles from which to look at challenges and turning them into opportunities. Persistence requires believing in yourself – a confidence that you ARE capable of achieving your vision. Persistence is something that your team has to latch onto and carry into every day.

The generosity within this industry is another reason that you are able to survive. Talking to first timers at the Winter Management Conference, they were floored at how open established companies were with sharing lessons learned. It’s a value within this industry – helping others along so that they don’t have to dig as deep quite as often as some of their predecessors have.

When you think about being in the heart of this year’s season, remember that you have a staying power about you that you can rely upon. You have companies all over the nation and the world just as determined as you to succeed and that are practicing persistence to get to the next level of a sustainable operation. Remember that you have TCI there as a resource that has gathered the wisdom of tree care companies for years, and our job is to help you not to have to – dig as deep …

Cynthia Mills, CAE, CMC
Publisher
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The Official Publication of the Tree Care Industry Association
Tree Care Industry Volume XIX Number 4

APRIL

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Ticks suck – and spread disease
Tree Gear Authority

Stephen & Laura Chisholm

Having met and started their tree care company over 30 years ago, Laura and Steve Chisholm have developed strong roots in the Northeast arborist community.

With distinctive voluntary service including a presidential post of Certified Tree Expert, founders of the Committee for the Advancement of Arboriculture and chairmen of New Jersey Tree Climbing Championships, there might appear to be few functions this dynamic duo has failed to fulfill.

Perhaps their greatest accomplishment though, is something we all hope to attain; handing the business over to world-class sons Mark and Steve Jr. who now run the company as if customers themselves were family.

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Cranes operation is not identified as one of the top hazards in the tree care industry, but having a well-trained, safety-conscious crane operation is part of maintaining a safety culture.

One of the latest efforts to maintain safety in crane operations for all industries that use cranes is the ongoing push toward operator certification. Some states have already made certification mandatory for crane operators on construction sites.

"Regardless of whether or not it is required, it is something desirable, for the very reason that it came from a grass roots industry effort to improve the safety of crane operations," insists Graham Brent, executive director for the National Commission for the Certification of Crane Operators (NCCCO). "The principle is that cranes, no matter where they’re used – whether it’s general industry or in construction – need to be operated by a professional – by someone who’s been trained and has had the training evaluated.”

NCCCO is the accredited body for certifying crane operators according to two national agencies – National Commission for Certifying Agencies (NCCA), and the American National Standards Institute (ANSI). The organization was founded in 1995, but the push for proven standards began more than two decades ago in response to a series of accidents in the construction field. These days, the NCCCO conducts tests for certification and recertification for crane operators in all fields. Some states have begun mandating certification, and many companies are adopting the need for it as a way to provide a safe working environment that will cut down on injuries and fatalities on the job, while bringing with it the many long-range benefits of a strong safety culture: reduction in lost man hours, lower insurance premiums and a competitive edge over competing firms.

"We’re still seeing a good number of accidents, small and large, but every accident is something you would hope to avoid,” Brent says. “Whether it’s high-rise construction, general industry, shipbuilding or tree care, you’ve got different types of hazards. The bottom line, for us, is that..."
the individual operating the crane should be trained.”

The NCCCO doesn’t conduct any training, but does conduct a national assessment that ties into federal rules and safety standards. The credentialing for the cranes most often used in tree care ties into the ANSI/ASME B30.5-2004 standard for Mobile and Locomotive Cranes.

“By providing a national standard, we’re not saying that all operators that pass these exams have reached the same level of experience or proficiency. What we are saying is that by going through a written and practical exam, by demonstrating compliance with physical and medical criteria, by attesting to drug testing standards, that at least you have something in place,” Brent says. “Whereas in many, many cases – in many industries that use cranes – there is, quite frankly, nothing. Or there had not been anything.”

Fourteen states require crane operators to be certified. Nevada, Minnesota and Utah adopted the requirements last year, and legislators in Michigan, Maryland and Florida are considering similar regulations. The state of Washington will require certification as of 2010.

While certification sometimes applies only to cranes used in construction, since 2005 in California there has been a crane operator requirement that applies to nearly all uses.

Safety experts with the Tree Care Industry Association, which in recent years has been promoting its own Certified TreeCare Safety Professional (CTSP) credential, see the certification of crane operators as an important step in creating a safety culture for those arborists and tree care crews who employ cranes.

“We support the certification of crane operators,” says Peter Gerstenberger, TCIA’s senior advisor to the president for safety, standards and compliance. “We’re consistent with NCCCO on that. If we’re going to have crane operators in this industry, they should be certified.”

A recent TCIA survey found that only 55 percent of the association’s members use cranes, and a much smaller percentage actually own the crane. The majority of TCIA members that do use cranes will hire an outside company.

That’s the case with Sam Noonan, who operates Noonan’s Tree Care of Santa Rosa, Calif. When he needs a crane, he hires Precision Crane Company (also of Santa Rosa) to do the work. Precision Crane is certified, he says, although what’s most important is that he has a long history with the company and knows that they use safe practices on his job sites.

“We’ve been using the same company for 15 years,” he says. “There are cheaper companies out there, but they’re the best.”

Noonan says that having a crane company he trusts is an important part of maintaining a safe work environment. There are several business reasons, he says, but what’s most important is protecting the personnel on the job site.

“We don’t want anything to happen; they’re worth too much,” Noonan says. “You always protect your employees, because they protect you.”

Observers think that testing and certification will help bring a higher measure of safety.

“Certification of an operator of a big and potentially dangerous piece of equipment like that helps guarantee an overall higher standard of knowledge and awareness of the crane operation, and helps to insure that the overall crane operation is going to be safer,” Gerstenberger says. “We feel that’s a good step. We also feel that compliance with all other OSHA and ANSI standards with regard to crane use – with regard to inspection, setup, and actual operation – are all very good things that our industry needs. Probably more than most industries, compliance is vital because virtually every time we use a crane in tree care, we’re hoisting a climber in the air. That, by definition, is what is called a ‘critical lift.’ You’ve got a lot on the line, no pun intended, when you take one of your co-workers and lift him up in the air with a crane.”

Ironically, the uses that make cranes critical in tree care are also what put tree care into non-compliance with federal safety standards, which don’t allow the lifting of a human being on the load line of a crane, unless he or she is in a “personnel basket.”
or “man cage.” The issue is of particular concern to Gerstenberger (“Washington in Review: Industry Needs New Rules,” TCI, January 2006). The association is petitioning OSHA for a waiver, making the argument that this is the safest way to do the work.

“That one issue, hoisting a climber, is what puts us into non-compliance with OSHA and other ANSI standards that are pertinent to cranes,” Gerstenberger says. “We can’t do our work out of a man cage or personnel basket. It just doesn’t work, it’s unfeasible, it’s even unsafe. We’re using the crane, first and foremost, because it makes the job safer. It adds an incredible amount of expense to the typical job. If you think about it, the only way it is justified is if it makes the job safer or more efficient, or both.”

Since the alternative is often for the climber to go up a tree, and trees sometimes fail, Gerstenberger notes that the crane is a safer option in most circumstances that it is used.

“There’s documented evidence that people are dying because trees are failing with them in them,” Gerstenberger says. “The crane is a powerful tool to help us mitigate or avoid that hazard completely, as long as we do everything else properly with that crane.”

Peter Gerstenberger

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Organic PureSpray GREEN. Safe on anything but pests.
pany also teaches safety courses in aerial devices used in tree care.) Approximately 450 operators have gone through the crane safety program, and another 200 have gone through the exam preparation course. Julie Perilloux, test site administrator for the Sentry Safety Program, said that there are a minimum of 10 operators per class (an NCCCO rule), and an average of 15. Limiting the number of students in a class helps maintain a good student-teacher ratio for a course that can be rigorous and difficult.

“We want to keep them small, because we want the pass rates to outweigh the failure rates,” Perilloux says. “The test is hard. The national average in passing the NCCCO exam is 40 percent, and these are experienced operators. We want to improve on that and exceed that, by far.”

In general, those in the safety program are those seeking experience as crane operators, and those in the certification course are experienced operators.

Approximately 10-15 percent of those participating in the crane safety program work in the tree care industry, by her estimate, and 5 percent take part in the exam preparation course.

“There are only 14 states that require certification,” says Beach, the program manager, “For example, Alabama doesn’t, so the tree care people here just want (to take) the minimum, and go on. The only way it would help them is if they went to another state that did require it, and they knew it ahead of time.”

Beach says that Altec has received more requests from tree care professionals this year.

“Like, overnight,” says Beach, who thinks the reason might be that the word-of-mouth has just begun reaching those who are familiar with the company’s reputation in the tree care industry. “We have a safety record that’s second to none, and I think people out there recognize that across the country.”

For those who work on hurricane or other storm cleanups, or otherwise want to make themselves more employable if they cross into other states, certification is a way to do it. The company recently ran a NCCCO certification course in New York, a state that doesn’t require certification, because the unions requested it.

Beach says that having certification provides a competitive edge for the individual, in terms of getting a new job or pay increase.

“That’s what they tell us in the field,” he says.
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NEW DISTRIBUTORS AND DEALERS PLEASE INQUIRE.

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Leaders with Georgia-based North American Training Solutions (NATS) and Arboriculture Canada Training & Education (ACTE) out of Alberta, Canada, have agreed to join forces to help reduce the ever-increasing rate of arborist fatalities by developing what they are calling a “revolutionary and dynamic new way to train arborists.” A priority on their to-do list is to train the trainers.

Both companies were already providing arborist training. For this new venture, they prepared a Who’s Who-type list of well-known arborists that includes their current rosters of instructors, representing more than 12 chapters of ISA, world champion tree climbers and well-known seasoned trainers in the industry. At least three of these instructors are already Certified Treecare Safety Professionals (CTSPs) and several own or work for TCIA-member companies.

Recently, close to 30 of these men and women took part in the first ever joint “Instructor Intensive Training Camp” held in Florida. The outcome? With an unprecedented amount of industry knowledge among the group (460 years), together NATS and ACTE plan to develop new standards for training and certification to benefit the entire industry.

“Historically, there has not been any sort of credentialing process that encourages arborist trainers to broaden their arborist skills and knowledge by learning from one another, and through this process to become a Certified Arborist Instructor,” says Dwayne Neustaeter, ACTE owner. “It is a well-known and statistically proven fact that bringing in outside training entities to supplement or augment training programs, and moving a step beyond to cross train between two groups, as we did in Florida between ACTE and NATS, can ensure the highest level of competency in each individual trained.

“Based on this and requests from companies and municipalities seeking a more comprehensive training process, Arboriculture Canada Training & Education Ltd. and North American Training Solutions have researched and developed similar mandates in our approaches to training,” explains Neustaeter. “Therefore, it made good sense – both to Scott Prophett with NATS and me with ACTE, as owners of these companies – to cross train and cross certify our instructors. This idea gave birth to the concept of joining the instructors from two different training companies together in a training program that not only provided education about how to be a better trainer and presenter, but also combined the instruction of arborist disciplines. From this process, we will be offering instructors the ability to become what we will designate as both Certified Arboriculture Technicians and Certified Arborist Instructors.”

Arboriculture statistics reveal that a tree care worker is more likely to lose his/her life than a police officer. Overall, close to 600 tree care workers lost their lives in the 90s (as published by the Arborist Safety and Techniques Fund). At the current rate, the arboriculture industry is expected to lose almost twice this amount (1,000 arborists) in the first 10 years of the 21st century. This information alone established another critical reason for these two training companies to come together to develop a more extensive level of advanced training for arborists worldwide, according to Neustaeter and Prophett.

“The vision of the folks who are involved with this new direction in arborist training is more expansive,” says Prophett. “The number of instructors, the broader sense of courses, number of trainers, look-
...ing at the industry and trying to make an impact by spending the time necessary to research, test and change unsafe methods for the betterment of the industry – we are here to share what we know, serve arborists the training they need and support our clients well beyond any and every training session we offer.”

Another key element for arborists is making sure the equipment they have is what they need to perform each job effectively and, most importantly, safely, according to Neustaeter and Prophett. For the intensive training program, Tobe Sherrill, owner of SherrillTree arborist supplies, provided the group with the latest equipment as well as numerous samples of up-and-coming gear to test during the week, and also take with them to further assess in the field.

“I have a great respect for these men and women, who care enough to give back to the industry they represent by supplying arborists with the best and most effective training, and that can, literally, save lives,” says Sherrill. “It is because of their dedication and passion that SherrillTree supports these training companies by supplying the latest tree gear and equipment to allow trainers the opportunity to try out the latest innovations and provide us with the feedback. We, in turn, can share with arborists who continue to look for the next equipment advancement to save time on the job, allowing more time for additional work.”

Neustaeter and Prophett say they will keep TCI readers informed of their progress in developing the new standards for training and certification, and development of their related training programs. More information and updates can also be found on their Web sites at www.northamericantrainingsolutions.com or www.arborcanada.com.

NATS/ACTE Instructor Intensive Training Camp attendees included: Warren Williams, Thor Clausen, Andrew Hordyk, Bruce Smith, Scott Prophett, Lita Sciturro-Smith, Glen Wilson, Glenn Peroni, Ed Carpenter, Odis Sisk, John Ransom, Kathy Holzer, Melissa LeVangie, Matt Logan, Mike Dirksen, Mark Cooke, Matthew Hodges, Ary Fun, Wenda Li, Anthony Tresselt, Michael Tain, Zeb Haney, Javier Jimenez, Kevin Mengers, Sam Kezar, Dwayne Neustaeter and Nancy Neustaeter.

Gillean Smith is a freelance writer and public relations account executive with King’s English in Greensboro, N.C., currently doing work with SherrillTree.
New Jonsered midrange saw

Jonsered’s new midrange professional saw, the CS 2153C Turbo, was developed for demanding users who want high power-to-weight performance and high rpm in a smaller displacement saw. Imported by Tilton Equipment Company, the new 50.1 cc model is rated at 3.5 DIN (Deutsches Institut für Normung) hp and the engine has been designed to deliver fast throttle response and a broad power band for strong torque at all rpm. The CS 2153C Turbo also features a decompression valve and an air purge primer, as well as a quick-release top cover and vibration-isolated carburetor. A deluxe model with electrically heated handles is also available. Contact Tilton Equipment Company via www.tiltonequipment.com or call 1-877-693-7729.

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Bobcat compact tractors

The first five of Bobcat Company’s new line of compact tractors – the CT120, CT122, CT225, CT230 and CT235 – are already available at select Bobcat dealerships. The four remaining models will be introduced throughout 2008. They feature four-wheel drive and hydrostatic transmissions for easy operation, and can be used with Bobcat implements, including an auger, backhoe, box blade, finish mower, seeder and tine rake, as well as a front-end loader and attachments. The compact tractors have sleek hoods and side panels made of tough, durable steel. Their design provides superior visibility to the front of the tractors. Standard comfort and safety features include a spark arrestor muffler, horn and brake lights as well as an optional Bobcat suspension seat and a fully retractable seat belt. The roll-over protective structure (ROPS) can be folded down to make transportation and storage of the tractor more convenient. The CT120, featuring a 20-hp diesel engine and two travel speed ranges, is 46.5 inches wide with agriculture tires, 106 inches long and 81.8 inches high with ROPS deployed and weighs 2,055 pounds. The next four models are each successively more powerful and slightly larger. Contact Bobcat Company via www.bobcat.com.

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SilkyUSA’s new Yamabico 330 is an innovative dual-purpose pruning saw with both fine (8 teeth per inch) and coarse (5 teeth per inch) teeth on one 13-inch, ultra-strong, mono-constructed blade. Fine teeth are located on the back of the blade (back teeth) for undercutting. Whether you are cutting thin or thick branches, the back teeth can be used to undercut the branch. The saw is equipped with a rust-resistant, hard, chrome-plated, taper-ground blade with an impulse-hardened non-set tooth design. The blade is mono-constructed giving strength and flexibility to the full length of the saw. The precision-ground, razor-sharp teeth provide a fast, clean and extremely smooth cutting action. The hard, chrome-plated blade resists rust and effects of tree resin, and wipes clean easily. The comfortable, non-slip rubber handle absorbs vibration, reduces work fatigue and provides superior grip when hands are wet or when wearing gloves. A durable, black polypropylene sheath with belt holder is included. Made in Japan. Contact SilkyUSA at via 1-877-SILKYSAWS (745-5972) or via www.SilkyUSA.com.

RZI Products Root Soaker

RZI Products Root Soaker is a water conservation product designed to water roots through mulch and harsh, compacted soils. It is also designed to evenly water the root mass interior and condition the soil just beyond the root mass, regardless of slope and grade changes, to encourage root development in the native soil. The patented and patent pending Root Soaker incorporates a clog-free drip hole design. For aesthetics, it has a low profile that can be embedded in, or surrounded with, mulch and is available in typical mulch colors to blend in with the landscape. It can be placed under evergreens and large shrubs. It is filled through the top without removing it. Units connect together so that it is adjustable to the right size for any tree or shrub. Contact RZI Products at 1-800-704-0893 or via www.RZIproducts.com.
Stens and Liquid Combustion Technology partner

Stens Corporation has partnered with Liquid Combustion Technology (LCT) to become its exclusive parts distributor in North America. Stens will also manage the service network, including recruitment of new service centers and processing warranty claims.

LCT is a U.S. owned and operated company with employees worldwide and more than 30 years of engine manufacturing experience. LCT is a full-service manufacturer of small engines, building them from the ground up including concept, design, patent and engineering. Stens will initially offer the 208cc (6hp), 291cc (8.5hp) and 414cc (12hp) engines and LCT parts. These general replacement, horizontal shaft engines are designed for use in a variety of outdoor power equipment including generators, pressure washers, water pumps, compressors, blowers and tillers.

Stens Corporation, Forestry Division, supplies replacement parts and accessories to more than 50,000 dealers in North and South America through its U.S. and international distribution network. Stens is also a member of the Outdoor Power Equipment Aftermarket Association and is a subsidiary of Ariens Company.

Jamieson joins National Safety Council Board

Scott Jamieson, president and CEO of The Care of Trees and a TCIA Board member, has been elected to the board of directors of the National Safety Council. The first tree care professional to be elected to the council’s board, Jamieson will be part of the board’s development and strategic planning committee. He will serve a two-year term.

Under his leadership, The Care of Trees was the first tree care company in the nation to join the ranks of NASA, Daimler Chrysler, Johnson & Johnson and others in conducting a comprehensive evaluation of the company’s safety leadership practices. Through the Strategic Safety Leadership program of Behavioral Science Technology, Inc., the company underwent an assessment, involving everyone from ground crews to senior managers.

“Company culture is probably the biggest influence on worker safety,” says Jamieson. “You can have a safety plan, but if the culture doesn’t embrace it, it won’t have much impact.”

Bartlett promotes key operations employees

The F.A. Bartlett Tree Expert Company has promoted Peter Jeskey to assistant vice president of capital equipment, and Matthew Farin to assistant vice president of contracts administration and assistant secretary.

Jeskey will continue to oversee management of over 800 production vehicles and a fleet of over 200 sales cars. He will also focus on initiatives to maximize the environmental efficiency of the company’s equipment. He previously served as director of purchasing and capital equipment. He will transition oversight of purchasing to a new director, yet to be named. Jeskey joined Bartlett in the 1970s as a crewmember and then foreman and has held various roles of increasing responsibility.

As an officer of the company, Farin plays an intricate and diverse role in operations, including heavy involvement in the bid-

Davey acquires Skip Kincaid & Associates

The Davey Tree Expert Company has acquired Skip Kincaid & Associates of St. Louis, Mo. Skip Kincaid & Associates provides urban forestry consulting services to private entities and local, state and federal governments. The acquisition will operate as part of the natural resource consulting unit of Davey Resource Group.

“We’re focusing on growth at the regional level and this acquisition gives us a second base of operations in the region,” said Pat Covey, Davey executive vice president and DRG general manager.

Joining DRG allows for collaboration with an expanded urban forestry consulting team, says Skip Kincaid. “Joining Davey Resource Group is a great way for me to continue what I’m doing in the greater St. Louis area in urban forestry consulting, and also serve as a senior consulting arborist on other Davey projects throughout North America,” he said.

Skip Kincaid & Associates has a range of urban forestry experience, including completion of several tree inventory projects, preparation of urban forestry management plans, tree preservation plans and municipal ordinances.
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Events & Seminars

April 4, 2008
Texas Tree Climbing Championship
Ft. Worth, Texas
Contact info: www.isatexas.com

April 7-9, 2008
Trees & Utilities Conference*
Wyndham Orlando Resort, Orlando, FL
Contact: www.arborday.org/TUConference

April 8-9, 2008
Cert. Pesticide Applicator Training/Testing (In Spanish)
Bingham Farms, MI
Contact: MGIA (248) 646-4992

April 12, 2008
Certified Tree Expert Prep Course I
Cook College, Rutgers University, New Brunswick, NJ
Contact: NJ Society of Cert. Tree Experts 1-888-873-3034

April 18, 2008
Urban Tree Risk Assessment workshop
UTenn, TN State Ext., TN Tech., Tree Solutions & Hailers Landscaping
Nashville, TN
Contact: Dr. Joshua Idassi, (615) 963-5616; jidassi@tnstate.edu; Karla Kean, (931) 648-5725; kkean@utk.edu

April 19, 2008
Connecticut Tree Climbing Competition 2008
Edgerton Park, New Haven, CT
Contact: (203)484-2512; www.ctpa.org

April 19 and 20, 2008
2008 North Carolina Tree Climbing Championship
Charlotte Arbor. Assoc. & Mecklenburg City Parks & Rec Freedom Park, Charlotte, NC
Contact: (704) 363-1578; JohnMaurice@mac.com

April 22, 2008
ASC (Arboriculture Safety Std Committee) Z-133 Meeting
Embassy Suites BWI, Baltimore, MD
Contact: Peggy Currid (217) 355-9411 x210; pcurrid@isa-arbor.com

April 25, 2008
118th Official State of Texas Arbor Day Celebration
ISA Texas & Texas Forest Service, El Paso, TX
Contact: John Giedraitis jpg@tfs.tamu.edu; www.isatexas.com

April 29-30, 2008 through May 27-28 2008 (5 wks)
Arboriculture I & II: Tree Climbing Train. & Education Committee for the Advancement of Arboriculture
Forest Resource Education Center, Jackson, NJ
Contact: John Perry (732) 833-0500

May 1-5, 2008
Western Chapter ISA Annual Conf. & Trade Show*
Fairmont Hotel, San Jose, CA
Contact: (866) 785-8960; www.wcisa.net

May 13, 2008
Urban Tree Risk Assessment workshop
UTenn, TN State Ext., TN Tech., Tree Solutions & Hailers Landscaping
 Cookeville, TN
Contact: (615) 963-5616; jidassi@tnstate.edu; Karla Kean, (931) 648-5725; kkean@utk.edu

May 15, 2008
Certified Tree Expert Prep Course II
Monmouth County Parks, Middletown, NJ
Contact: NJ Soc. of Cert. Tree Experts 1-888-873-3034

May 17, 2008
ISA Certified Tree Worker Exam
NJ Forestry Research and Education Ctr, Jackson, NJ
Contact: Matt (609) 625-6021; www.isa-arbor.com

May 20, 2008
ISA Cert. Arborist, Utility & Municipal Specialist Exams
PSE&G Training Center, South Plainfield, NJ
Contact: Matt (609) 625-6021; www.isa-arbor.com

June 4-5, 2008
Certified Treecare Safety Professional-CTSP Workshop
Charlotte, NC
Contact: 1-800-733-2622; www.tcia.org

June 7, 2008
Certified Tree Expert Prep Course III
Monmouth County Parks, Middletown, NJ
Contact: NJ Soc. of Cert. Tree Experts 1-888-873-3034

June 7-10, 2008
Trees Florida 2008 Conference & Trade Show
Hyatt Regency Bonaventure, Weston (Broward City), FL
Contact: www.treesflorida.com

June 11-12, 2008
Certified Treecare Safety Professional-CTSP Workshop*
Cherry Hill, NJ
Contact: 1-800-733-2622; www.tcia.org
June 18, 2008
Urban Tree Risk Assessment workshop
UTenn, TN State Ext., TN Tech., Tree Solutions, Hallers Landscaping
Jackson, TN
Contact: (615) 963-5616; jidassi@tnstate.edu; Karla Kean, (931) 648-5725; kkean@utk.edu

July 18, 2008
2008 Woody Plant Conference
Scott Arboretum, Swarthmore Coll. & Tyler Arboretum
Swarthmore, PA
Contact: (610) 388-1000 x507; www.woodyplantconference.org

July 24-25, 2008
Certified Treecare Safety Professional-CTSP Workshop*
St. Louis, MO
Contact: 1-800-733-2622; www.tcia.org

July 26-30, 2008
ISA Annual Conference*
St. Louis, MO
Contact: www.isa-arbor.com

August 20-21, 2008
Certified Treecare Safety Professional-CTSP Workshop
San Jose, CA
Contact: 1-800-733-2622; www.tcia.org

September 11, 2008
Urban Tree Risk Assessment workshop
UTenn, TN State Ext., TN Tech., Tree Solutions & Hallers Landscaping, Knoxville, TN
Contact: Dr. Joshua Idassi, (615) 963-5616; jidassi@tnstate.edu; Karla Kean, (931) 648-5725; kkean@utk.edu

September 13, 2008
10th Annual Tennessee Tree Climbing Championship
Lake Shore Park, Knoxville, TN
TN Urban Forestry Cncl/TN Dept. of Ag. Div. of Forestry
Contact: www.tufc.com; (615) 352-8985

September 17, 2008
ISA Certified Arborist, Utility and Municipal Specialist Exams
Atlantic City Electric Regional office, Mays Landing, Atlantic City, NJ
Contact: Matt (609) 625-6021; www.isa-arbor.com

September 24-26, 2008
29th Annual Texas Tree Conference
Hilton Hotel & Conference Center, College Station, TX
Contact: ISA Texas/Texas Forest Soc; www.isatexas.com

November 11-12, 2008
Certified Treecare Safety Professional-CTSP Workshop
In conjunction with TCI EXPO 2008, Milwaukee, WI
Contact: 1-800-733-2622; www.tcia.org

November 13-15, 2008
TCI EXPO 2008*
Milwaukee, WI
Contact: Deb Cyr 1-800-733-2622; cyr@tcia.org; www.tcia.org

October, 2008
Certified Landscape Technician (CLT) Exam
NJ Landscape Contr. Assoc. & PLANET
Bergen Community College, Paramus, NJ
Contact: www.njlca.org; (201) 703-3600

December 3, 2008
 ISA Cert. Arborist, Utility & Municipal Spec. Exams
Cora Hartshorn Arboretum, Millburn, NJ
Contact: Matt (609) 625-6021; www.isa-arbor.com

February 8-12, 2009
Winter Management Conference 2009*
Westin Grand Bahama Island Our Lucaya Resort & Sheraton Grand Bahama Island Our Lucaya Resort
Contact: Deb Cyr 1-800-733-2622; cyr@tcia.org; www.tcia.org

* Indicates that TCIA staff will be in attendance

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or staruk@tcia.org
A

s it traditionally does this time of year, OSHA recently notified 14,000 employers nationwide that their injury and illness rates are considerably higher than the national average.

In a letter sent this month to those employers, OSHA Head Edwin G. Foulke, Jr. explained that the notification was a proactive step to encourage employers to take action now to reduce rates and improve safety and health conditions in their workplaces.

“A high injury and illness rate is costly to employees and employers in both personal and financial terms,” said Foulke. “Our goal is to make them aware of their high injury and illness rates and to get them to focus on eliminating hazards in their workplace. To help them in this regard, OSHA offers free assistance programs to help employers better protect the safety and health of their employees.”

OSHA identified businesses with the nation’s highest rates of workplace injuries and illnesses through employer-reported data from a 2007 survey of 80,000 worksites (this survey collected injury and illness data from calendar year 2006). Workplaces receiving notifications had 5.4 or more injuries resulting in Days Away from work, Restricted work activity, or job Transfer (DART) for every 100 full-time employees.

Nationally, the average U.S. workplace had 2.3 DART occurrences for every 100 employees.

Employers receiving the letters were also provided copies of their injury and illness data, along with a list of the most frequently cited OSHA standards for their specific industry. The letter offered assistance in helping turn the numbers around by suggesting, among other things, the use of free OSHA safety and health consultation services provided through the states, state workers’ compensation agencies, insurance carriers or outside safety and health consultants.

OSHA traditionally follows up this survey and notification with what they term “Site-Specific Targeting,” i.e. targeted inspections.

Peter Gerstenberger is senior advisor for safety, compliance & standards for the Tree Care Industry Association.
Tough Equipment to Clean Up and “Green Up”

It's happening every day. More and more municipalities are banning the burning of leaves, twigs, pruned limbs, etc. in favor of more ecologically minded alternatives. One of the alternatives is to chip or shred these materials into easily biodegradable or re-usable material.

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Surgery. It was exactly the word Eric Segec didn’t want to hear, and yet there was his doctor, insisting that cutting open his left wrist was his only hope of reducing his pain, improving his dexterity and saving his career.

After only four years of full-time tree care work, Segec had begun waking at night to tingling, numbness and cramping in his left wrist. During the day he began dropping tiny nuts and bolts while maintaining his equipment. His attitude, too, began to suffer.

“The frustration I was experiencing was manifesting itself as a free-floating anger that would suddenly be directed at anything that would go wrong,” says Segec, 48, an employee for Bartlett Tree Experts who was diagnosed with carpal tunnel syndrome in October 2006. “It was just over-the-top anger generated by my frustration or fears that my hand might be ending my career.”

Segec had good reason to fear.

While the word ergonomics most often conjures images of office chairs and computer monitors, it turns out that the tree – the arborist’s workplace – is no different than the cubicle when it comes to potential for injury. Ergonomic injuries, also known as cumulative trauma disorders or repetitive stress disorders, are serious, costly problems that are forcing some arborists into premature retirement and threatening employers with towering health care costs.

Climbing trees, lifting debris, using equipment that vibrates and working for hours in unnatural, awkward positions are all opportunities for serious damage to the body.

At Bartlett, which employs approximately 1,500 production workers in the U.S., Canada and United Kingdom, management realized that approximately 30 percent of the company’s injuries were chronic – and amounted to 50 percent of the company’s personal injury costs. While training addressed avoidance of acute injuries such as cuts, falls and struck-bys, the company’s safety programs overlooked the all-too-frequent strains and sprains – and more importantly, how to avoid them.

“It doesn’t take a rocket scientist to realize we’re doing difficult work and we’re putting our bodies into very difficult positions most of the time,” says David Marren, vice president of safety and regulatory affairs for Bartlett. “You start thinking, ‘Why do we have to accept this?’ We don’t.”

So, in 2006, Bartlett’s safety committee launched a study, putting its western division safety and training coordinator David Anderson at the helm, and rounding up universities, sports doctors and ergonomists to tackle the problem. The study identified five risk factors that tree care workers should consider before undertaking any job:

▶ whether a repetitive motion is involved;
▶ whether an awkward posture is required;
▶ whether the use of vibrating tools is necessary;
how much force the task requires; and
the duration of the task.
“It’s what I call working smarter, not
harder,” says J. Alan Roberts, senior safety
and ergonomics consultant with Bureau
Veritas North America, a health, safety and
environmental consulting firm that worked
with Bartlett on the study. “What we’re
looking at is matching the tools and
the work methods to the task. And that is a crit-
ical concept.”

Ergonomic injuries typically creep up on
a worker so slowly that the person does not
recognize the severity of the problem until
too late. Bad habits – such as relying on
arm muscles more than leg muscles to
ascend a tree, or using a handsaw for hours
on end without a change in task – can affect
a worker’s body for years before the toll
becomes apparent. Workers also shake off
sprains and strains, ignoring them or push-
ing through the pain until it becomes
unbearable.

“There’s a woeful – with a capital W –
lack of education about training on symp-
tom recognition for the employee,” says
Roberts. “So it goes on and on, and they
continue to do the wrong thing on the job.
Employees work through the pain. As a
result of that they’re doing additional dam-
age.”

Segec, who believes he began damaging
his wrist years ago in a previous career
with electronics, as well as indulging a
motorcycle hobby, was officially diag-
nosed with vibration-induced carpal tunnel
syndrome.

“I knew that it was worst after extended
periods of hedge-shearing,” says Segec,
who is based out of Bartlett’s Victoria,
British Columbia, office in Canada. “And
then it started to become more consistent
no matter what I had done during the day.
When it got to the point that I wasn’t get-
ing a full night’s sleep, I realized I (had) to
do something about this.”

In addition to the individual’s suffering,
employers, too, feel the pain.

“These are not inexpensive injuries,”
says Anderson. “If an employee cuts him-
self with a handsaw, goes in and gets a few
stitches and gets them removed a week
later, you might be looking at $500 to
$1,000 in medical costs (for the employer);
compared to an employee who gets ten-
donitis from that handsaw, that’s generally

a minimum of three weeks of work
(missed). Sometimes tendonitis never goes
away. It can be career-ending.”

Segec’s doctor admitted a 2 percent
chance that surgery would not be success-
ful, potentially rendering his hand useless.
But it was a risk Segec decided to take. The
operation, performed under a local anes-
thetic, had him discharged from the
hospital the same day, but scheduled for six
weeks of recuperation at home, intertwined
with strength and resistance exercises and
weekly visits to a local clinic for therapy.

When he was finally allowed to return to
work, he was restricted to four hours of
labor per day for four days during the first
week – with his left hand limited to 20
pounds of lifting.

“That doesn’t get you very far on a tree
production crew,” remembers Segec, who
did not return to full-time work until near-
ly 15 weeks after his surgery. He remains
grateful to British Columbia’s worker’s
compensation board, which subsidized his
lost wages, and to Bartlett, which support-
ed him through the surgery and held his job
until he was well enough to return. “Guys
could have been calling me the half-day
guy or whatever to my face and I would
have laughed it off, because I felt so
relieved that the path to recovery was
there.”

Many employees are not as fortunate as
Segec. When injured workers are unable to
return to the field, medical and workers’
compensation costs are only the begin-
ing of the losses that employers must swallow.
Lost work time, wages and training for
replacement workers and a loss of experi-
enced hands take a serious toll.

“Can we continue as an industry to chew
up a population of young people and just
replace them when they wear out? Is that a
long-term business model? I don’t think
so,” says Anderson. Even employees who manage to avoid career-ending injuries often don’t stay in tree care work for the duration of their working years, he adds.

“In their late 30s and 40s, (many employees) start to feel like they cannot maintain the physical edge to do the work,” he says. “Even though they have the experience, the judgment, the training and the knowledge, if they can’t maintain that physical ability, they start to look elsewhere.”

So Bartlett has set out to teach them – a long, slow process that involves reversing the mindset and habits ingrained over a period of many years. Rather than incorporate a new ergonomics training regimen, Bartlett decided the best way to approach the challenge was to integrate ergonomics awareness and safety into the existing training programs. New ways of thinking – such as using the largest muscle group possible for a given task, rather than straining a single muscle or limb; and using muscles in the middle of their range, known as the “power zone” – are now emphasized to become part of workers’ everyday thinking on the job.

“Every time we have a training program we’re trying to filter these concepts into it,” says Marren. “When you’re chipping brush, (we demonstrate to workers that) there are the ways that you twist your body (and) there’s a better way of doing it. When you’re using a handsaw to prune a tree, there is a different type of handsaw that requires less pressure from your body to do it right. Sometimes the equipment you’re using is causing your body to work overtime and you don’t even know it.”

Anderson, who trains tree crews on safety measures, frequently sees such examples when he asks employees to grab their handsaws and cut a cookie off a piece of wood.

“We count how many (strokes) it would take to cut off the piece. There’s always some guy on the crew with a handsaw that should have been thrown away two years ago,” he says.

But by educating that worker – and encouraging him to replace his saw – the work to cut through that piece of wood is reduced significantly.

“Now, instead of 36 strokes to get through that limb, it has taken 10,” he says. “We’ve effectively made a huge change with little cost.”

New ways of thinking, such as using the largest muscle group possible for a given task, rather than straining a single muscle or limb, are now emphasized.

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TREE CARE INDUSTRY – APRIL 2008
Ergonomic injuries are a familiar problem at S.P. McClenahan Co., a much smaller tree care company based in Portola Valley, California. Out of the company’s 54 employees, risk manager Joshua McClenahan estimates that 90 percent of those with 25 years of experience on the job or longer suffer day-to-day discomfort due to cumulative trauma. While he lauds Bartlett’s efforts to reduce injuries, experience has taught him that the goal is difficult to reach. After watching the slow progress at his family’s company – and working previously in the insurance industry for one of the largest carriers in the U.S. – he warns that change is difficult.

“Ergonomics is probably not the best word to introduce to a tree guy, especially someone who has been around for 20 years,” he says. “He’s not going to want to listen to it.”

Not only is the concept of ergonomics difficult to teach to workers, he says, the tools themselves are culprits.

“Manufacturers have really lagged in producing equipment that is easy on the body,” he says. “And employers are unwilling to replace them.”

Despite the challenge, S.P. McClenahan Co. is taking steps to curb injuries. It recently purchased a new crane to eliminate some ground work for crews. It employs a full-time mechanic to maintain chain saws. And he anticipates the company will be purchasing a new spider lift in the near future to reduce climbing.

But the most critical component for suc-
cess, McClenahan says, is communication between individual workers and management – about what works and what hurts.

“Listen to what your employees have to say,” he counsels.

Bartlett is doing just that by reinforcing the importance of early reporting of injuries, says Bureau Veritas’ Roberts.

“Employees understand there will be no retaliation,” he says. “In those companies that are very open and very progressive and have a strong safety culture, employees understand that it’s expected of them that they will report.”

The company also plans to improve its tool maintenance program and invest in new, higher-quality tools, he adds.

And though the program is still new, Bartlett is already seeing positive results. While Marren says it’s premature to draw scientific conclusions, he has already seen a 15 percent reduction in sprains and strains, and he expects that reduction could rise as high as 30 percent.

More importantly, he hopes, the program will prolong arborists’ ability to work in the career of their choice.

“Those men and women doing the work are the most valuable resource in the company,” he says. “Yes, we have a tremendous management team. Yes, we buy the best equipment we can buy. But the people – day in and day out – that’s how it gets done. You don’t throw them away because they’ve been hurt.”

Having knots in the pruner rope makes gripping it easier, reducing strain on some muscles.

S.P. McClenahan Co. recently purchased a new crane to eliminate some ground work for crews, and may be purchasing a new spider lift in the near future to reduce climbing. Photo courtesy of S.P. McClenahan Co.
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**Morbark**

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**Brush Bandit**

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Man injured in fall from tree

A Brewster, N.Y., man was critically injured after falling out of a tree he was working on February 19, 2008, in Chappaqua, N.Y. Philip Prinz, 41, was flown by helicopter to Westchester Medical Center after falling about 25 feet out of the tree, according an article in The Journal News. Prinz was doing maintenance on the tree when he fell.

New York Climber killed in struck-by accident

A Putnam County, New York, man died February 20, 2008, after he was struck by a limb while cutting down a tree in Yorktown Heights. Pablo Tenempaguay, 28, of Mahopac, N.Y., an employee of a Mahopac landscaping company, was in a harness cutting down a tree when he was struck by the limb, according to an article in The Journal News. The limb broke free and struck him in the torso area, according to police.

Lake Mohegan firefighters responded and removed Tenempaguay from the harness. He was taken to the hospital, where he was later pronounced dead.

Yorktown police investigated and considered it an accident.

One source noted in the report indicated that Tenempaguay was the owner of the landscaping company.

Climber hurt after tree fails

A 19-year-old man employed by a local tree care company was injured when a tree that he was strapped into came down February 25, 2008, in Cummaquid, in Barnstable County, according to a report in the Cape Cod Times newspaper.

The arborist was taken by Barnstable paramedics to Cape Cod Hospital, where tests were performed to learn the extent of his injuries. The man’s injuries were not believed to be life threatening.

Tree trimmer needs rescue

A Central Kitsap, Washington, tree trimmer in his early 50s was rescued from a tree branch that broke to secure the branch he was trimming when both limbs fell.

Doug Strawn, a fellow tree trimmer who was working with Rafael Carbajal, heard him call for help after the accident.

“He was strapped in right, otherwise, he would’ve been dead,” Strawn said.

Strawn ran across the street to the Thornton Fire Department, located approximately 100 yards from the scene of the accident. After arriving on the scene, Thornton firefighters realized they wouldn’t be able to reach Rafael Carbajal with their equipment. Thornton firefighters called for Lodi Fire Department to bring a truck with a ladder to the scene.

Meanwhile, Rafael Carbajal sat suspended in the air for the truck to arrive. Carbajal’s son, Joel Carbajal, 14, who was working with his father, watched him dangle six stories in the air after the limb broke.

Lodi firefighters arrived at the scene a short time later, extended their ladder and walked Rafael Carbajal down shortly after. Paramedics suspected his left leg was broken but couldn’t tell for sure.

Rafael Carbajal was taken by ambulance to Methodist Hospital of Sacramento.

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The afternoon was not starting well. The three-man crew was pulling up to the house at 1:30 p.m. for a job they thought would be half done by lunch. They had gotten out of the shop late, ran into heavy traffic and were lost a while looking for the address of the day’s first job. The morning seemed to go well enough once they arrived at that job; just a simple removal, cut flush and haul. But they discovered one saw was left back at the shop as well as a fuel can and other gear, so the day was running slower and slower as the delays due to these small errors continued to accumulate.

The weather was not cooperating either; a morning that started out unseasonably warm was becoming a hot and humid afternoon. The air had a sticky quality to it with a hint of a late afternoon thunderstorm building. As the crew got out of their truck and walked around the house, one look made it clear that the day was not going to end any better than it started.

The 60-foot northern red oak, tall and slender, was not in good health. It was obvious that this was one of several trees “saved” when the new subdivision was carved from a forest about 10 years ago. These trees that had once stood sheltered by the surrounding forest were now isolated specimens, buried in two feet of backfill and surrounded by a manicured and irrigated lawn. This tree appeared the worst of the bunch: the top was dead, even the bark of the upper 10 feet had sloughed off, and there were some shelf fungi at its base. There were so few leaves left on this one power pole-like tree that it seemed you could almost count them all. Calling the tree “structurally compromised” would have been kind.

The lead worker, a middle-aged climber with four years experience in the company and more than a decade of previous work with a string of other tree businesses, took one look at the removal and told the crew the salesman must have bid this as a “buddy” job. The price was far too low for the time it would take to complete it, and anyway, this was more a job for the bucket crew. This tree was in a confined place with lots of inviting targets, it was piece work, easier from a lift. And there was access for the lift though the side yard; sure you would have to be careful backing in and not turn it on the turf, but the ground was firm and he thought it would have made more sense, certainly safer and easier, if the other crew had been sent out.

Nevertheless, after a short discussion regarding the lack of common sense (as well as parentage) of the salesperson who sold the work, the climber began ascending the tree. He was widely regarded as the best in the company and if anyone could pull it off he was the guy and he wanted to do it.
get done soon. The puffy cumulus clouds were beginning to build – rain couldn’t be more than a couple of hours away. The climber told the crew the job did not look right and the sooner the tree was on the ground the better he would feel, so without further discussion he tightened the straps on his spurs, yelled to the crew to pull the gear out of the truck and began working his way up the trunk.

He ascended to approximately 45 feet, snapping off an occasional epicormic shoot on the way up, and decided it would not be prudent to go any higher. Much of the tree above him was clearly dead and he decided he would cut it off here and lower the whole top from a false crotch. Free falling a piece this size was not an option. The climber cut out a notch, hitched a line around the top and through the block. One of the ground men took a wrap around an adjacent tree with the line, the port-a-wrap being another piece of equipment left that morning at the shop. The ground man, relatively new, the three months with the company being his first in the tree business, was still senior to the other worker, and neither had ever worked for the climber before. The climber’s regular crew was apparently suffering from a little excess during the weekend as they did not show up that Monday morning, another early sign this would not be a good day.

The ground man made two wraps around the trunk with the line – he was worried the top would fall too fast when it came down – and steadied himself. The climber was concentrated on the cut and did not see what the ground man had done and they had not taken the time to discuss the set-up from the ground.

As the climber finished the backcut, the dead top fell clear as the trunk pitched back, but as the detached top became parallel to the ground and began its steep dive down it was caught suddenly by the line, the trunk pitching violently forward and shook. The ground crew heard the trunk snap and watched in horror as the tree broke at 10 feet with the climber falling 45 feet still attached to a 35-foot section of trunk. He died of massive internal injuries within minutes of the impact.

The climber became one of the statistics for that year – and the year was not looking good. The Bureau of Labor Statistics reports that approximately 70 tree workers are killed on the job every year, a deplorable number, and based on the number of tree workers employed in the industry, makes the tree care industry one of the most hazardous jobs in America. This would be bad enough, except the number of fatalities are underreported by the government and the actual number is not one or two fatalities a week but closer to three or four a week. Coal mining in China is widely reported to the most hazardous job in the world, but tree workers would not be increasing their risk that much if they changed places with their subterranean comrades.

The industry has come a long way in the past several decades. Personal protective equipment – such as chaps, widely ridiculed in the 1970s and derided as a safety hazard – are now commonly used. Almost every piece of equipment we use is a vast improvement over counterparts from the previous decades, from lines to aerial lifts and chippers to saws. Our practices have improved as well, with free-climbing, once a common means of ascending a tree, now rarely seen; instead we employ a multitude of lines, knots and techniques to safely and efficiently navigate a tree’s canopy.

There are only two parts of the work we have not improved – the tree and the worker.
We certainly understand trees better than we did, thanks in large part to the pioneering work of Alex Shigo and others, but we have not improved their strength. Thanks to the work of Ed Hayes, among others, we are better at detecting and evaluating tree defects, but we seem to miss the fact that the tree is becoming the weakest link in the rigging chain. Our lines, blocks and other rigging equipment now can withstand tremendous forces compared to our old manila bull ropes, and it is becoming a sad, but frequently common event for a fall accident to be falling with the tree rather than falling from the tree.

The worker is also in need of updating; call it tree worker 2.0. The majority of our accidents are not due to equipment failures but the failure of the worker to properly balance risk and capability. We are at fault for not listening to the little voice telling us that what we are about to do is foolish or faulty, but instead say, “Oh, what the heck,” (or more colorful expletive) and keep right on working.

Too many tree workers do not balance or weigh risk – they revel in risk, and an “adrenaline junkie” is a common term. But adrenaline, like fire, is a good servant but poor master. Our “fight or flight” response to a stressful environment can provide the heightened edge necessary to work through a hazardous situation. But sometimes this edge can also blur our senses, make us unaware of the developing chain of errors and the need for flight – leave the job – rather than fight our way through it. We all have a little voice within us that says in these situations, be careful, stop what you are doing or are about to do, and concentrate on the details, look at the pattern.

I define an accident as a series of errors made in a particular sequence. Accidents do not just happen, as author Laurence Gonzales points out in his superb book, Deep Survival, they build. Seemingly small errors, inconsequential in themselves, when assembled together propagate into more serious errors, finally building
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into an accident. You leave some needed gear back at the shop, the crew is missing familiar workers, a crew ill-equipped for the task is sent out to a job; the crew is rushed due to weather so the pre-work inspection and job-briefing are rushed or dismissed – all errors that build into an accident. At a certain point, even when we see that the errors are aligning and propagating, we are reluctant to stop, take a deep breath and consider another approach, or even not doing the job that day. After all, coming back to the shop early can subject the workers to ridicule or, worse, unemployment.

Balancing risk and capability, making the correct judgment call in a profession where mistakes can be unforgiving, is essential to being a safe tree worker – our tree worker version 2.0. Many accidents are due, in part, to worker judgment error, not listening to that little voice telling them that something is not going right, that little errors are beginning to align and propagate, that it is time to stop and consider what they are about to do. We spend a lot of time speaking to crews on PPE and safe work practices – time well-spent – but maybe we might do well to devote a training session or two on listening to that voice and perhaps even, in our goal of fostering a culture of safety, reward rather than ridicule a crew that makes that correct judgment call and walks away from a job that is not going right.

No tree work is worth your life, or your loss to those who care about and depend upon you. Remember to heed that little voice the next time you’re 60 feet up, preparing to begin a cut and you just want it done because nothing has gone right so far that day. You might be the last thing that goes wrong that day...

John Ball is a professor of forestry at South Dakota State University and has worked in the field of tree worker safety for many years. He also serves as the campus arborist. The accident discussed in this article is based upon an actual event. He spoke on this same subject at TCI EXPO 2007 in Hartford, Connecticut.
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By Don Dale

Okay, you couldn’t compare them to the Department of Homeland Security or the X-Men, but these tree people are working toward securing the nation against foreign invaders. Sure, the invaders are usually six-legged rather than two-legged, but they are every bit as dangerous to the economic and aesthetic life of the United States as the human variety.

Tree pests, sometimes domestic but often foreign, have the potential to wreak havoc on urban and rural tree species. They currently go by exotic names such as emerald ash borer and Asian longhorn beetle, but in the past they have also come in the form of infections such as Dutch elm disease and sudden oak death. They are organisms that can virtually destroy entire regions or species of trees before city foresters and arborists become aware that they are a formidable foe.

The stalwart defenders? They are a dedicated group of tree people who think that these critters can be prevented from depleting our urban and wilderness forests. They think this can best be accomplished by detecting them early enough to take precautionary measures, and early enough to enact controls or quarantines before the pests do widespread damage. At least, before they become national disasters.

But that methodology would require a system of identifying and inventorying those pests or their symptoms early in the game in any city in America. And that system is what they are trying to set up.

“If it doesn’t appear that signs and symptoms come from a known pest, there is currently no national protocol for discovering pests before they become catastrophic in nature,” explains Scott Maco. That method could very well be I-PED, the pest detection and reporting protocol and software being developed by a partnership spearheaded by the U.S. Forest Service.

Maco is a team member and a research and development analyst for The Davey Institute, a branch of Davey Tree. He’s also the company’s project manager for I-PED, which this summer will have its second test run in urban tree inventory settings around the country.

I-PED is an offshoot of, and likely will be an integral component of, the i-Tree...
suite of software tools, which has already utilized this partnership approach in developing comprehensive tree analysis software and training information for urban forest managers. The i-Tree software has been free to users since its 2006 release and includes applications and utilities for inventory data collection. Though still in development, the pest detection protocol is on track to become an element of the i-Tree offerings.

There are three main objectives of the pest detection component. The first is to simply increase awareness of pests associated with urban trees, which is not necessarily something done in the course of a routine inventory. The second is to identify new pests and take action before they cause a catastrophic loss of trees. Third, a national approach to pest identification will be possible, and management can be made easier with a standardized data collection and reporting system that utilizes a publicly accessible repository of data.

Dan Twardus, the Forest Service group leader from the Forest Health Protection unit in Morgantown, West Virginia, explains that i-Tree is a suite of tree analy-
sis software that has been in development and use for some 20 years. It is being used by urban foresters across the nation as a tree advocacy and management tool. The pest detection aspect was an idea he had that could make the Forest Service more proactive against pest invasions, using arborists and community foresters as the front line of defense.

Twardus says the eruption of the emerald ash borer as a devastating pest in the Midwest is a good example of what I-PED developers hope to avoid in the future. This borer is a native of China and was accidentally introduced into Southeast Michigan. Before anybody knew what was happening, ash trees were being killed by the thousands throughout the Midwest. It is now almost a certainty that all urban and forest ash trees, at least in the Eastern states and possibly nationally, are in danger of being eradicated.

“Finally, after some years, someone found one of these little green beetles,” Twardus says, and a name was given to the culprit. But what could have happened if it had been detected while still in one isolated community? He thinks that this disaster could have been averted, and I-PED is a system that could have provided that early warning.

What is I-PED – which stands for Inventory, Pest, Evaluation and Detection – exactly? The best way to look at it, Maco says, is to look first at i-Tree. These peer-reviewed software tools were developed by a partnership of USFS, Davey Tree, the International Society of Arboriculture, the Society of Municipal Arborists and the Arbor Day Foundation with funding primarily from the federal government. Go to www.itreetools.org to get a complete picture of this system of urban tree management.

In general, i-Tree provides two different software components for urban tree analysis and various utilities to inventory trees, assess storm damage and determine the best tree species to use in specific geographic areas given the environmental benefits desired. In addition, utilities are available that allow users to utilize PDAs to collect field data. But i-Tree is not only free to users, it is also continually evolving as welcome feedback is collected and worked into the system.

Maco notes that I-PED, when it is implemented, could be used as one more component of the i-Tree suite, or it could be used in conjunction with any of the other commercially available programs. Portability of the system is critical to widespread adoption and is a goal of the development team. It basically consists of a means of field identification and reporting of pests or their signs and symptoms, such as foliage or trunk damage. It will come with its own training protocol and manuals as well as online support. Go to www.pest.itreetools.org to see what is happening with I-PED.

The ultimate primary end user will be a city worker or arborist assigned to carry out a community’s tree inventory program. With I-PED as a component of a general tree inventory, a worker would note specific pests or damage. The I-PED protocol will include a network of local or national experts who would be available to help identify potential problems and come up with the guidelines and resources for dealing with identified pest concerns.

“We’re actually still working on that mechanism,” Maco says, but the group hopes to link with pertinent organizations such as the National Plant Diagnostic Network, Animal and Plant Health and Inspection Services (APHIS), university Cooperative Extension programs and the Bugwood Network. Private companies and consultants would also be natural users of I-PED, since they are on the front line of pest detection and control.

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cities around the country would be included in a national database. If this data was compiled at the regional and national levels, it could be a valuable weapon in the early detection system. A forecasting component might be developed as a result of analyzing this data over time. It would be a terrific alert system for communities surrounding a pest outbreak, for example.

So, how is the pest detection system progressing? The first test was run in four cities last summer. Data gathering and pest protocols were tested by volunteer city foresters in Chattanooga, Tennessee; Dublin, Ohio; Ithaca, New York; and Wilmette, Illinois. “It went well. Everything worked,” Twardus notes, but many kinks are still being worked out of the system.

Andy Hillman is the city forester for Ithaca. He is also the past president of the Society of Municipal Arborists who used SMA contacts to recruit volunteers to beta test the I-PED system. He’s an unabashed fan as well as partner. One of his employees, as well as a Cornell University team, tested the system in Ithaca last year. He agrees with Twardus that there are still bugs in the system, but that the system is all the better for working out those challenges in field trials.

“It made sense for city foresters like me to help with the beta testing,” Hillman says, because these are the folks who will be the end users. In Ithaca, a PDA was used as an input device when looking at street and parkland trees for pests and symptoms. The city’s trees have already been inventoried, he says, but this new component will be a welcome added function in future updates. The I-PED software features pull-down menus using the i-Tree platform to prompt questions about insect or disease signs, and that platform seems sound and has “great potential.”

Hillman says that a city such as Ithaca could derive great benefits not only from knowing what its pests are, but also from any national detection network that results from the I-PED effort. This tool, integrated with his existing inventory program, could not only prevent a citywide tree disaster, it could also avert quarantines that might be damaging to nurseries and landscapers over a large region.

“That could have a significant effect on a city,” he points out. And the potential effects on national security are also real, given that protecting urban forests ultimately will provide a defense for rural forests. The fewer pests that migrate out of the cities into the wild, the less chance there is for another catastrophe such as Dutch elm disease or the emerald ash borer.

Maco confirms that a second round of testing will be conducted this summer, once changes from last year’s feedback are integrated. Once released, possibly early in 2009, the software will be a valuable management tool. What could be better than having a pest detection system that can be dovetailed with existing programs, used in the field to collect data and then piggybacked with other tree information to provide a solid base for management of urban trees?

He notes that this has been an ideal partnership, in that all parties are invested in the idea that preventing disasters in America’s forests is a worthwhile cause. If exotic pests in particular can be recognized and neutralized early-on, these tiny terrorists will not be able to diminish the national landscape. Maybe they don’t carry guns or make arrests, but this team certainly could give invasive pests a serious butt-kicking.
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Long live the bucket truck. The lift business in general - bucket-type booms, minis and spiders - are hot commodities, and each has a place in this business.

Mini lifts can get through that garden gate and cost less to purchase. They often can handle terrain not conducive to a full-size, chassis-mount lift. They are light, nimble, easy to tow and operable by one person, generally speaking.

(Mini lifts include a variety of smaller, compact lifts. Spider lifts are compact lifts that have articulated, or jointed, spider-like legs/outriggers, while other mini lifts have only standard, fixed outriggers. Either style can have wheels or tracks.)

Bucket truck-type lifts are prized for their long life, not uncommonly being transferred from one truck chassis to a newer one. And, the configuration makes the bucket truck a self-contained operation. Buckets, unlike most spiders and minis, feature hydraulic-tool capability in the bucket and are dielectrically safeguarded.

What we are finding is that the two “technologies” are heading toward a common point, though it’s unlikely they will ever reach it and become one. The mini lifts, initially designed for tight spaces and interior work, are getting longer, stronger and more capable of handling all kinds of geography. The brute utility truck, at least in some iterations, has been slimmed down and re-engineered to get into tighter spots with broader applications.

An aside regarding bucket truck longevity: We’ve heard tell of booms lasting 15, 20 and up to 25 years (with proper care, of course), but we learned that the

Terex, which came out with the first hydraulic elevator, has seen a lot of interest of late in its transverse mounted lift, which are mounted behind the cab or at the tail of a platform-type chassis.
bucket device when in use in forestry or arbor applications gets far more use than the same equipment in utility use. Why? It seems that when utility workers take their buckets to the desired working height, they tend to stay in one spot for long periods. In our business, we make money by the speed in which we can cut, trim and clear. So, to be able to give an accurate average lifespan is difficult. Keep that in mind if you buy used.

There are two basic trends in the bucket lift market. First, is greater height and reach and the related growing popularity of the elevator lift - the latter providing 10 feet or more of added vertical lift for a boom. The second trend is to wring as much economy as possible out of the technology, either by putting more capability on smaller chassis or by leveraging existing hybrid power plants.

Inflation and the cost of a new emissions-friendly chassis can push the bucket truck starting price to more than $100,000 for a complete package. Upwards of $200,000 will get you just about everything - the top chassis, every option, such as automatic transmission and air conditioning, and maximum lift and reach.

Altec has been in the truck-mounted aerial lift business for almost 30 years, says Greg Leow, market manager for the arbor products group. Altec offers from 57 to 75 feet of working capacity, with the extra height coming from a 19-foot, scissor-type elevator (or lift) between the truck chassis and boom assembly.

"People opting for truck-mounted aerial devices are doing so largely because of versatility," Leow says. "They come with a chip dump and a host of features that make the bucket truck a package, complete boom and bucket, dielectrically safeguarded equipment, hydraulics, chip dump and tool boxes, even a cab where the crew can communicate with the home office. Other lifts (minis and spiders) may require up to two trucks (one to tow the lift, the other for the chip dump and crew). With a bucket truck you can send out a crew of three and put them all to work," Leow says, adding, "The drawback is that the bucket can't get through that backyard gate."

Lately, Altec and others are beginning to mount aerial assemblies on hybrid-powered chassis. That means, Leow says, "We can deliver outstanding fuel savings" when the operator can turn off the diesel engine and run lift hydraulics off the hybrid's electric power system. There are a lot of advantages and growing interest in the hybrid approach, he says, initially among municipalities and larger tree care organizations.

"Not only is there a tremendous potential for fuel savings," he notes, "there also are issues of reduced carbon monoxide and other pollutants, plus the positive image of environmental stewardship."

Versalift, according to Paul Rugh, director of special accounts, is in the tree care
and utility business. In both industries, Rugh sees the push on for more reach, both vertically and horizontally. Why? Because utility poles are getting taller and are set further back, so the working height gets greater as does the need for height and reach in line clearance. One of the beauties of the struggle for reach and height is that, in Rugh’s words, “you have to move the

truck less.” That translates to more productive work time in the air and less fuel usage.

Another trend Rugh has seen, especially in the last few years, is use of an “elevator unit, typically mounted behind the cab, which can put another 10 to 15 feet or more of lift under a 55- to 60-foot boom.” Rugh says we can expect a scissor-type lift from Versalift in ’08. The extra vertical lift will add about $15,000 to the total cost of a Versalift boom installation. That sounds costly, but not when you figure you can get greater boom reach without having to go to the next size — and greater expense — of a larger chassis.

“The goal is to mount the taller boom on the same GVW chassis,” Rugh explains, adding that one of the challenges is to get as much reach and lift as possible without breaking through the magic 26,000-pound threshold of a fully loaded truck (vehicle, mounted weight and cargo, such as chips) requiring a CDL (commercial driver’s license).

“Commercial licenses are hard to get and maintain, on the one hand,” he says, “and with concerns over the skill levels of the workforce, it’s a challenge to be able to have a fully capable bucket truck with full chip box of up to 6,600 pounds and stay under the CDL requirements. As an industry, we’re not quite there yet.”

Typically, you’ll find Versalifts with a reach of 55 and 60 feet to the bottom of the basket (add 10 feet for a vertical lift) and horizontal reaches of from 39 to about 43 feet. (Always ask if the quoted reach is to the bottom of the bucket or the working height.)

Another venerable name is Terex, known in our industry for its XT line of booms. They come in three heights, the tallest being a 60-footer (add another 5 feet to get the effective working height).

Terry VanConant, manager of marketing and sales support, says Terex, which came out with the first hydraulic elevator, has seen a lot of interest of late in its transverse mounted lift. These elevators, which provide an additional 10 feet of working reach, are mounted behind the cab or at the tail of a platform-type chassis. Not only does the transverse mounting (about 90 degrees to traditional mounting) help save space on the chassis for a chip dump or tools and storage, VanConant says their real appeal in the tree care industry is to enable a smaller, lighter chassis to handle a bigger boom.

“Operators who want or need the extra reach can take our tallest, 60-foot boom (measured to the bottom of the basket) up another 10 feet. Add another five feet for the effective working height,” he reminds us. “With what you get is a longer boom without having to go into a longer or heavier cab and chassis.”
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"The transverse lift has been around for four years or so," he explains, "but its popularity has taken off, especially in tree care." By bringing the transverse lift in at about the same cost as a traditional lift (certainly north of $5,000, depending on installation), we’ve made bucket trucks more productive without a major increase in cost."

Forestry Equipment of Virginia is what the computer industry would call an “integrator,” mounting any one of three Terex Hi Ranger lifts (60, 65 or 75 foot for other applications) onto an International or GMC chassis. Packages can be ordered either as a flatbed or in a “forestry package,” which includes a chip box.

According to Jim Loughney, FEV’s national sales agent, lift/truck package prices start at about $92,000 for a basic setup (no 4-wheel drive, etc.), but prices will vary, he warns, because of the current “state of flux” in chassis prices due to new emissions requirements.

But what you want can be ordered and built in a matter of weeks or months. “We always have between 50 and 150 chassis and lifts in stock and can build you a lift in four weeks,” Loughney says. For a custom ordered chassis, “No matter what you want, delivery is no more than two and a half months in any case.”

MAT-3, headquartered in Ixonia, Wisconsin, is run by president John Mlaker who says the brand started in ‘92 as a non-original-equipment replacement for the former Hi Ranger lift. MAT-3 (MAT is derived from the old acronym Mobile Aerial Towers) initially engineered its Big Lift series of 110- and 125-foot-working-height lifts for transmission and other high specialty work.

However, “We looked at niches we could serve and went into tree care, developing lifts with 65-foot working heights and later 75. We have been in production with those for nine years.” These are their MAT-Tree truck-mounted aerial lifts specifically designed and built for the tree care industry. The lifts are articulated, with a telescoping upper boom.

As with other integrators, MAT-3 will install the flatbed and boom on a chassis, which can be custom-ordered, and order out other pieces, such as tool boxes. The company also provides replacement parts for the Hi Ranger.

Although MAT-3 runs hydraulic lines to the top of the bucket, Mlaker says that about half the orders come from buyers who do not want that function. One point he makes is that the bucket truck set-up is designed to be sturdy enough to withstand the occasional inadvertent drop of a limb.

Selecting a boom and bucket arrangement over a mini or spider lift is a matter of mindset, he says, adding that there are pros and cons either way. “Our unit, a telescoping upper boom, delivers more working range, and the end-mounted bucket provides access off three sides (versus side mounts where you can work off one side and the front only).”

Lift-All, a division of Hydra-Tech, Inc., makes a variety of lifts including 47- to 65-foot LSS-model tree trimmers and optional 10-foot, scissor-type elevators – more than 100 models in all, according to Mike Hudson, VP of marketing.

Lift-All is addressing the momentum for faster, lighter booms that increase the process speed for tree professionals. “There is definitely more call for lighter units, for backyard units, and we are seeing
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a push toward that — reaching out for residential trimming without tearing up a back yard.

There is also some action in mounting buckets on track vehicles, he says. “It’s whatever the customer wants.”

Plastic Composites Company in Fort Wayne, Indiana, makes replacements for one, one-and-a-half and two-man buckets as well as boom guards, and covers for most bucket trucks (and supplies to a few original equipment makers.)

“The first bucket our company ever made for an insulated bucket truck was in 1959, and that became the Hi Ranger,” says Craig Keoun, company president. “You have to consider the weight of the bucket (when figuring) boom lift capacity. Then dielectric protection is key, followed by strength of the bucket, which has to do with fiberglass in manufacturing and also the process used to form the bucket. That results in integrity overall and allows for side-mount or rear-mount buckets,” he says.

“Clearly, fiberglass components are part of the care of a bucket unit,” he says. “It’s not unusual to see a 25-year-old boom and bucket still performing well if taken care of, and it might have been on several chassis during that time. If one of our buckets fails, it’s due to damage or abuse, like running into something or branches falling onto them.”

According to Keoun, “The cost of bucket replacement varies on whether you do it yourself or have it done as part of an overall retrofit.”

Speaking of retrofits, Kirk Messing, in charge of sales at RBG Inc. in Raymond, New Hampshire, a company specializing in truck-mounted aerial devices and cranes, says business this winter has been booming (his words) with “a lot of remounts — flipping rear mounts to new trucks and re-certifying them. And we are selling a lot of used booms.”

“New or used, most guys in the Northeast look for rear-mount buckets, often with no dump boxes. The smaller chassis and shorter wheelbases, even with a chip dump, gets them better access to yards and tight working areas because they are working off the back of the truck,” he says. “These are great for the independent owner-operator.”

Rear-mounts, he adds, also keep dropped debris from falling onto the truck, and the lighter-weight chassis means a crew can run off a standard license.

From an investment perspective, Messing’s conclusions are that a good bucket and truck, if well maintained, will remain serviceable for a long time and maintain value if and when it comes time to trade in, making the technology a good, long-term investment. “For half the cost of a new unit, owners can take a boom they know and have cared for, have it refitted and certified and mounted on a new or newer chassis.”

New or used, the right aerial device will give you a lift in business at a time in the economy when speed and cost savings are critical.
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Ticks Suck
Thomas Mather, Ph.D.

Spring and summer are tick season, and with increasing tick encounters comes risk for diseases like Lyme disease, babesiosis, and Rocky Mountain Spotted Fever. Learn to routinely take just a few simple steps that can keep you safe, and maybe increase business, too.

graphic artwork by Brian Muller
ne tick bite can change your life. In the eastern and north-central United States, Lyme disease is the most common tick-borne disease problem, although ticks also transmit a malaria-like protozoan called Babesia microti as well as a host of other microbes that can cause mild to fatal infections. In the eastern and north-central United States, one type of tick, the blacklegged or deer tick, is responsible for most cases of disease, and an unlucky person could be infected with two or three disease-causing agents from a single tick bite. The resulting illnesses may start as a summer-time flu, but lasting side affects can be as severe as heart block, chronic arthritic complaints, various neurological abnormalities including tingling, memory loss, paralysis ... and even death.

All of these diseases can be treated effectively if diagnosed, and they all are quite preventable. So, although it’s true that one tick bite can change your life, sometimes forever, it is equally important to remember ... just don’t get bitten!!

In areas where ticks are common, experiencing prolonged fever with muscle ache, severe headache and joint pain during the summer months could indicate a tick-borne disease. In its earliest stages, Lyme disease is often associated with a bull’s-eye or solid bright red rash that grows to more than 5 centimeters in diameter over the course of a few days to a few weeks. Diagnostic testing may not be conclusive at the earliest signs of disease, but if taken a week or two later, it is generally very reliable. A negative result from tests taken a month or more after initial signs and symptoms should prompt seeking alternative causes for the symptoms. Not every summer-time flu is Lyme disease or one of the other tick-transmitted infections, but in tick country, these diseases certainly need to be ruled out by a physician and not merely dismissed.

Lyme disease has become a public health threat worldwide, occurring throughout rural, suburban and even semi-urban portions of the north-temperate region of the globe. In the U.S. about half of all cases are reported from just four states (Connecticut, Rhode Island, Massachusetts and New York). The ticks that transmit the disease-causing spirochetal bacteria are typically found in forested habitats or along woodland borders where humidity is usually highest. These ticks are very prone to drying out; just eight hours at 75 percent relative humidity can be fatal to a blacklegged tick.

The emergence of Lyme disease, or really its re-emergence, began with changes in the landscape starting in the 1920’s. In the northeastern United States, demographic shifts to cities and the secession of farmland into second-growth forests began to restore suitable habitat for white-tailed deer, which had been missing for a century and a half. As a deer re-populated, it created the necessary (blood) resource for blacklegged tick reproduction. These ticks were re-introduced from coastal New England islands that were never de-forested, and they began to spread. 

Lyme disease is a public health problem. In Rhode Island, we estimated that in 1993, about 275,000 residents were likely to encounter at least one of these blacklegged tick nymphs at their home but by 2006 that number had risen to 717,000 residents – nearly three quarters of the state’s population. Similar increases have likely occurred in other states in the Northeast and mid-Atlantic regions.

Remembering that all ticks come in small (larvae), medium (nymphs), and large (adult) sizes, it’s important to note that most disease comes from deer tick nymphs that are most active from late May through July. Their small size (about the size of a poppy seed), their typically painless bite, their abundance in suburban residential settings, and their high infection rate all combine to make nymphal deer ticks the prime cause for most disease cases.

But nymphs don’t transmit their infections as soon as they latch on and start biting. Experiments have conclusively shown that these ticks must be attached for at least 24 hours before they can transmit the Lyme disease agent. For adult ticks, the time delay for transmission is even longer, over 48 hours. Removing attached ticks within the first 24 hours can prevent infection. Because of their small size and usually painless bite, you may be unaware...
that a tick is attached. Nearly 75 percent of ticks submitted for testing by tick-bite victims were attached for longer than 24 hours.

**Take action to stay healthy**

Various Internet and print sources will suggest all kinds of remedies and prevention tips, and sometimes all that variety of information gets ... well, overwhelming. Our goal is to keep the message on preventing tick-bites simple so that people actually will DO IT! We reduced the key objectives of an effective tick-bite prevention program into three target categories: Protect Yourself – Protect Your Yard – Protect Your Pets. In following this strategy, there are just a few highly effective practices that if used regularly, can definitely keep you safe and disease free. And to help people remember how simple it can be to protect against tick-bites, this year we launched the “Think TICK...Take ACTION” campaign. The letters spelling TICK can be used to remind every family member of the actions they should take every day during tick season to most effectively prevent disease.

Everyone should have at least one pointy tweezer handy for safe tick removal. A pointy tweezer allows you to grasp even the tiniest nymph close to the skin for a clean removal.

Remove them as soon as you find them and save them in a zip-lock bag for later identification and testing.

Inspect yourself carefully at least once a day. Do a whole body check, paying close attention to those areas where clothing bunches up and restricts the tick’s movements as they climb up. Behind knees, groin, around waistbands, bra straps, and arm bands on tee shirts are all likely spots for ticks to attach. Use a full-length mirror and bright lights if you can’t find someone to help.

*Backlegged ticks (deer tick) adults and nymphs with straight pin. Photo courtesy of Jim Occi, BugPics, Bugwood.org*

**C** put repellents on clothing not skin. The best way to repel ticks is with repellents containing permethrin soaked into clothes. Buy the clothes already treated, or treat them yourself and allow to air dry. Shoes, socks, pants and shirts should all be treated. The treatment lasts for a month or longer, and through at least a few cold-water washes. Use similar approved products on pets to repel and kill ticks before they attach to your pet or crawl from the pet onto you.

**K** use approved pesticides to kill the "kreepy kritters." Bifenthrin or other synthetic pyrethroids work well and can generally be used in a targeted spray around the yard perimeter and along paths, trails, stone walls or other shady, high exposure areas. Arborists are well suited for this work as high pressure sprayers for turning the forest leaf-litter over gives best results. Granular products applied to leaf-litter also can be effective.

Among others, Bartlett Tree Experts has adapted these simple strategies in developing a highly effective and successful commercial tick control program for customers. Their program combines arboriculture practices like opening up the tree canopy to encourage tick-drying sunlight with high-pressure perimeter sprays and a rodent-targeted treatment (Damminix Tick Tubes).

Deer proofing, raking and removing leaf litter and other landscape practices that discourage rodents also can help reduce tick abundance and tick encounter risk.

More information on the Protect Yourself – Protect Your Yard – Protect Your Pets tick-bite prevention program and the “Think TICK...Take ACTION” campaign is available at www.tickencounter.org.

Thomas Mather is professor of public health entomology at the University of Rhode Island and is director of the University’s Center for Vector-Borne Disease and its Tick Encounter Resource Center. He has conducted research on ticks and disease prevention for over 25 years.
Major Gifts Launch Endowment Campaign

Yes, it’s an ambitious goal to grow the TREE Fund endowment by $2 million in two years. But making a big goal is the first step in achieving it, and Janet Bornancin, TREE Fund executive director, was pleased to report on February 11, during TCIA’s Winter Management Conference in Aruba, that the foundation is off to a strong start!

In announcing four $100,000 pledges, Bornancin thanked the donors for their leadership and forward-thinking generosity. Those donors included:

- Tim and Tom Gamma of Gamma’s Shield Shade Tree, St. Louis, Missouri;
- Jim and Annie Barbarinas of Urban Forestry Services, Mount Vernon, Wash.;
- Mike Neal of Arizona Public Service in Phoenix, Arizona; and

These major gifts represent a dedication to the future of arboriculture and express the desires of each donor to create a reliable pool of funds whose earnings will support important research and education programs in perpetuity.

Every contribution to the TREE Fund endowment builds a stronger future for arboriculture and can be a great way to honor the work and passion of those we love and respect. For instance:

- the Connecticut Tree Protection Association is making a major contribution to establish the Dr. Mark S. McClure Fund and support the TREE Fund’s Research Fellow Program
- the Florida Chapter of the ISA has made a great start on building up the John P. White Fund to educate municipal decision-makers about the importance of professional arboriculture and urban forestry
- Scott Packard, president and CEO of Wright Tree Service, pledged $10,000 to support a new scholarship program.

Why did they do it

Each part of the name “Tree Research and Education Endowment Fund” has a meaning and importance for these donors. Some put their money in for Research and others for Education; these lead contributors know that building the Endowment is a long-term commitment to Tree care and the professionals who perform it.

Tim Gamma, a TREE Fund trustee, and his brother, Tom, wanted to honor their father’s hard work and dreams for the industry by establishing the Frank E. Gamma, Sr. Arboricultural Training Fund.

“My father has always credited the ISA and NAA (now TCIA), as he still likes to call it, with providing the training and seminars that he needed to excel in the business,” says Tim. “We’re always looking for more trained workers in our field. We want to inspire young arborists to get the training they need and help to make it more affordable for them by providing grants to local or regional arborist organizations who offer courses and seminars.”

For Jim Barbarinas, a recently “retired” TREE Fund trustee, and his wife, Annie, a commitment to building the endowment will create a steady source of research funds focused on tree planting, roots and the improvement of tree varieties for nurseries. The Barbarinas Fund will support an aspect of arboriculture near and dear to them.

“The only thing that makes us experts in the field that we are in is the application of methods or techniques that are proven by unbiased third parties,” says Jim. “I feel that TREE Fund research grants are the best way to make all of us real experts.”

Mike Neal, manager of Forestry & Special Projects at Arizona Public Service, believes research provides long-term benefits to his company’s operations, the field of arboriculture and the environment in general.

“The research that Arizona Public Service supports will hopefully help cities avoid making the mistakes of not planting the right tree in the right place, not having the resources to care for the trees, or not making scientifically-based decisions,” says Mike. “Planting millions of trees in cities will only be good if they live long enough to have a significant impact on pollution and heat. Research is still needed to make this tree-planting initiative effective.”

Robert Bartlett, chairman of the F.A. Bartlett Tree Expert Company and a dear friend of the TREE Fund, believes there are still many questions to be answered in the field of residential and commercial tree care. His goal is to establish a Bartlett Fund for arboriculture research that would help this important branch of the industry.

“This contribution to the TREE Fund endowment represents my grandfather’s commitment to research and science in tree care, which continues today in my family and our company,” he says. “From the beginning of our company over 100 years ago, to the first Shade Tree Conference in my grandfather’s home, we have always emphasized the importance of research. The TREE Fund endowment will help to make sure that emphasis continues long into the future.”

You can do it, too

Last year the TREE Fund was able to fund only about a quarter of the most promising projects for which it received grant requests – and still maintain its balanced budget. With the generous support of these lead donors, and your help as well, the Fund can dramatically increase grants while reducing its reliance on the annual ups and downs of special events revenue.

We are grateful to our lead donors for their generous support of the TREE Fund Endowment Campaign. Please join them.

Help the TREE Fund plan for the future of arboriculture and urban forestry by making a gift to the endowment, in addition to your annual donation. Contact Janet Bornancin at (630) 221-8127 ext. 256; or TREE Fund, 711 East Roosevelt Road, Wheaton, IL 60187.
Most would agree that engaging in the practice of plant appraisal requires, at a minimum, arboricultural and horticultural expertise and familiarity with construction and installation processes. These processes typically have recognizable and easily identifiable costs data associated with them, and appraisers have utilized this information in the formulas outlined in previous versions of the Guide for Plant Appraisal to develop their opinions of value. What many appraisers may not be aware of is that plant appraisal also combines and is influenced by several distinct and sometimes disparate disciplines that can have significant impact on how an appraisal assignment is defined, what types of value can legally be determined, and on the validity of the appraisal methods or techniques used. In this article, we will address one of these influences; the relationship between the plant appraisal process and real estate.

Recent feedback to Council of Tree and Landscape Appraisers (CTLA) representatives has included concerns that proposed changes to the Guide for Plant Appraisal in the 10th edition will require plant appraisers to become real estate appraisers. This concern has in part originated from previous exchanges that have alluded to the fact that the 10th edition will mark a departure from earlier editions of The Guide and will, among other things, bring the practice of plant appraisal into closer conformance with the standards for appraisal as defined by the Uniform Standards for Professional Appraisal (USPAP) and the standards of appraisal organizations. While we have no intention of requiring plant appraisers to become or be subservient to real estate appraisers, these fears indicate common misconceptions within the plant appraisal industry that we hope to address.

By definition plants and landscaping are inextricably intertwined with real estate; real estate is the “physical land and appurtenances attached to the land.” This includes natural elements such as trees and minerals as well as things attached to the land by people, including houses, buildings, and other site improvements such as landscaping. In many ways plant appraisal has always been a part of real estate.

While we have no intention of requiring plant appraisers to become or be subservient to real estate appraisers, these fears indicate common misconceptions within the plant appraisal industry that we hope to address.

Since there are many different ways to define an appraisal assignment, and as each of these will each generate a different opinion of value, it is critical that the appraiser appropriately identify which type of value they are seeking. While plants can have intrinsic, aesthetic, historic, habitat and a number of other values that have very real meanings to people and the greater ecology of an area, in the context of the marketplace, when dealing with the exchange of money between entities, many of these types of value may not be applicable.

Fundamentally, real estate deals with this exchange in the marketplace, and the inappropriate use of appraisal approaches, methods and techniques not grounded in the marketplace can expose an appraiser to liability. Trunk formula method (TFM) has come under fire in litigation as being unreliable and an unfounded technique of estimating a value that has little or no relationship to the marketplace. The Internal Revenue Service (IRS) does not accept this (or any formulaic method) as an acceptable form of valuation as it requires comparisons of market value before and after a casualty to estimate conclusions of loss or the actual cost of reasonable repairs.
As appraisers gather cost estimates and price data in their appraisal process, they may assume that the value of the plant is simply the aggregate of these costs, perhaps minus some depreciation factor. In fact, even though the terms value, cost and price are often used interchangeably by plant appraisers, these terms have significantly different meanings and should not be mistaken for being synonymous.

Cost is the amount required to purchase or create an item. Price is how much someone has paid or is willing to pay for that item. Value is the tangible or intangible worth of that item, and in many cases is highly subjective. An example of the differences in these terms can be illustrated with a classic 1959 Corvette. The cost to the manufacturer was the cost of the various components, labor and other direct costs required to construct the car. The price the original owner paid was that cost plus profit for the dealer and manufacturer. The value to a collector of vintage cars may exceed what the original owner paid for it due to desire, scarcity or a number of other reasons. Someone who is not interested in vintage cars may value that same 1959 Corvette much lower.

It is critical that plant appraisers understand the differences among these terms and not assume that cost always equals value. There are instances where cost approaches are the most reasonable means of developing an appraisal, particularly where like materials can be used to restore a site to its pre-casualty condition. One example would be the restoration of a landscape of small shrubs and hardscape materials that has been damaged by an errant vehicle. It may also be applicable when damage occurs to a large tree, and the functional utility, even though not identical to the original tree, can be replaced by the planting of several smaller trees.

However, cost methods may not be appropriate when a client actually requires a statement of how damage to the landscape affects their property value. As stated before, the IRS, as well as courts and insurance companies, may require an opinion based on impact to the real estate market value of the property. In these situations, a comparison of the damaged site to comparable properties would be appropriate as a means of developing an opinion of the value of a plant. The plant appraiser should be aware that this information is generally available from a number of sources. Sales data of recently purchased properties is commonly printed in newspapers. Many municipalities have developed Internet accessed GIS (Geographic Information Systems) -based real estate resources that list property values and occasionally sales information. Additionally, opportunities exist for plant appraisers to learn about this topic through continuing education seminars, books and other publications.

However, while the skills required to successfully identify and research comparable properties is within the abilities of many plant appraisers, the real estate market is highly volatile with fluctuations in the economy and varies between neighborhoods and cities. In many cases it would be advisable to seek the services of a local real estate appraiser or broker to assist you in your assignment. These professionals are well versed in current real estate transactions, and developing these relationships may help you comfortably, and defensibly, approach projects that require this information.

Each approach to value, whether market, cost or income, cannot and must not be universally applied to all plant appraisal assignments. Understanding the variability of plant appraisal assignments and how to appropriately choose approaches and methods for offering an opinion of a specified value is the responsibility of each and every plant appraiser. With the issue of real estate, what the Council of Tree and Landscape Appraisers is proposing in the 10th edition of the Guide for Plant Appraisal is to clarify how it can affect the process an appraiser chooses to use, with the goal being to create a better, more defensible opinion of value. The evolution of the Guide for Plant Appraisal, and of the profession in general, should be regarded by the plant appraisal community as an opportunity to advance one's skills and qualifications, not as a source of apprehension, a limitation to one's qualifications, or a detriment to one's bottom line.

Timothy R. Toland, RLA, is currently serving as the American Society of Landscape Architect's representative to CTLA, and an assistant professor of landscape architecture at SUNY College of Environmental Science and Forestry, in New York.


One-handed use of a chain saw debate continues...

I must agree with Mr. (Blair) Glenn of Saratoga Tree Service (Letters, TCI March 2008), that there are times when one-handed chain saw use is a necessity. Those of us who have been in the field a large portion of our careers have come to realize that this practice can be a safe and time saving practice in tree care when done properly. Whether we are a one-man show or a large corporate business, we are capable of judging the capabilities of our arborists who, by the way, are professionals in their own right and need to be trained with that in mind. We do not need the judgment of bureaucratic, insurance-lobbyist-driven entities of the profession mandating this rule upon us.

You (TCIA’s Peter Gerstenberger in his response to Mr. Glenn’s letter) say that OSHA doesn’t care how long it takes to prepare and make a proper pruning cut, and assume there is a handy limb there to double crotch into. Well, the reality is that every arborist who is out there trying to be the best and is competitive in the profession will adopt this practice. If you are content with being in a union or on a municipal payroll, then all the obstacles to individual excellence that are placed in front of you are not a problem. If, however, you are in it for higher stakes, then you understand the importance of efficiency.

I realize that municipalities have thorough hiring and training regimes all conducive to safe employment, and I’ve seen private operators get away with very unsafe practices, as is written in the accident reports (also in the March 2008 issue of TCI), such as the guy who died from a blow to the head. We all know that hard hats are essential to safety, but some guys evidently haven’t the common sense to protect themselves. I would never allow a person on site without one, but I would never discourage an arborist from hanging onto the rope with one hand while reaching for a cut if he feels safer that way, as long as the chain saw is below his horizontal plane and away from his body.

Unfortunately, it has been my experience that one-hand cutting is most often applied unsafely due to inadequate training, poor attitude and/or as a bad habit, and not because of a lack of reasonable alternatives.

Kevin Eckert

You know, we are taught by government instructors to brake with our right foot while driving a car. My dad taught me to use my left. He said I’ll have a faster braking reaction by doing so. But the instructors fear a person panicking and accidentally pressing both pedals; a problem for sure, but then my dad also said that not everyone has a knack for this or the common sense to realize the benefit of this practice. Government would rather err to the lowest common denominator (lowest skilled that is). I say encourage the learning of techniques to make you a better performer and measure the ability, don’t stifl the ability. Of course I wouldn’t force anyone to attempt any advanced technique if I felt they weren’t ready.

There are some things we can all agree must be law for obvious reasons and I would like to think I’ve clearly made the definitive argument against this one, but I’m sure there is at least one “restrictionist” out there who will not accept my reasoning and continue to push for having us all under their blanket of safe white foam. Anyway, I probably shouldn’t confess this either, but I still free climb most trees and visit smoky bars, even though I don’t smoke. Bottom Line - my choice!

Carl Peterson
Apollo’s Garden Landscape Professionals, Eau Claire, WI.

Peter Gerstenberger, TCIA’s senior advisor for safety, compliance & standards, responds:

Carl, I sincerely respect your viewpoint. In previous editorials and articles, both sides of the one-handed debate have been thoroughly aired.

I must take exception to your statement, “We do not need the judgment of bureaucratic, insurance-lobbyist-driven entities of the profession mandating this rule.”

The rule in question, paragraph 6.3.7 of ANSI Z133.1-2006, was adopted only after a vote of the full committee and a period of public review and comment.

Please take a look at the people who comprise the ANSI Z133 Committee. They are listed in the Standard’s Foreword. These people are your peers and colleagues. Most of them were, or still are, practicing arborists. There isn’t an insurance-lobbyist-driven entity among them.

When the vote to adopt the “two-hands-at-all-times” statement was taken, one person voted against it. That vote came from a highly respected arborist who felt, as you do, that the requirement was infeasible to enforce 100 percent of the time. Significantly, 20 or more of his colleagues, also highly respected arborists, felt strongly otherwise.

I am very confident that arborists, being the resourceful people we are, will adapt our practices to this rule and end up being even more efficient, even more productive and, most importantly, even safer than we were in the past.

And the one-handed debate continues...

Editor’s note: Starting with the November 2007 issue of TCI, numerous articles and letters to the editor have debated the issue of one-handed use of a chain saw. In response to a letter from Willie Gingg in the March issue asking why manufacturers’ don’t make a chain saw that makes one-handed use safer and easier, TCI, seeking a noted industry chain saw safety professional to weigh in, asked Kevin Eckert to do so. Eckert is a practicing...
arboretum/climber for 30 years, president of Arbor Global LLC/Arbor Global Hong Kong Ltd; chair of the Hawaii Urban and Community Forestry Program, the Western Chapter ISA Arborist Certification Committee and the 2007 ISA Annual Conference Committee, past president of the ISA Utility Arborist Association, and author of Chain Saw Safety and Field Maintenance - A Photo Guide, which is available for sale from TCIA’s online store at www.tcia.org. Following is his response:

I have been following the debate regarding one-handed chain saw usage with great interest. This is obviously a challenging issue with strong opinions on both sides, and I appreciate the opportunity to present my own views regarding this important topic.

My experience has been that, while not the preferred practice in the vast majority of cases, there are situations where the one-handed use of top-handled chain saws is appropriate in our line of work. The most recent version of ANSI Z133.1 currently requires chain saw operation with both hands firmly on the saw. Given my understanding of the high number of injuries resulting from improper one-hand cutting, I believe that this restriction is necessary. However, I personally believe that there are practical exceptions to this rule.

In my experience there are certain conditions when a top-handled chain saw can be safely used with one hand. There are times when properly skilled operators may find that, when applying their knowledge, professional practices and good judgment that a free hand can provide greater stability while making a long reach cut or to distance the operator from a potentially dangerous cut or limb fall. My caveat is of course that, as with all cutting, constant diligence and proper positioning of the operator and the chain saw are mandatory at all times to ensure that the operator and their equipment is protected and not in the plane of a potential kick back or follow through. Equally important, whenever an operator feels that it may be necessary to conduct a one-hand cut with a top-handled chain saw, the operator should always consider and apply any practical, safe alternatives rather than use one-hand.

Unfortunately, it has been my experience that one-hand cutting is most often applied unsafely due to inadequate training, poor attitude and/or as a bad habit, and not because of a lack of reasonable alternatives. Even skilled operators can be exposed to unreasonable safety risks when this technique is not applied properly. Operators must understand that all it takes is one lapse of judgment, attack of laziness or bravado, inattention, or fatigue and errors are made. When that happens, in a split second your whole day, or life, can be ruined.

Before applying any cutting practice, including one-hand chain saw operation, each operator must take proper care to minimize risk. From my experience, I believe that many operators in our industry who regularly use this technique don’t truly consider alternatives or appreciate the risk of serious injury or the potential impacts of these injuries to their life.

I believe that it is important for everyone to recognize that our work takes place in a very dynamic environment. Every tree and site condition is different. This environment requires constant consideration and balance of safe, productive work practices. As correctly pointed out by the TCIA staff and a number of TCI magazine readers, chain saw operators must have an appropriate level of knowledge, skill, diligence, good judgment and common sense at all times when conducting their work. They must take all reasonable actions at all times to minimize risk to themselves and others around them. This includes exercising the courage and good judgment to avoid work or application of a practice, such as one-hand chain saw cutting, if they do not have the knowledge, skill, focus, or conditions to operate safely.

In summary, one-hand cutting with a top-handle chain saw has been an observed practice that is not generally recommended and should be avoided whenever possible. This technique should only be conducted when reasonable alternatives are not safe or practical and only by skilled operators under very controlled circumstances that ensure the safety of the worker and others who may be nearby.

Thank you for the opportunity to express my thoughts and opinions on this challenging topic.

Kevin K. Eckert
Kailua, Hawaii

The final word? We doubt it...

Bob Rouse, TCIA’s director of Accreditation, also responds to the one-handed use of a chain saw issue.

OK, we are probably a little tired of this one, but I think talking about this as long as people want to is good. Here is my opinion from an Accreditation standpoint:

The Accreditation standard requires that companies follow the Z133.1 standard. I think the following example helps explain why.

I was just reviewing safety data from one of our accredited companies. They had only one recordable injury in the past three years, which is almost unheard of. The injury was a chain saw cut to the forearm.

If this injury involved a cut tendon or other connective tissue requiring therapy, you can forget about this company, or our industry, gaining any benefit from the almost perfect safety record over a three year period.

What does this mean to arborists who are
deciding on a daily basis whether to follow the Z133.1 standard or one-hand? It means the company you work for, or own, has to pay higher WC insurance premiums as these premiums are set based on overall industry loss experience. More injuries equals higher premiums. The types of injuries that occur as a result of one-hand-ed chain saw use are expensive because they often involve the hands and cuts to connective tissue. Higher WC premiums means less funds available for payroll, employee benefits, new equipment, profit, etc. It also means you need to do more work, taking up more time, to cover the higher insurance premium expenses, which kind of defeats the purpose of one-handing in the first place.

Arborists should not feel that there is a lack of trust in their abilities, skills, or experience. This is simply a matter of statistics on a national basis. And, yes, injuries from one-handed chain saw use are somewhat less likely to occur to a qualified and experienced arborist as opposed to a new recruit. But the key words are “somewhat less likely.” One-handed chain saw injuries do happen to qualified and experienced arborists. When they occur, they are just as costly and just as likely to end your career.

Call back on rigging advice

In my article “Marketing Tree Care the ANSI Way (TCI, February 2008), there was a description and a picture of the Wirestop cable fastener. After the issue went to press, I consulted at length with the designer, Steve Tillitski, at www.rigguy.com. I’d like to pass on his remarks:

“1. Instead of saying ‘lining up the outer wires,’ which could imply a manipulation of the wires, I say unwrap the strand to its reversed natural lay. People who have a hard time getting the proper spacing are usually trying to “make” the wire hold the pattern when they have a couple of wires that are stuck together instead of re-twisting and untwisting the strand until it unwarps to its natural reversed lay. If someone it having to try to make the wires be spaced correctly, the strand has not been unwrapped correctly.

“2. The outer wires can be bent over as well as the single inner wire. This will give an extra measure of security if the middle wire has a fatigue failure. It is easier to do when there is pressure on the cable system to hold the ends steady. The outer wires should always be bent over the inner taper and never over the outer block (as they were in the picture with the article). This secures the position of the taper and facilitates the strand and captured taper moving into the block and seating under a load.”

Earlier instructional material showed the outer wires clipped off cleanly without being bent. I bent them to gain what I perceived as extra holding power, but it seems I guessed wrong when I bent them out instead of in. From now on, I will bend them in for that extra measure of security – and the caps will slide on more easily, too! I apologize for the inaccurate picture – a better picture is attached.

Guy Philip Meilleur
Better Tree Care,
Apex, North Carolina

H2B failure will hurt

I read with great interest the blurb in the “Tree News Digest” section of the February TCI issue about the undocumented worker who won a $30,000 settlement for getting hurt on the job in Rhode Island. The part that interested me most wasn’t the settlement, however. It was the statement by the W/C judge, putting “employers on notice,” and trying to make them “realize they cannot employ undocumented workers without consequence.”

As an employer who has utilized the H-2B seasonal worker visa program for the past six or seven years, I would like someone to explain to me what I’m supposed to do now that the 66,000 visa cap was met before the end of the year and there is no hope of getting the Returning Worker Exemption passed. Washington, in their complacency, is forcing me back to that workforce. And, I’m fuming.

I wrote, I called, I emailed, I went to visit my Representative’s local offices, and here we are. March 3, me sitting with my employees’ W-2s from last year on my desk and them sitting in Mexico. We’ve gotten nowhere. Worse than nowhere. The relative handful of employers and employees willing to go through the trouble and expense of keeping it legal – trounced, devastated, penalized, pooped on.

I actually got to speak to a staffer in my Congressman’s office last week, who, while being very well versed on the H-2B issue, literally admitted to me that they were under the impression that no one was going to be hurt by not extending the exemption, and only after speaking to me did she realize otherwise.

Sure, Edgar Velasquez deserved to be compensated. Even under the best and safest circumstances, accidents happen. That’s why we have workers’ compensation insurance. That’s why I had it. Maybe Chief W/C Judge George E. Healy, Jr. can give me some advice, instead of putting me on notice, and tell me what I’m supposed to do now.

Randie Rubenstein
Dion’s Tree Service
Howell, New Jersey
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Three years after becoming the first TCIA accredited company in Colorado, Robert Brudenell, owner and president of The Natural Way Inc. in Englewood, not only attributes cost savings to the program, but says it is the reason he has more than doubled his annual revenue in that relatively short time.

The Natural Way, only the third company to achieve TCIA Accreditation nationwide when it came on board in July 2004, started saving money right out of the gate. Just months after becoming accredited, Brudenell received a call from one of his crews telling him that OSHA was on site. Apparently, they were working a block away from an OSHA office and OSHA inspectors were under a mandate that if they drove by a tree care operation, they were required to stop and inspect it. On their way back from lunch, a group of inspectors did just that. Confident that Accreditation had prepared them for just this situation, Brudenell told the crew leader to just give the inspectors everything they asked for.

In the end, though OSHA had a couple of recommendations, the inspectors left not only without imposing any fines or violations, but impressed with the crew’s and the company’s organization and procedures, says Brudenell. When the inspectors asked for documentation, “I said, ‘Look, we are an accredited company.’ I handed them not only what they were asking for but our full Accreditation folder. They were overwhelmed, I think, and just blown away by it. I really think that helped us out.”

That was a great start to what has been nothing but a positive experience with Accreditation, says Brudenell.

In business 13 years this April, The Natural Way has 20 employees and produces a little more than $1 million in annual revenue. Their business, which covers the Denver metro area, is 98 percent residential.

“We specialize in high-end residential; we also have an estate maintenance program.”

Brudenell, 40, earned a degree in urban forestry and trained with The Care of Trees, working under John Hedricksen, Larry Hall and others. He started The Natural Way as an environmentally conscious company, with a focus on IPM using minimal chemicals, practicing targeted spraying versus broadcast applications, and using spreader-stickers to maximize the efficacy of the chemicals that they do use.

“We also have a strong focus on training our applicators to do the proper application and mix and apply chemicals properly.”

Business is gained through word of mouth.

“We don’t advertise. Everything is from referrals – local nurseries, and the majority of our referrals are from happy customers.”

They pride themselves on customer service, and if someone has a bad experience, such as a miscommunication or order error, which, based on volume, is bound to happened from time to time, says Brudenell, they make every effort to resolve it within 24 hours. That, he says, goes a long way in retaining customers and building the company’s reputation.

“What differentiates us is a real commitment to overall quality, honesty and the expertise and the credentials of our employees.” He encourages employees to take any training and certifications they can, and has one employee currently enrolled in the CTSP program.

His biggest business challenge has been the overall recruitment, training and retention of employees.

Accreditation

The Natural Way will be gearing up for the reaccreditation process this spring as it readies for its fourth year in the program. So, what convinced Brudenell to pursue Accreditation?

“When I started my company, I used the (TCIA Business) Management Guide, and that was a huge help. Then, when I heard the speech that Bob Rouse gave at the (2003) TCI EXPO in Baltimore on Accreditation, it sounded like, not only are we going to help you with the management guide, but we’re going to provide you with a bunch of templates, we are going to help you analyze your business, we are going to help you organize your employee files, we are going to help you with your contracts – we are going to help you with everything. And the bottom line was, I heard, ‘Hey, if you become accredited, you’re going to be a better business not only internally, but externally as well. You are going to be able to market both of those very effectively.’ And that has
proven 100 percent true."

"We hang out an Accreditation brochure with every estimate we give. That's how important I think it is.”

"The bottom of the market is getting tougher and tougher. The higher end of the market is where you want to be in this industry. And the clients at the higher end of the market want high quality work, they want excellent customer service, and they want to hire a reputable company. Accreditation spells everything out for them - here's what we get audited on annually, and then every three years there is a major audit. This helps to prove that we are a reputable company that is striving to do things right.”

It took The Natural Way about six months to get accredited once they started pursuing the program, says Brudenell.

"The really big thing about Accreditation is that it helped me learn my business. It helped me learn how to have a professional organizational structure. It helped me to revisit a business plan.”

His office manager, Andrea Brown, helped put all the paperwork together, but they didn't use any consultants.

"The hardest part of completing all requirements for Accreditation was the volume of information that had to be represented in the application process,” says Brown. Compiling all that was a chore, she says. On the other hand, she adds, the benefits, from a managerial and administrative point of view, are that it has made subsequent “audits and OSHA inspections a breeze.”

"I think that people really ought to do it internally because they'll learn so much more about their business,” says Brudenell.

"I learned I was doing a lot of things wrong, especially in dealing with employees. Having all of your employee files completely organized - documenting all the training - helped us not only with the Accreditation, but it has helped us with the Department of Agriculture, it helped us in a whole bunch of different areas.”

Now trees aren't the only thing growing in Denver.

"Right after the Accreditation we really started to grow, because a Accreditation provided a real foundation. These last three years we've had between 25 to 35 percent growth. Since we became accredited, the business has more than doubled,” says Brudenell.

"When we got accredited, we were doing about $400,000 (in annual revenue), and now we're over $1 million. In three years, that's huge. I can't expect that we're going to continue that kind of growth.”

Prior to Accreditation they were doing about 10 to 15 percent growth, and they still do budget projections very conservatively at 15 percent growth, he adds.

Highly recommend

"I constantly recommend Accreditation. A lot of companies tell me, 'We're just a small company. I don't know if it will have a lot of value for us.' I ask them, 'Do you guys want to grow? Do you guys want to be a more efficient, more organized company?' So, the answer is, 'Yes, go ahead and get Accredited. It will help put in so many ways, ways that you can't really predict.”

"It is almost easier, I guess, if you are a smaller company, because you don't have nearly the amount of work. You build a foundation when you are small. Then it would actually be a lot easier to handle the growth if you have all the systems and procedures in place.”

"I am a very strong advocate for Accreditation. It breeds professionalism. With employees, it helps instill a professional nature, and that has actually bred countless initiatives by the employees of the company. They really take Accreditation to heart and they know that we are one of the best tree care companies in the Denver or Colorado or even the Rocky Mountain range. When employees have pride in their work, they not only do their job extremely well and effectively, but they really go the extra mile. Then it also increases loyalty, because they don't want to leave an accredited company and go and work for a company that is not as professional.”

"I think a lot more companies ought to be looking at this; it will help companies, especially small companies that want to grow; it provides a great foundation. It adds a huge amount of credibility for customers. And you get a huge amount of help from TCIA. I can't really understand why more people are not getting accredited. I just really don't see a downside.”

Not an expense, but an asset

The cost of Accreditation is relatively minor, Brudenell says.

"When you look at how much a chip truck costs or how much a chipper costs, really how much does Accreditation cost? It pretty much costs the price of a new chainsaw.”

And it is not time consuming, he says.

"Once you get everything in place, it is easier to run your business. You know your business better, you make better business decisions. It helps with your marketing - it helps in all aspects of the business.”

"I think it is great. I log onto the Web page and I see that Accredited companies get listed first on TCIA's Web site. That's huge.”

He was in on a bid for a job in the Denver area where they were only looking at accredited companies. There were only two companies in the final bid because there are only two accredited companies in the Denver area.

"Those are the customers you want. You don't want the guy who calls 12 tree care companies out of the Yellow Pages. So you get a couple of jobs off the TCIA Web page and it pays for all of your Accreditation right there.”

Just as many bids already require applicants to have a certified arborist, Brudenell sees a distinct possibility that TCIA Accreditation will be a standard requirement anywhere that there are enough accredited companies to make that feasible. Ideally, he says, that would be not just one or two; but a handful of companies in the area that are eligible for the bid.

For now, the chief reasons for companies to consider Accreditation, he says, are “wanting to know your business; having that organizational structure in place; knowing how to deal with employees, how to deal with financials, how to deal with dispute resolution, how to deal with everything.”

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The Structural Dimensions of Tall Tree Growth
By Dr. Steve Sillett
(professor in The New York Times best seller book The Wild Trees), Professor, Department of Forestry and Wildland Resources, Humboldt University, Arcata, CA

Tuesday, July 29, 8:00 am – 9:00 am
Point/Counterpoint: The Role of Trees in Climate Change
Tree Planting in America: Rhetoric and Reality?
Dr. Greg McPherson, Director, Center of Urban Forest Research PSW, USDA Forest Service, Davis, CA, and Dr. Shaul Cohen, Associate Professor, Department of Geography, The University of Oregon, Eugene, OR

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Gypsy moth. Cankerworm. Across North America, they are the modern day equivalent of a plague of locusts. No one talks about eradicating these pests; the best we can hope for is to control the damage. Pesticides are being used on a large scale because the number of infested trees is so enormous. Municipalities, parks, commercial sites and residential lots face the same problems but, because they are working on a smaller scale, they may have other options.

With the current focus on non-chemical controls, arborists are looking at mechanical barriers - everything from duct tape to burlap barriers to Tanglefoot to BugBarrier Tree Band - as viable options. Even if the population is reduced, will that protect the affected trees from defoliation?

First, let's take a look at the best known branded products. The Tanglefoot Company, based in Grand Rapids, Mich, has been in business for well over 100 years. Back in the 1880s, the company produced a sticky paper to trap flies. Today, Tanglefoot is still all about “sticky.” Tree Tanglefoot Pest Barrier, Tangle Guard Tree Banding Material, Tanglefoot Pre-coated Sticky Tree Bands and Tanglefoot Paper Tree Wrap are all used to block crawling insects from the upper branches of trees.

Joe Skendzel, president of Tanglefoot, says, “Everything we do is sticky.” Tanglefoot Pest Barrier, which has been in production since about 1900, is made from natural ingredients, primarily castor oil, wax and resins, he explains. “It’s gooey and sticky, but it does the trick,” says Skendzel. “Our products provide a physical or mechanical barrier, a form of interference to insects who crawl up to deposit their eggs. It remains sticky in all weather, and is not affected by moisture, heat or cold.”

Skendzel concedes that sheer numbers of these crawling pests can overwhelm even the stickiest barrier by forming a bridge. “The important thing about Tanglefoot is that it stays sticky. It never comes off. You can apply it directly to the tree - there’s nothing toxic in it - but over time it can cause damage. We recommend using waterproof paper to protect young trees.”

Another mechanical product on the market today is the BugBarrier Tree Band produced by Envirometrics Systems, Inc. in London, Ontario, Canada. This product has been tested for use with emerald ash borer as well as gypsy moth, spring and fall cankerworm and winter moth. The product is described as “a dense, flexible, fiber barrier” that is wrapped around the trunk of the tree, filling in crevices and blocking the pests from escaping. A film barrier is installed over the fiber, the adhesive side next to the tree.

Brian Pancoast is the sales manager for this product and Duane Pancoast, CEO of The Pancoast Concern, Ltd., in Victor, N.Y., is communications director for the BugBarrier Tree Band. Duane Pancoast notes that the inventor of this product came from Winnipeg, Manitoba, where there was a terrific cankerworm problem.

“The inventor didn’t like spraying,” says Pancoast, “and he didn’t like the messiness of (other available products). Working with an entomologist at the University of Toronto, a team of designers put it together. Denis Crane, president of Envirometrics, was the entrepreneur who made it a viable product and put it all together.”

The main focus of the patented BugBarrier is residential and commercial markets, Pancoast explains. “Entomologists don’t look at eradicating this pest as much as controlling it. This product helps to manage the problem, but I don’t think you’ll ever wipe out a population with anything. BugBarrier has a fiber that is put around the tree, acting as a barrier to keep bugs from getting into the crevices. The stickiness is facing the tree.
but doesn’t touch the tree – the pests get stuck on the adhesive. It’s easy to apply – one person can do it.”

Patrick George is the owner of long-time TCIA member Heartwood Tree Care in Charlotte, N.C., a region that has had severe cankerworm infestations. He has used BugBarrier in the past and found it effective, but says the problem in his area has gone too far for mechanical barriers at this point. “Cankerworms have reached plague proportions; it means the barriers need to be cleared every couple of days during the height of the movement of the females, about a month long period. Since labor is money, that becomes expensive.”

In residential situations, George thinks the barriers might provide a benefit simply because the barriers need to be maintained on a regular basis – it makes the homeowners more aware of the problem. “It raises the profile of the tree care industry,” he says. “Everyone loves trees but they don’t realize it requires some investment to maintain them – kind of like your hair when you’re in your 20s!”

Arborist Dave Story is a local manager at the Northbrook, Ill., office of Bartlett Tree Experts. He tries to address the problem earlier through spraying. “We use helicopter spraying for municipalities and ground spraying from a truck.”

The problem in Lake Forest is so bad, Story says, that the city forester “literally goes around with a super soaker brigade” to spray the trees. “He’s pretty happy with the results,” Story adds.

When it comes to pesticides, Story says that choices have greatly improved. “The aerial people tend to use an improved strain of Bt (Bacillus thuringiensis) but it’s slower acting and the residual effect is not as long,” Story observes. “There are some nice choices for naturally derived materials, such as ConsERV™, which has really low mammalian toxicities. It’s a pretty big improvement. Both Bt and ConsERV are pretty good.”

Dr. Michael J. Raupp, professor of entomology and extension specialist at the University of Maryland in College Park, says that when it comes to the issue of mechanical barriers in relation to gypsy moths and cankerworms, “We’re not really sure. Their impact is questionable, especially with a high density population, but it is a way for homeowners to be actively involved. There is some good data out of the Pacific Northwest and Canada for issues with cankerworm, but that is quite a different organism than gypsy moth. With gypsy moths, we are trying to prevent the larvae from migrating up into the tree.

“In theory, mechanical barriers can reduce the population, but whether that has a measurable impact on defoliation is unclear. Using mechanical barriers falls into the category of things homeowners can do, but while these are not a detriment, their benefits are unclear,” he observes.

Raupp has reservations about the use of burlap or hiding bands: “Burlap provides a daytime hiding place,” he explains. “You have to go out every day and collect the caterpillars under the band. If you put up burlap bands and don’t go out and remove the caterpillars you will be exacerbating the problem. By creating a perfect place to hide them from predators, you’ve increased their survival. In Bethesda, Md., I saw two magnificent white oak trees with their foliage totally stripped because they didn’t go out and regularly kill the immatures.”

Daniel A. Herms, associate professor of entomology and associate chair of the Department of Entomology at the Ohio Agricultural Research and Development Center of The Ohio State University at Wooster, Ohio, says mechanical barriers, for gypsy moth anyway, “don’t prevent defoliation.”

“The primary dispersal is after the first instar,” Herms explains. “They blow in the wind and lay in the upper canopy above the barriers. A lot of those caterpillars stay in the upper canopy. If there is an isolated residential tree, the barriers prevent migrating caterpillars, but what’s the risk – where are they going to come from? If the neighbors have trees they aren’t treating, the barriers become overwhelmed – you see the sides of houses covered with the caterpillars. Tanglefoot becomes saturated very quickly, and there may be more than a thousand a day captured in burlap. The mechanical barriers are recommended as a sampling tool when populations are high enough that trees are going to get defoliated. When the populations are low, you can get away without doing anything.

“People are hungry for alternatives to pesticides, but they get very upset when the mechanical barriers don’t work,” Dr.
Herms observes. “They have the false impression that every caterpillar vacates the tree at night, but in reality tons of them stay up in the tree. Bt is recommended because of its selectivity in its caterpillars and it doesn’t harm birds or other insects,” he says. “Bt is registered as an organic; it lasts only five to seven days, so there is a narrow window.”

Rex Bastian, who has a Ph.D. in entomology and is vice president of Field Education and Development for The Care of Trees, uses mechanical barriers in certain circumstances, noting that “they are not perfect, but they are an option.” He explains that if he was to suggest this option to a client, he would be sure to “set out the parameters to avoid setting them up for disappointment.” While he is aware that some entomologists have concerns about these products, he observes, “Entomologists don’t always have the same concerns as we in the industry do.”

Bastian does not advise that Tanglefoot be applied to trees directly: “Sometimes Tanglefoot will leave a mark on the trees,” he says. “You can still see the marks on trees from cankerworm infestations 20 years ago. While this doesn’t really hurt the tree, you can see the remnants of the applications many, many years later, so there is this visual reminder. Gypsy moth in large numbers are starting to move through the Chicago area, and we used BugBarrier Tree Bands at the home of a client who had a large group of oaks right near their house. The clients were so accepting of it they’ve asked us to do it again.

“With cankerworms, the female moths are flightless and they get stuck in the BugBarrier band very easily, so the product may be more effect with them than with gypsy moths. Gypsy moths are a little different. The caterpillars are pretty spiny. The fiber of the BugBarrier band holds it away from the trunk a little. When the caterpillars get larger they don’t get as good contact as cankerworm, but it can form a physical barrier to them.

“This particular homeowner was interested enough that he would go out and destroy the caterpillars that got stuck underneath the barrier. I certainly wouldn’t claim that this is going to stop defoliation on your trees if there are extremely high population levels, but this client didn’t want sprays done. We gave the BugBarrier a try and they worked to the client’s satisfaction. They don’t leave any residue - sometimes a little batting, but no discoloration.

“In a low level infestation, gypsy moths tend to feed at night, and in the day they will crawl down the trunk. That’s how the barriers work. When the caterpillars are getting larger and feeding on the foliage, under very high populations they often don’t have that migratory behavior. None of the banding type approaches will work then - with Tanglefoot, they get stuck on it and others crawl over them. With burlap, you have to remove the caterpillars or you’re really just giving them a place to hide in the folds. You have to go out and pick them off every day or they will climb again, and the spines can cause skin irritations or asthma if you touch them.”

The benefit of the mechanical barriers, Bastian says, is that they provide “a way of trying to do something as opposed to doing nothing if spraying is not acceptable.” He explains, “These aren’t perfect and they may not prevent damage, but they may trap enough caterpillars to be deemed a partial success. We have to respect the opinions of our clients when we determine which option is the best for their peace of mind, as long as we set the proper expectations. We have to look at these as an option that may be worth considering.”

While there does not seem to be one definitive answer as to the effectiveness of mechanical barriers, one common thread seems to be that if these products or methods are to be considered as an option, it is important that you don’t oversell the likely results. Make sure that the appropriate level of expectation is clear when describing this option.
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WMC 2008 makes five record-breaking meetings in a row!

In the farthest southern reaches of the Caribbean lies the semi-arid island of Aruba, the venue for what turned out to be the biggest Winter Management Conference ever. The crowds – 373 in all, up from 207 in Cabo just three years ago – have helped turn this conference into a fitting end (or start) of the year for commercial and utility tree care company executives.

While the setting, extracurricular outings and events make for an enjoyable week for the whole family, the purpose and value of Winter Management Conference remains its focus on advancing tree care businesses. Each day kicked off with networking breakfasts, where owners and managers had the chance to talk about the previous year and compare notes or experiences on what worked, what didn’t, and what they plan to do to make 2008 even better. After breakfast, a diverse lineup of experienced business professionals spoke directly to the concerns of small business leaders:

- Dean Lindsay helped owners focus on increasing sales with “Cracking the Networking Code: Four Steps to Priceless Business Relationships.”
- Dirk Beveridge continued the sales theme with “Proactive Customer-Focused Sales.”
- Dr. Cliff Robbins offered owners advice on how to retain clients with a presentation entitled “Customer Retention Requires Leadership and Execution.”
- Recognizing that a safe workforce is a productive and profitable workforce, Dr. Sherry Perdue led a provocative session on “What’s Keeping Your Safety Culture From Flourishing?”
- The final day brought two sessions devoted to leadership, when John Parker Stewart kicked off with “The Real Bottom Line – True Employee Motivation,” followed by Dave Timmons and “The New Model for Acquiring and Inspiring Breakthrough Results.”

In addition to the high level and quality of business speakers found nowhere else in the world of commercial arboriculture, the entire conference was geared to helping small tree care business leaders thrive and grow through networking and relaxed conversation with leaders from other parts of the country – or the world. On the first day, sandwiched around educational sessions, attendees took advantage of a networking breakfast, a poolside meet and greet for first and second timers, and an afternoon poolside forum on “Managing Growth and Capital Needs,” all capped off in the evening with sunset cruises. More poolside forums on “What Keeps the Best Employees at Your Company,” “What’s Preventing a Culture of Safety?” and “Educating Clients Without Giving Away Your Time” put industry professionals together all week started on a high note around the pool at the opening reception.

A sunset cruise is always one of the best ways to attain the proper island mood.

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A week long to share ideas, tips and success stories. And for the second time, WMC held a spouse breakfast and round-table, where spouses who work in the business had a chance to discuss their unique challenges in moving a family business forward.

Between networking, ATV tours, fishing trips, and afternoons spent on a private island water park, attendees also found time for two very worthy causes:

- the annual Robert Felix Memorial Golf Tournament raised a record amount of money for the TREE Fund to be used for scholarships and education.
- the Voice for Trees auction and dinner also set fundraising records for the industry’s only political action committee, which will have a difficult road after the November elections in keeping the interests of commercial tree care on the minds of elected officials in Washington.

Winter Management Conference has continued to grow, evolve and refine its schedule to become the premier business event for the tree care industry. Much more than a week in the sun, it is a celebration of success, a chance to learn and prepare for the challenges ahead, and a time to visit with colleagues and friends.
State of the Association

Following is the text of the State of the Association speech presented by Cynthia Mills at Winter Management Conference in Aruba in February.

Happy Anniversary! Yes, my friends, we are 70 years old this year! I’m closing in on having known you for a decade of those years. Seventy years makes TCIA a mature organization, having grown from infancy in 1938 through the rebellious adolescent years, peak growth, and on to our later years when we should be just kicking back enjoying the fruits of our labor.

Adjectives that might describe the mature organization would be bureaucratically heavy, solid established programs, little new to offer, with attendees who go to meetings because they feel they have to...

Yet today, on this auspicious occasion of celebrating 70 years together, I want to challenge that definition with you. TCIA is mature in the sense that we have lived a lot of years together in this industry. We have seasoned companies throughout the world. We have established standards for best tree care practices, best safety practices, and best business practices. We have had the blessing of volunteers upon whose backs we have built an industry that is an essential part of communities throughout the world and which is growing in respect each year.

I would challenge the notion that mature means you are slowing down, uninventive or resting on any laurels. I would describe TCIA and its members as risk takers, innovators, and determined, driven leaders.

And today, I want to prove it to you by showing you who you have become – particularly, who you have become in five short years, just half-way through the strategic plan we began in 2003. And by the way – this was your CHOICE.

You did not HAVE to become this. Company by company, owner by owner, field employee by field employee, arborist by arborist, YOU have decided that you would become something even BETTER than our founders could possibly have dreamed of right after the Depression.

Here is who you are –

We have 143 facilities accredited with another 150 slated to come on-line in a very few short months. We are beginning to reach a critical mass and are covering the majority of the marketplaces around the country. And, of those 143, 33 percent represent companies earning under $1,000,000.

You have decided to communicate to consumers that best business practices are the norm. You have decided to challenge your teams to higher expectations in how they perform tree care safely. You have decided to advance as an industry through what is known in the political world as “self-regulation” – a much preferred option to the government doing it for you.

Here is also who you are –

Barely over one year since our CTSP Task Force developed the only safety certification program for our industry, we have had more than 400 people enroll in the program. 254 go through the workshops and have certified 208 people as of January.

Again, we are seeing both enrollment...

One of the most important quotes I have heard from a long-established business owner since this program began was, “We thought we were safe. We really thought we were doing everything we could until we sent someone through the CTSP program, and he began implementing what he had learned in our company.”

On the one hand – TREMENDOUSLY scary. On the other hand – what a great thing for us as a profession. We have finally found more mechanisms that we can use to keep our people alive. And company by company, you are making a statement that your people come first; that a culture of safety is one of your values; and that you’re willing to do whatever it takes to keep them alive.
takes to keep everyone alive every day.

You are also not letting somebody else determine your destiny anymore. Whether it’s meeting with the Assistant Secretary at OSHA for the umpteenth time to drill it home that we need a separate standard for arboriculture or going straight to Congress to get them to write that bi-partisan, bi-cameral letter of support for our standard, you’re not waiting any longer for somebody else to make your world right.

Your participation in the Voice of Trees Political Action Committee and our Legislative Conference is making a difference. For example, last month that Secretary Foulke’s response to Congress is going to include OSHA’s next step in a Request for Information from our industry, which begins to get the process moving. It’s not exactly where we wanted to be yet – which is ON the regulatory agenda, but it IS one step closer. Latest word is that we’re on OSHA’s top 10 list of standards to pay attention to thanks to our members’ work – and that’s a LOT closer than where we were before, which was not even on their radar.

Not only that, you’ve recognized that it’s not just the agencies and the Congressional branch that can have a positive effect on our destiny – it’s also the Executive branch. I can’t tell you the number of comments I have had from members who are pleased to see that we are taking advantage of our New Hampshire location, not by endorsing any candidates but by building the relationships that can be important throughout Washington in the coming years.

And when I stop and think about the number of members who have sent me information in the last year about what is going on in their states – well THAT is certainly going up. It’s not from the same people either. Our members are beginning to understand the critical nature of a grass-roots movement. This is one area of our work where we’re still in our infancy, but we are fast moving through to adolescence!

Now let’s talk for a minute about having a brand image as the voice of the tree care industry with members, government, consumers and growing media awareness. Just this year, through the Presidential Primary Project, I was interviewed by Time magazine, Reuters, the local press, and was included in a ‘Chronicle of Philanthropy’ article. That doesn’t begin to cover the times that our staff team has been quoted or published in everything from This Old House to the Wall Street Journal. Nor does it cover all the times that TCIA members have been featured in the press from an Extreme Makeover to the national Christmas tree to days of service all over the nation. After our new name tied the things we were known best for in the industry together – Tree Care Industry magazine and Tree Care Industry EXPO – we now have brand awareness with consumers: through the treecaretips.org consumer Web site, the Better Business Bureau brochures, the Society of Municipal Arborists joint Accreditation with TCIA, and partnerships with the National Safety Council and the Sustainable Urban Forest Coalition.

We have so many strategic alliances that are helping us to carry our brand out to different audiences and are creating an even greater credibility for the tree care industry. This is just a snapshot. Together our members and TCIA are changing the landscape and making ourselves known one contact at a time.

And one of the biggest reasons for your success is that you include a strong group of manufacturers and suppliers to this industry in membership who have demonstrated time and time again that they are your partners in all of these efforts.

Whether walking out on faith with us in 1990 and establishing the only audited and most highly respected magazine in our industry or taking the first booths that launched the world’s largest conference and trade show, you have been with us during some of our biggest growth years.

And, this year, our partners have increased their giving to us and brought us back to pre-9/11 levels of support for the Transformation of the Industry. See – you knew I couldn’t get through a speech without mentioning “the Transformation”!

You see the associate members who show up at our trade shows and Winter Management, who served with us on the Safety Committee and come to our VFT dinners – they are our family. They are as much a part of this industry as anyone who puts a climbing saddle on. Without them, we would not have quality equipment; we would not have safer equipment; we would not have the resources to continue to educate our people – and we would miss out on great friendships as well.

Because of our partnership with them, we have been able to enhance attendees’ experiences at our meetings, leading us to FIVE – yes, that’s FIVE record-breaking meetings in a row, not to mention Student Career Days.

You are telling us by your presence that we are creating exceptional educational experiences and a vital opportunity/marketplace to meet with the associate member companies that are building the finest products to support our industry, and that, quite simply, you cannot afford to miss attending if you’re going to be a successful arborist and run a successful company in the 21st century.

And because of your decisions – and the fabulous Board leadership that I continue to be blessed to work with – this is also who you are now – an organization that has its feet solidly on the ground; that can weather difficult economic times when they come; and an organization that can make choices to invest when needed in technology and staffing that allows you to keep developing the finest programs in our industry that benefit you as you seek to run even more successful companies.

And yes, 2007 is not up there yet, because our audit has not been completed. However, I can tell you that the draft financials from 2007 are looking just fine.

So, I may only be with you the next 10 or 20 years, but I can’t WAIT to see what you – or the next generation – is going to do on the way to your 100th Anniversary! You see you’ve proved it to me now – if YOU can dream it, you DO IT!

Congratulations, my friends, on 70 years of outstanding service caring for our world’s trees. You have my deepest respect and admiration!

Cynthia Mills, CAE, CMC
President & CEO
With wind and sun, no losers in golf tourney

The wind-swept Tierra del Sol golf course on the west end of the island of Aruba was teeming with cacti, parakeets, lizards and wild-swinging arborists for the annual Robert Felix Memorial Golf Tournament.

Held February 12, in conjunction with the TCIA’s Winter Management Conference, this year’s tournament set records for balls blown off course and for the amount of money raised to assist the next generation of arborists. In all, 66 golfers and a seemingly endless list of sponsors teed off to benefit the TREE Fund’s Robert Felix Memorial Scholarship and Education Fund.

Two foursomes bent into the wind but were not broken, including the winning team of Howard Bowles, Brandon Brown, Pat Covey and Janet Bornancin. Also taming the difficult Robert Trent Jones Jr. course was the second-place team of Jerry Morey, Richard Goforth, Tommy Nix and Steve Marshall.

The final numbers aren’t in yet, but the tournament produced hundreds of stories and should yield total net proceeds of more than $25,000. Recently, this fund supported arboriculture education through scholarships, assistance to 350 students to attend TCI EXPO, distribution of Careers in Arboriculture DVDs and teaching kids about arboriculture at Tour Des Trees events.

TCIA, the TREE Fund and all those involved in educating the future leaders of arboriculture would like to thank the golfers, as well as Bandit Industries for sponsoring the golf carts, lunches and beverage cart; Cummins Bridgeway for sponsoring the lunches and beverage cart; Rotochopper for sponsoring the hole-in-one contests (and monitoring all those who missed); Altec Industries for sponsoring the putting green; Massachusetts Arborists Association for sponsoring much needed mulch; and Vermeer Corporation for hosting the awards reception after the event.

Finally, we would like to thank an unprecedented 40 hole sponsors, who each made commitments to the future of the profession: Arborist Enterprises, Inc.; ArborMaster Integrated Productivity & Safety Solutions; ArborMax Insurance; Arborsoftworx; Asplundh Tree Expert Co.; Autumn Tree Care Experts; Bandit Industries, Inc.; Buckingham Manufacturing Co., Inc.; Buckley Tree Care Specialists; Cedar Lawn Tree Service, Inc.; Cleaves Company, Inc.; Collier Arbor Care; Fanno Saw Works; Gamma Tree Service; Gamma’s Shield Shade Tree; Hartney Greymont, Inc.; Jarraff Industries; Lewis Tree Service, Inc.; Lueders Tree & Landscape, Inc.; Metropolitan Forestry Services, Inc.; McFarland Tree & Landscape Services; Ogilvy Hill Insurance; Plant Health Care Products; PTS Professional Tree Surgeons Supply, Inc.; Rainbow Treecare; Scientific Advancements; Tree Health Management; RTEC Treecare; SherrillTree; S & S Tree & Horticultural Specialists, Inc.; Swingle Lawn, Tree & Landscape Care; Tamke Tree Experts, Inc.; Terex Utilities; Teupen America; The Care of Trees; The Davey Tree Expert Company; Tree Tech, Inc.; Wachtel Tree Science & Service, Inc.; Wonderland Tree Care, Inc.; and Wright Tree Service.

See you all next February at Our Lucaya Resort in the Bahamas!

Maybe they didn’t win anything, but they sure had fun! At least, from left, Tom Golon, Paul Markworth, Tim Harris and Mark Tobin had a great view to enjoy!
Helping to build a stronger marketplace can have significant benefits for your company. To learn about the many branding and marketing opportunities available, contact Deborah Johnson, Director of Development; johnson@tcia.org or call 1-800-733-2622.
always hard to predict what will work and point,” said Darrell Ross, a professor of ecological control looks very promising at this time. These flies prey only on adelgids and have almost 90 species of birds. Some bird food source, nesting site or shelter for cover for grouse, turkey and deer, and is a mostly deciduous forests. It can provide few dominant conifer species in what are invasive insects that is devastating hemlock forests up and down the East Coast, disrupting ecosystems and in some places threatening the very survival of Eastern hemlock as a tree species. The findings may provide an important new way to address the growing epidemic of the hemlock woolly adelgid - an insect about the size of a small ant that sucks the juices from tree needles, ultimately killing the tree. More research is still needed on safety and efficacy. The findings are being published in Environmental Entomology, a professional journal. Various other predators have been used in attempted biological control of this pest, so far with no proven success. The adelgid, first found in eastern United States forests in the 1950s, is affecting trees in a vast area from Georgia to Maine, and is spreading west. It can cause 90 percent tree mortality in heavily infested areas, with major economic and ecological repercussions.

In eastern forests, hemlock is one of the few dominant conifer species in what are mostly deciduous forests. It can provide cover for grouse, turkey and deer, and is a food source, nesting site or shelter for almost 90 species of birds. Some bird species depend on hemlock forest habitats, and the trees' shade helps cool streams, enhances fisheries, and provides a winter wind break. The newest candidates for control are two species of Chamaemyiidae flies, which are similar to related species that have successfully been used for biological control of pests in Hawaii and Chile. It appears these flies prey only on adelgids and have a life history that is closely synchronized with the pest. “The potential of this species for biological control looks very promising at this point,” said Darrell Ross, a professor of forest science at OSU. “With biocontrol it’s always hard to predict what will work and what won’t, but flies very similar to these have worked well elsewhere.”

The insects previously used in attempted control of the HWA have been beetles, Ross said. Some beetles imported from China and Japan have not worked well, and a beetle from British Columbia is now in early testing stages. A native of Asia, the HWA is found across North America but only causes serious problems in hemlock tree species in the East. Scientists believe it has been around considerably longer in the West, where hemlocks have more natural resistance and there are also a wider range of predators that appear to help keep the pest under control.

Glenn Kohler, a recent OSU graduate student, sorted through dozens of species and thousands of predators in work at 16 sites in Oregon and Washington to identify species that attacked the adelgid and, more importantly, favored it. For biological control, researchers prefer a species that goes directly after the pest that is a concern, and not much else. The two Chamaemyiidae fly species fit that description. Continued study of the host specificity and preferences of the Chamaemyiidae flies will be necessary before they could be released as a biological control agent, Ross said.

Hemlock Woody Adelgid foes found

Forestry researchers at Oregon State University have discovered two likely candidates for biological control of a tiny, invasive insect that is devastating hemlock forests up and down the East Coast, disrupting ecosystems and in some places threatening the very survival of Eastern hemlock as a tree species.

TREES

Cape Meares has Oregon's largest Sitka spruce

Almost three months after a windstorm toppled the Klootchy Creek Giant, the Oregon Big Tree Registry has crowned a new champion Sitka spruce.

The Sitka spruce at Cape Meares State Scenic Viewpoint stands 144 feet tall, with a circumference of 48 feet and an average crown spread of 93 feet. That's much shorter and skinnier than the Klootchy Creek Giant, which topped out at 206 feet and a circumference of 56 feet 1 inch.

“Tahina spectabilis soars 60 feet (18m) as it puts out millions of flowers in a spectacular last hurrah that kills it. Despite its size, it escaped detection until Xavier Metz, a plantation owner, took his family for a picnic in Madagascar.

The new species, whose name was announced in the Botanical Journal of the Linnean Society in January, has leaves which, with a 16 foot diameter, are among the largest seen in flowering plants.

Dr. Bill Baker, of the Royal Botanic Gardens, Kew, said finding the plant was equivalent to a zoologist identifying a new species of elephant hidden in a jungle. "It's the most astonishing new palm in the last 50 years," he said.

The palm lives for several years until growing a “candelabrum” structure upon which millions of flowers appear. These drip with nectar, making the palm a magnet for birds and insects. The energy the palm has to put into reproduction depletes its reserves and it dies of self-inflicted exhaustion.

The palm is located in a small area of the west side of Madagascar, rather than the wetter east where most of the island's palms are found. It is thought that only a handful exist.
minor modifications to the motor itself. Wood gas produced in a gasifier will burn in engines actually run on vapour. Thus, the fuel supply comes from his sawmill’s leftovers.

Wayne Keith has converted his pickup to run on scraps of wood from his Alabama sawmill, according to a March 8 report on www.InternationalForestindustries.com. The heart of the wood-powered vehicle is a gasifier, which basically converts solid fuels into gaseous ones. Though the fuel in their tanks is liquid, gasoline and diesel engines actually run on vapour. Thus, the wood gas produced in a gasifier will burn in a gasoline or diesel engine with only minor modifications to the motor itself.

When heated in the absence of oxygen, wood gives off a mixture of gases made up of about 20 percent hydrogen, 20 percent carbon monoxide, and small amounts of methane, with nitrogen accounting for the rest. The gasifier keeps the gas from combining with oxygen until it reaches the engine, where it combusts, giving off carbon dioxide and water vapour as waste products. This technology is not new. Wood gas has been produced for heating since at least the late 1700s, and has been used to run engines since the 1880s. During WWII’s petroleum shortages, wood gasification for transportation fuel became rapidly and briefly widespread, both in the Europe and the U.S.

Keith’s converted pickup starts on gasoline. As a supercharger pulls air through the gasifier, he tosses a piece of burning newspaper into the bottom of the unit. The burning paper ignites the charcoal, and 45 seconds later, the engine is running on wood gas alone (though it takes longer to get to full power).

With two separate accelerators, Keith says, the pickup can switch from gasoline to wood fuel “in the blink of an eye.” The pickup easily reaches cruising speeds of 60 mph. At 2 miles per pound burned, it takes 20 pounds of wood to replace a gallon of gasoline. That works out to around 4,000 miles per cord of wood, says Keith, whose entire fuel supply comes from his sawmill’s leftovers.
We’ve All Had a First Day On the Job

By Rob Muller

We all have had our first day on the job. Mine involved being handed a putty knife and shown to a 600 gallon Lockwood-Hardie spray tank supposedly to scrape out the residue built up on the inside. I found out later it was stainless steel anyway. Ten minutes of being in the smelly darkness, with the crew beating that thing like a drum, was ruled sufficient, and I was released.

When I showed up for work the following day, ready for my next lesson, they were all surprised, if not impressed, I was there.

Ten years later it was Joe C’s turn. Up the tree he would go. This one was a Norway maple, 50 feet tall with the crotch 10 feet off the ground.

“Show him the knot, but only once!” the boss told me, he needs to learn this. “If he asks you when he gets up there, don’t tell him.”

“He’s up there, good; now tie him on a saw; no, not that one, the bigger one. OK, now cut that branch,” the boss said pointing. Joe started the saw, cut the branch, and then turned the saw off, anticipating his next order. “Who told you to turn that saw off? Turn it on. Good, now cut this one, and cut that one,” the boss yelled, expecting maximum efficiency, like a military operation, even though it was Joe’s first tree.

We held ourselves to a higher standard, and this blank slate was no exception, at least in the eyes of the boss. Guess what happens next. With the saw running, the boss pointing and me watching helplessly, Joe went to cut the leader he was tied-in to.

A chill goes up my spine.

“STOP,” I yelled, running and waving my arms trying to get his attention. I threw a look back at the boss and he’s mad that the boy didn’t listen. He tosses his hands, turns and, without looking back, tears off in his pickup truck, never to mention it again. Meanwhile, the new kid is flying down sideways, saw in hand, top spearing down, still tied in. Not good. Well, wedged he gets, sideways in the crotch, stuck with the saw running.

“Drop the saw.” I tell him, but he was able to hand it to me anyway. I thought his ribcage had been crushed, but the piece, the line and the crotch all tangled and stopped together just enough to lessen the impact. How lucky. He was OK. I still had to rescue him and finish the tree, and then we both cleaned up. All was well.

The next day, when Joe showed up, not a word of this was spoken. Business as usual, because that’s the way real men operate, or something like that. If the boss was impressed, he didn’t show it. But I knew that day another tree man was born. As they say, what doesn’t kill you makes you stronger.

Robert A. Muller, dba The Tree Man, climbs, cuts and cares for trees in Fitzwilliam, N.H.

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