30 YEARS OF INNOVATION...
As we look back on 30 years of success, we are extremely grateful to all the hard working professionals in the tree care industry that have—and continue—to make us the company we are today. The first Bandit chipper was built in 1983 by just six people in a small mid-Michigan shop; today that shop is part of 240,000 square feet of manufacturing space, staffed by a workforce of over 400 to produce nearly 50 innovative wood processing machines sold all around the world.

We've stayed close to the professionals who use our equipment, asking for your input into making these machines even better. As a result you've helped us grow through the years, from hand-fed chippers to whole tree chippers, horizontal grinders, stump grinders, forestry mowers, and the expansion continues for 2013.

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We couldn’t be more proud of this industry and the dedicated people who show up every day to suit up, rope in, climb, cut, chip, grind, then get up early the next morning to do it all again. It’s a tough job, and we thank you for trusting us to help you do it. From everyone at Bandit Industries, thank you for 30 great years. Trust us when we say the best is yet to come.
The way we digest news and entertainment has certainly changed dramatically in recent years. The national TV networks that once were our source for the nightly news have given way, first to dozens of cable outlets, then to thousands of online sources. Entertainment that was once confined to broadcast radio and TV, as well as movie theaters, have given way to on-demand access and streaming content online. Printed magazines and daily newspapers now compete with digital subscriptions and the proliferation of free content online.

But entertainment and news are very different from business information, and facts in isolation don’t always translate into wisdom for the business owner. There is an endless stream of business information available, but how practical and useful is it for your specific business circumstances? From where and how do you access information – and crucially, gain some perspective – that can help you run your business?

Networking is the catch-all phrase for the opportunity to meet with and discuss issues of common concern at meetings, conferences and trade shows. And those opportunities are certainly valuable to business owners and managers.

Given the somewhat brief and haphazard nature of many of these networking interactions, however, more and more business leaders are seeking groups that structure information sharing, mentoring and networking into a defined format.

Often called peer advisor groups or peer-to-peer networks, they can take many forms. The most common include six to 12 business owners who meet to discuss their companies’ challenges. With the help of a facilitator, the participants share their successes and obstacles, giving them opportunities to learn from others who’ve had similar experiences.

The best known model for this is Vistage, which gathers owners in a single geographical area from companies in different industry sectors who don’t compete with each other. They typically recruit companies of similar size, based on annual revenue or number of employees, to keep the discussions meaningful. The ease of online communications today makes it possible to combine face-to-face meetings with continued interaction between meetings.

Even though many of these groups include some sort of online component, you shouldn’t confuse social networks such as LinkedIn or industry discussion boards such as Tree Buzz with peer advisory groups. The current model for peer groups includes a facilitator and often costs thousands of dollars annually. And the other members can vote you out if they don’t think you are adding to the discussions, for which they are paying heavily.

A number of consultants in the green industry have organized these groups in recent years. What about you?

Are you in a group or thought about joining one? What made the group you are or were part of valuable? Did you join one and find it wasn’t for you? If you dropped out of a group, why?

I’d like to hear about your group advisory experiences so we can advise you on the best way to share valuable information in a way that will advance your tree care business.

Mark Garvin
Publisher
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Sustainability has become a ubiquitous term in modern society. Indeed, many would argue that the term is so overused – as well as misused – that it no longer has any substance or relevance. However, if we think carefully about its true meaning and the principles that underpin it, then we soon discover that the term is critical to how we conduct both our personal and our professional lives. In this article, I will briefly describe the meaning and the principles of sustainability and discuss basic practices that can make arboriculture a sustainable enterprise both from an ecological and an economic perspective.

A quick search of the Internet reveals literally dozens of definitions for sustainability. Some are very generic. Others are contextualized around a particular enterprise or resource. At its very essence, sustainability describes a system that can continue indefinitely without significant change in its character. These systems – whether they be natural systems or human systems – are viewed as sustainable if they can meet current needs without diminishing the system’s ability to meet future needs. Thus sustainability is not just about our environment, but also about our economy and our society. When any of these three elements are unsustainable, then the whole system is unsustainable. Thus sustainability is relevant to not only ecological systems but also economic systems.

The fascinating thing about arboriculture – whether it be municipal, commercial, or institutional – is that not only do the choices we make in our practices impact the sustainability of our environment, but our tree care practices are also powerful tools for creating a sustainable environment. That is, we have an obligation to not only minimize the impacts of tree care on the environment (and the fiscal health of our enterprises), but to also use our skills and services to make the world more sustainable. This is even more important when one considers that most of us practice arboriculture in urban areas where sustainable human environments are most urgently needed.

Arboriculture as a practice for creating sustainable urban environments is multifaceted. Fundamentally, these practices revolve around using woody plants to mitigate the harmful byproducts of urbanization and to rehabilitate natural systems that have been degraded by urbanization. We commonly call these “ecosystem services” of trees – filtering air pollution, cleansing polluted water, enriching and protecting the soil, providing wildlife habitat, and mitigating the urban heat island.

Initiating these services begins with the simple act of planting a tree. But for tree planting to be sustainable, we must not simply plant a tree. Rather we must carefully choose, situate, and cultivate a tree so that it is healthy, robust, long-lived, and functional. We call this “right tree, right
When we put the wrong tree in the wrong place, then that tree is unsustain-
able. It might become invasive, create infrastructure conflicts, develop defects, or fail to thrive. In all of these instances, the
tree’s costs outweigh its benefits, and it therefore has practically no value to so-
ciety or the environment.

If we think about the landscape in which we manage trees as an ecological system,
then we can start to understand how trees and their cultivation influence the sustain-
ability of that system. Conceptually, an ecological system basically comprises four
parts: inputs, parts and processes, outputs, and byproducts.

Inputs are the raw materials of the sys-
tem, namely energy and essential
elements. The parts are the organisms and
the abiotic environment (land, water, air
and soil) that they inhabit. These parts
interact through organic (photosynthesis,
respiration, and fermentation) and inorgan-
ic (geology and climate) processes that
produce an assortment of outputs (organ-
ism biomass, inorganic molecules, etc.)
and byproducts (metabolic waste, heat,
etc.).

Although ecological systems are never
truly in equilibrium (they’re always adjust-
ing), they tend to be homeostatic when
viewed over long periods. As such, we
consider these systems to be sustainable in
their natural state (with the exception of
occasional severe disturbances such as fire,
weather, etc.).

The challenge with urban landscapes is
that both disturbance of the natural envi-
ronment and construction of the built
environment perturb homeostasis of eco-
logical systems. This is where the
restorative capacity of arboriculture comes
into play. Through proper tree selection,
placement and cultivation, the arborist
can mitigate fluctuations of the
ecological system. Examples of
mitigative functions of trees
include sequestering carbon,
reducing soil erosion, captur-
ing air pollutants, intercepting
stormwater, and reducing heat
islands. These are commonly
called regulating services
because the trees – through
their physical presence and
physiological processes – are
regulating outputs and byproducts from the
urban ecosystem.

Trees also perform provisioning services
for the urban ecosystem. For example,
urban forests can be harvested to provide
food, fiber, timber, and fuel.

Urban environments by their very nature
are input, output, and byproduct intensive.
When people congregate in the city, the
resource base required to meet the needs of
commerce and daily life is proportionately
high. Inputs are utilized from both nearby
and distant ecological systems. At the same
time, the amount of built infrastructure
goes up, displacing green infrastructure

An urban ecosystem is sustainable when its social, economic, and environmental components
are managed wisely and are well integrated. Sustainable arboriculture contributes to the local
economy while also protecting the environment and quality of life. Courtesy of Wikipedia
Creative Commons.

There are numerous choices and practices that can make arboriculture more sustainable both ecologically and economi-
cally. Above, Jeff Ott, owner of TCIA member Northeast Shade Tree, aerates soil in a park on Arbor Day 2011 in Portsmouth,
New Hampshire.
develop non-petroleum-based containers. For these reasons, bare-root trees may be the most sustainable nursery stock, although these benefits must be weighed against the limitations of bare-root trees.

Species selection also has a role in sustainability. First, invasive species should be avoided. When these species escape cultivation, they can invade remnant native forests in the city and degrade their function. Second, it is critical to choose high-vigor species. These are species having the genetic capacity to tolerate stress that is commonplace in the urban environment. Low-vigor species are vulnerable to pests and abiotic disorders, requiring more frequent treatments to keep them healthy. These treatments cost money, strain water and energy resources, and often place pesticides into the environment.

Coupled with high-vigor is the need for high-function species. That is, selecting species with traits that make them particularly adept at benefitting the urban environment, such as filtering particulate air pollutants or intercepting storm water.

Finally, the arborist should strive to diversify the urban forest. By being taxonomically diverse, the urban forest is more resilient to disturbances such as introduced pests and extreme weather. Resilient urban forests can absorb the impacts of these disturbances with minimal disruption to ecosystem services and with less need for management intervention, both of which contribute to sustainability of the system.

The Sustainable Sites Initiative of the American Society of Landscape Architects and its partners has recently formalized not only guidelines for tree planting to accentuate ecosystem services, but also for the practices of sourcing nursery stock, protecting the soil, conserving existing vegetation, and provisioning irrigation and nutrients. Although arborists may not frequently engage in these aspects of
landscape planning and development, it is important that arborists become acquainted with the Sustainable Sites guidelines because they will inevitably inherit the stewardship of woody plants on these landscapes; thus their subsequent tree care practices should align with the long-term intent of these guidelines. For more information on Sustainable Sites, visit http://www.sustainablesites.org.

Once trees are established, sustainable arboriculture should focus on minimizing tree stress and maximizing resource use efficiency. Preventive tree care is generally less resource intensive than recuperative tree care. One example is periodic structural pruning to prevent crown defect development rather than cabling or bracing to mitigate neglected crown defects. Whereas structural pruning can be accomplished with manual tools and no machinery, installing a support system will likely require gas-powered tools and placement of hardware into the tree.

Another example is using integrated pest management (IPM) practices that minimize pesticide applications rather than relying on combination mixes of broad-spectrum pesticides applied as cover sprays. Although pesticides are an important tool of tree pest management, their manufacture and application may require large quantities of energy and water. When we do not use energy and water efficiently to manage urban forests, we miss opportunities for sustainable arboriculture.

Other related sustainability practices include harvesting and reusing gray water for irrigation and plant health care, converting fleet vehicles to alternative fuels such as natural gas, utilizing GPS for efficient routing of work crews, and extracting residual value from waste wood as timber products or biofuel. These practices not only make ecological sense, but very often also make economic sense, which is good for both public and private sector arboriculture enterprises.

In this article, we have learned about the basic concepts and principles of sustainability and sustainable arboriculture. Urban ecosystems present unique challenges for creating human environments that meet people’s current needs without compromising future opportunities for health and prosperity. When we under-
The urban environment is a system we seek to sustain by minimizing inputs and by-products while maximizing valuable outputs. Arborists tend the urban forest using low-impact, high-value practices to help sustain this system. Courtesy of the author.

stand how urban ecosystems function and how trees contribute to that functioning ecosystem, then the role of arboriculture in sustaining these environments becomes more apparent. Now is the time to adopt sustainable arboriculture as both an environmental and a business philosophy.

P. Eric Wiseman is an associate professor in the Department of Forest Resources and Environmental Conservation at Virginia Tech in Blacksburg, Virginia. This article was based, in part, on his presentation on the same subject at TCI EXPO 2012 in Baltimore. To hear the complete audio recording of that presentation, open this page in the digital version of this issue of TCI Magazine online at www.tcia.org and click here.
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By Larry Ryan

Every time we have an environmental event such as high winds, ice, or wet snow and we have damaged trees, professional arborists get the task of cleaning up the aftermath. It sometimes involves removing the tree completely. This process often involves listening to and sympathizing with the distraught client. After a few years most clients adapt to the change and the landscape quickly heals.

Removing trees due to environmental incidents has led me to consider that we should start looking at trees as having a useful life. This means not waiting for each tree to die naturally. Different tree species ought to have different useful lives. Depending on the tree type and location, the useful life will vary. A large tree planted close to a home will surely have a shorter useful life than the same tree planted in the middle of the yard.

Let’s start with an obvious tree that doesn’t often last long in the landscape, the Bradford pear. While many homeowners love this tree, after about 10 years it becomes a hazard and very prone to blow apart in even moderate winds. Should we not teach the homeowner to look at it as a 10 to 15 year specimen? After this time, remove the tree and replant. Think about how the homeowner treats the inside of his or her home. In 10 years, out goes the couch, the counter tops, etc. In 20 years the furnace needs replacing. In 25 years we put on a new roof.

Jokingly, I have two names for Bradford pear. One is Pyrus horizontalis (instead of Pyrus calleryana ‘Bradford’), implying that in the near future they will blow apart and be horizontal. We also call the tree “tomorrow’s mulch.” A downed Bradford quickly turns into a truckload of uniform chips. While the chips have some value, it is not why most homeowners grow the tree. In losing the tree, the landscape value has gone down.

Now let’s consider the river birch. It is widely planted because it’s a striking young clump tree. Sadly, after about 15 years it loses its attractive appearance. I sometimes advise homeowners to build a group of river birch clumps. The idea is not to have the clumps all the same age. Ideally, every few years remove the oldest clump and add another. This is similar to selectively logging the forest. It keeps the average age of the trees younger, offering the landscape a more vibrant appearance.

If you let the clump river birch live out its life naturally, as the branches get large, usually the weak, included stem peels off in a storm. In the heritage cultivar, the older stems do not have the peeling exposed white bark that most homeowners find attractive. As the tree ages, it becomes higher maintenance, higher risk in storms.

Pin oak is a durable and beautiful tree, but could it also make sense for the homeowner to harvest the tree at between the 30 and 50 years of age? Photo by Chris Evans, Illinois Wildlife Action Plan, Bugwood.org.

Callery pear (Bradford pear) branch failure in Tifton, Georgia. Photo by Joseph LaForest, University of Georgia, Bugwood.org

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and often is no longer attractive.

Third, let’s look at the long-lived pin oak. In many cities it was over planted, but is still a durable, beautiful tree. At 30 years of age, it is often 60-plus feet tall with a DBH of 25 to 30 inches. This is a nice shade tree for our urban landscape. As our neighborhood continues to age to 40 to 50 years old, this same tree might easily be 80 feet tall with a trunk diameter of 36 to 48 inches. This is a large tree and if the tree is in a target area, where if it failed it could cause property damage, doesn’t it make sense to give it a hazard rating? Could it also make sense for the homeowner to harvest the tree at between the 30 and 50 years of age? I have seen a lot of large pin oak branches fail in ice storms and cause property damage.

I started by mentioning that the useful age concept would depend on the tree location and species. It should also depend on the wishes of the homeowner. I think, however, if this concept was written about occasionally as a possibility for the homeowner, some would gratefully embrace the concept.

The idea is being pondered, not to deforest our urban landscapes; we could and should plant several trees for each tree removed. Rather this idea opens up the urban forest to be modeled after a natural forest, where we have trees grouped together in communities, have over story and under story trees, allow trees to naturally regenerate in the landscape, and could select the superior specimens and allow them to grow. In this setting, we could plant small three- or five-gallon climax tree and shrub species in the understory on a regular basis at a nominal cost.

We are not suggesting every large beautiful specimen tree be removed just because it is big. The focus with this article is to open thinking in the arborist community to treating parts of our living landscape as fixtures that can be changed. We have practiced rejuvenation pruning on old shrubs for years. It amazes people that you can take an overgrown, worn out 12-foot-tall viburnum and cut it back to the ground and the next year have a lush seemingly new 3-foot shrub. The idea is we open our thinking and keep learning.

This past winter, our company hired professional speaker Matthew Kelly to talk to our company at our annual meeting. He informed our staff that people don’t mind change, what they hate is the transition. How true this is. I remember going from flush cuts in pruning to collar cuts. It made sense and was an easy sell. Also the practice of painting wounds on trees was easy to give up. No more plants ruined with tar was a plus. Then Dr. Ed Gilman came along and taught us about co-dominant leaders. This also made sense. I am just challenging myself to think about trees not living in the landscape until their natural death. Removing the Bradford pear before the ice storm might reduce storm cleanup a bit.

Your thoughts? Let’s start the discussion and grow from each other’s input.

Larry Ryan is a forester and owner of Ryan Lawn & Tree in Overland Park, Kansas.
Lewis Tree, Clearion offer ROW package for utilities

Lewis Tree Service and Clearion Software, a wholly-owned subsidiary of Lewis, are now offering a software-and-services package to help utilities with vegetation management.

“Over the years, Lewis has developed a solid base of electric co-op and municipal electric customers. Clearion has also made strong inroads into the sale of their configurable software solution for vegetation management to utilities of all sizes, including a number of electric co-ops,” Tom Rogers, president and CEO, Lewis Tree Service, announced in early June.

The tailored GIS-based software package from Clearion and a regional support model from Lewis focus on the vegetation management challenges found in electric co-ops and municipal electric companies. The new offering is a turnkey software solution that allows utility operations to begin using GIS-based tools in two weeks to track and manage their vegetation management work.

Dosko names eastern Canada distributor

Dosko has struck a deal to have E-Quip Distribution, Inc. of Mont St-Hilaire, Quebec, Canada, provide distribution and dealer support for Dosko’s line of stump grinders, brush chippers, chipper/mulchers and log splitters in Quebec, Ontario, New Brunswick, Nova Scotia, Labrador and Prince Edward Island.

E-Quip Distribution, Inc. has been in the power equipment business since 2005 and supports a strong rental customer base.

Terex Utilities names regional sales managers

Terex Utilities recently named two new regional sales managers, Gary Rice and Tony Rust, to spearhead the company’s sales efforts in the United States. Rice will be responsible for Terex Utilities’ sales efforts in the Western Region, bringing more than 38 years of industry experience to the role. Rust will cover the company’s Eastern Region sales territory. Rust comes to the Terex Utilities team from Terex Financial Services where he served as the director of capital markets, as well as prior to that as the TFS manager of the U.S. Construction Segment.

“We are excited to welcome Gary and Tony to our sales team,” says Jim Lohan, Terex Utilities vice president of sales and marketing.

HMI reports success with storm work collections

HMI Network members achieved a 99.98 percent collection rate on storm work completed following Hurricane Sandy, according to Doug Malawsky, HMI COO. Through both deployed and local crews, HMI’s Network closed more than $3 million in emergency tree removals, with less than $5,000 left to be collected.

“I’m convinced we’ll reach 100 percent” said Malawsky. “HMI’s process works, but it’s not passive – I always tell our members to call HMI if they haven’t been paid in full within 45 days.”

With qualified insurance leads, a programmatic approach, comprehensive documentation and active communication between HMI and its Authorized Members, storm work does not need to represent a collection risk, according to Malawsky.

Stihl names Steve Meriam director of sales

Stihl Inc. recently promoted Steve Meriam to the position of director of sales in the U.S. Meriam began his career with forestry and logging jobs in Canada before he was appointed territory manager of Manitoba and Saskatchewan for Stihl Ltd. He went on to hold multiple executive level sales positions at Stihl Ltd. prior to relocating to the U.S. in 1997 and assuming the role of branch manager at Northeast Stihl. He was promoted to manager of national sales and product development for Stihl Inc. in 2002.

Maugget celebrating its 55th

The J. J. Maugget Co. is celebrating its 55th anniversary in 2013. Founded in 1958 by Jim Maugget and joined by Dale Dodds in 1968, Maugget was a pioneer in developing micro-injection and micro-infusion technology with their completely closed application system. Not everyone always believed in the efficacy of microinjection in controlling pests, and Maugget struggled for validation in the tree care industry, according to Nate Dodds, Maugget president. “Eventually, many did begin to see the light,” adding that, in these times of new invasive pests and increasing environmental awareness, micro-injection has become the front runner in pest control of ornamental trees.

“A tremendous amount has happened in the last in 55 years and Maugget has been there every step of the way paving the road for tree care,” says Dodds.
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Simonds brush chipper anvils

Simonds International, U.S. maker of knife products, is now offering brush chipper anvils. Manufactured in their Big Rapids, Michigan, plant to the same standards developed for their knife production, these anvils are made from specialized materials, in fact the same grade of chipper knife steel that is used in the knives Simonds makes for brush chippers, sawmill chippers, and pulp mill chipping applications. The anvils are heat treated using the same standards as well; they are fully hardened, double-drawn and annealed as necessary for specific applications. They currently have US made anvils in stock for Bandit models 150, 200 and 250, with anvils for other models and manufacturers to follow. Simonds is a Massachusetts based manufacturing company established in 1832 with additional production plants in Michigan, Oregon and Alabama.

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Fleetmatics telematics software

Fleetmatics is a fleet management solution delivered as a software-as-a-service (SaaS) for small and medium-sized businesses. Owned by Fleetmatics Group, Fleetmatics is designed to enable businesses to improve productivity of mobile workforces. It extracts actionable business intelligence from real-time and historical vehicle and driver behavioral data. The intuitive, cost-effective Web-based package provides fleet operators with visibility into vehicle locations, fuel usage, speed and mileage, and more, enabling them make adjustments to reduce operating and capital costs and/or increase revenue. Fleetmatics Group serves more than 19,000 customers, with over 356,000 actively subscribed vehicles worldwide.

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Toro STX-38 stump grinder

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Events & Seminars

July 13, 2013
TreeJam tree climbing competition
Port Huron, MI
Contact: Jake Carufel; treejam@hotmail.com; facebook.com/pages/TREE-JAM/44476712284889?fref=ts

July 16, 2013*
TCIA Roundtable Meeting for Commercial Companies and OSHA LEP for Tree Trimming Operations
The Mulch Center, Deerfield, IL
Contact: Peggy Drescher (630) 917-8733; pdrescher@tcia.org

July 16-18, 2013
MAC-ISA Arborist Certification Course
Abingdon VA
Contact (703) 753-0499; www.mac-isa.org

July 17, 2013
EHAP Workshop
Alabama Green Industry Training Center
North Shelby Library, Birmingham, AL
Contact: Gary Ickes (251) 945-5144

July 18, 2013
CTPA Summer Meeting
Farmington, CT
Contact: www.CTPA.org

July 21-23, 2013*
2013 Legislative Conference & Day on the Hill
Washington, D.C.
Contact: 1-800-733-2622; www.tcia.org/events/legislative-conference-2013

July 23, 2013
Six Steps to Guarantee Customer Loyalty webinar – Free; with Jeffrey Scott, noon (EST)
Contact: www1.gotomeeting.com/register/326539929

July 31-August 1, 2013
PANTS Penn Atlantic Nursery Trade Show
Pennsylvania Convention Center, Philadelphia, PA
Contact: (732) 449-4004; www.pantshow.com

July 31, 2013
Chipper Safety Workshop
N. Oxford, MA
Contact: Wendy, Morbark (989) 866-2381 ext.1279

August 3-7, 2013*
ISA Annual International Conference and Trade Show
Toronto, Ontario, Canada
Contact: www.isa-arbor.com

August 19-21, 2013
TRAQ (Tree Risk Assessment Qualification) Training
Baltimore MD
Contact (703) 753-0499; www.mac-isa.org

August 30, 2013*
OSHA Local Emphasis Program (LEP) for Tree Trim Ops. City, Water, Light & Power Mgt. Ctr., Springfield, IL
Contact Peggy Drescher (630) 917-8733; pdrescher@tcia.org

September 19-20, 2013
Shawnee, OK
Contact: www.oklina.org

September 22-25, 2013
Pacific NW Annual Training Conference
Surrey, BC
Contact: www.pnwisa.org

September 26, 2013
Creating an Ownership Culture webinar – Free with Jeffrey Scott, noon (EST)
Contact: www1.gotomeeting.com/register/235876049

September 26-27, 2013
Rocky Mountain Chapter ISA Annual Meeting
Cheyenne, WY
Contact: www.isarmc.org

October 2-4, 2013*
Texas Tree Conference
Waco, TX
Contact: www.isatexas.com

October 7-9, 2013
Prairie Chapter ISA Annual Meeting
Edmonton, AB, Canada
Contact: www.isaprairie.com

October 14-15, 2013*
MidAtlantic Chapter ISA Annual Conference
Fredericksburg, VA
Contact: www.mac.isa.org

November 12-13, 2013*
Certified Treecare Safety Professional/CTSP Workshop
Charlotte, NC
Contact: 1-800-733-2622; peter@tcia.org

November 14-16, 2013*
2013 TCI EXPO Conference & Trade Show
Pre-conference workshops Nov. 13
Charlotte, NC
Contact: 1-800-733-2622; sboutin@tcia.org

* Indicates that TCIA staff will be in attendance

What’s coming in TCI?

Each issue of TCI Magazine contains a variety of articles tailored to the specific needs, concerns and interests arborists. TCI solicits a number of articles from outside writers to keep its editorial content fresh.

Do you have a story for TCI? The editor will be happy to review your idea or manuscript and discuss it with you. Here are some of the upcoming topics for the next two issues:

August
Machinery & Equipment:
Right-of-Way

Tools & Supplies:
Pest Management, Climbing Gear, Preparing Storm Response

Services: Tree Appraisal

Safety: Ergonomics

September
Machinery & Equipment:
Trucks, Chippers

Tools & Supplies:
Fertilization/Soil Amendments

Services: Maintenance & Repair

Safety: Aerial Lift Safety

Special Supplement: TCI Equipment Locator

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The early ‘90s was the cusp of a big change for production tree climbing. Like many, I started using a Blake’s hitch and connecting links or carabiners instead of the tried-and-true steel rope snap. About this time, the split tail was just starting to come on the scene. The advances since then have been numerous.

Today we have rope, harnesses and saddles, connecting lines and hitch cords. SRT is coming around, a change not only for ascent but for work positioning. Today we banter with terms like “Friction management” – you would have never used that term in 1990. If you did you would probably have gotten a good ribbing. Wrong – it does. Reviews happen periodically. To keep focus, we will look at some general changes, then at some changes in climbing specifically.

However, before we dig into the details we must define two of the main words from the ANSI standards: “should” and “shall.” As used in the standards, “shall” indicates a mandatory requirement, and “should” indicates a recommendation.

**General changes**

These general changes apply universally to tree care and safety. These apply across the industry and are not specific to rigging or climbing.

- **Shall** have two means of being secured at all times and use both whenever it is advantageous.

Previously the Z only directed using two points of attachment when cutting with a chain saw aloft, but they added a second requirement to use two points of attachment whenever it is advantageous.

Why two points? In case you cut one. There is something to be said for this. If you put yourself in a position where lanyard and climbing line could be cut easily, you might want to rethink your plan. Keep it in mind. Whenever it is to your advan-

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By Anthony Tresselt, CTSP

The American National Standards Institute, or ANSI, standards, and specifically the ANSI Z133 Safety Standard, came into use in tree care in the late 1960s driven by a tree accident that occurred at that time. The Z133 is not just a book of rules and regulations. It is basically a response to mistakes that people have made and ways to avoid making similar mistakes.

Many people have the misconception that the Z133, or “Z” for short, is just a set of rules, it doesn’t live and breathe. Wrong – it does. Reviews happen periodically. To keep focus, we will look at some general changes, then at some changes in climbing specifically.

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Climbers must carry two means of being secured and shall use them when using a chain saw aloft and should also use them whenever else it is advantageous to do so.
When tying in with no structure to support the climbing system (i.e. with out a branch nearby), climbers shall use tie-in points and tie-in methods that positively prevent the climbing line from sliding down or up the stem.

There are a number of ways that we accomplish this. Keep in mind that the Z133 isn’t telling you to use a specific system. It is giving you a set of guidelines to use. Your system should work within this framework. Why do we need guidelines? They serve as starting points.

Without a lateral limb the climbing line shall be cinched or choked around the stem, run through a double-ring, adjustable friction saver or otherwise secured around the stem.

This revision is a variation on a theme. You need to have your primary life support tie-in point secured. It can’t be able to slide down the stem. Even if it is not removable, even if there is 20 feet of tree, you don’t want it able to slide down the stem with you attached. Newer techniques do not mandate the presence of a lateral limb.

This gives us a number of advantages. Look at the example of rigging with branch unions. We’ve removed trees using no blocks, just a natural crotches. We do it all the time; convenient, not a bad way to go, but what is one of the disadvantages? The rope damage, yes, but the main disadvantage is that you need a branch union and it has to be in just the right spot. What is the big advantage of using a block? You can put it where you want it! The same holds true of cinching tie-in points for life support.

Climber and aerial lift operators

Check the climbing line for damage while descending.

ANSI Z133: Origins, Evolution and Importance Today

By Keith Norton

While the ANSI Z133 standard has been guiding tree care safety practices for more than 40 years, many professionals may not be familiar with the origins of the standard, how it has evolved over the years, how they can have a say in this evolution, or why the standard remains crucial to ensuring arborists and tree professionals are safe at work. This article will shed light on these areas, and will give an inside look into how ASC Z133 strives to ensure ANSI Z133 remains broadly applicable to today’s tree care industry.

The American National Standard for Arboricultural Operations – Safety Requirements, developed by the Accredited Standards Committee on Safety in Tree Trimming Operations Z133 (ASC Z133) according to the procedures of the American National Standards Institute (ANSI), has long been recognized within the tree care industry as the leading authority for safe practice in tree care. As a consensus standard, ANSI Z133 is formulated based on the input of tree care professionals throughout the industry – all views and objections are considered and an effort is made toward their resolution in the process of maintaining the standard.

ANSI Z133 is also a voluntary standard, meaning that adherence to its requirements is not mandated directly, but it is often cited or adopted by regulatory authorities as a source of best practices with which tree care professionals should be aware, and thus can be backed by the force of law.

Origins of ANSI Z133

The ASC Z133 was largely born out of tragedy; though it has likely saved many lives over time. After Ethel Hugg of Johnstown, New York, lost her son on Aug. 10, 1965, as a result of a tree trimming accident, she petitioned federal and state authorities, as well as safety organizations, to create measures to prevent others in the industry from meeting a similar fate. Her efforts were ultimately successful, and on April 4, 1968, the ASC Z133 was formed, with the National Arborist Association (now the Tree Care Industry Association) serving as Secretariat. Delegates to the committee included industry representatives, government officials, equipment manufacturers, laborers, academicians, insurance carriers and other interested parties, ensuring a balance of interests and expertise was represented. In 1969, the Secretariat of the committee shifted to the International Shade Tree Conference, which would later become the International Society of Arboriculture, and it has resided with the ISA ever since.

The mission of the ASC Z133 was and remains to further the safety of arborists and tree care professionals at the job site. Shortly after the formation of the committee, the delegates set to work to do just that, creating subcommittees to develop specific sections of the original standard. Each subcommittee was tasked with preparing and editing materials around an assigned topic, and eventually all proposed segments of the original standard were compiled and submitted to the full committee for review. After interested parties such as the Occupational Safety and Health Administration (OSHA)/U.S. Department of Labor were consulted, the first draft of the committee’s original standard was unanimously approved on July 14, 1971. By December 20, 1972, the standard was approved by ANSI, and thus ANSI Z133 came into existence.

Since the publication of the first draft of ANSI Z133, ASC Z133 has continued to monitor safety performance within the tree care industry and has clarified and interpreted the standard requirements.

(Continued on page 26)
should always carry handsaws when working aloft.

Kind of funny that this wasn’t a standard before. What is the use for a handsaw? We could list a lot of uses. So many times I see guys making very small cuts with chain saws they could make more safely and quicker with a handsaw. When it comes to rigging you might easily get yourself into this situation. You’d like to finish a cut on the back of spar because, when the piece comes off, the spar is going to rock back and forth. On the back side of the spar, opposite the rigging, you are more stable. However, it could be a bad cutting position. Finish it with a handsaw and you have one safe solution.

The non-working end of positioning lanyards shall have a fixed termination or be connected to a rated connection point.

What the Z133 implies here is you need a stopper knot on the end of your lanyard. If you don’t have a stopper knot, then it needs to be tied or fastened to a rated life support point. Why would you want that knot there, why that termination? Under no circumstances do you want your knot or friction device to slide off the end of your lanyard. No matter the length, it should have a fixed termination and or be fixed to a rated point on your saddle. It can dangle loose with a fixed termination or it can be attached to a rated point.

If a climbing line is damaged, the climber shall tie in with a work positioning lanyard immediately.

It makes sense. Someone probably nicked their line and put off fixing it. Inspect your ropes all the time.

The ground crew shall keep the climbing line free of debris and obstructions, protect it from damage and report any known damage to the arborist.

Have you ever seen a line go into a chipper, or had your own line go into a chipper? It goes in lightning fast. It rarely cuts the rope. One scenario is the line keeps spooling on the drum and then it shifts from one side or the other and gets between the bearing and the drum and it starts to displace the bearing. You are lucky if only the machine is damaged in the process. Climbers can be pulled from trees, trees can break, the consequences are often very bad. This all happens in a split second. Keep your lines clean and organize your job site properly and protect the ropes from damage.

The climber shall check climbing line for damage while descending.

This is just good, safe practice – and also not a bad time to find out if you have enough rope to get to the ground.

Annex 1

Annex 1, at the end of the climbing section of the Z133, bears mentioning because it really starts to delineate systems for fall protection. A lot of what arborists do and how we stay aloft is very different from other industries. It is important that ANSI delineates that in the arboricultural safety standard. Also it is important to look at the annex and understand it. Arborists use a little bit of everything – equipment and technique-wise – compared to many other high angle industries.
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Annex one:

**Fall restraint system:** Think dog leash. You are on a lanyard that physically will not let you fall. A classic example of this in arboriculture is an aerial lift. You are wearing a body belt and the lanyard has to be so short that you cannot physically fall out of the lift.

If you are using just a body belt (a fall restraint belt) on a deceleration lanyard, things are going to go terribly wrong for you if you fall. In the event of a fall the body belt will not support you and may result in injury. It is still in the standard to use “a fall restraint system” for aerial lift work, but that lanyard has to be short enough so that you cannot physically get out. Make sure your fall protection systems match their intended use and requirements.

**Fall arrest:** This type of system is common in aerial lift usage. Other than fall
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restraint this is the other way to secure a worker in a lift. The system requires a dorsal attachment. Using a deceleration lanyard will physically slow you up in a fall; the dorsal attachment on a fall arrest harness will support you properly, provided it is worn and fitted correctly.

What is the downside? As your lanyard decelerates your fall it physically gets longer by three, four or five feet depending on the lanyard. You want to make sure that you don’t hit anything in that three, four or five feet of expansion/slowdown zone. You might be working well out of your minimum approach distance from a 7.6 kV conductor, but in the event of leaving the bucket you may rapidly encroach on the minimum approach distance.

Work positioning systems: This is the big one. These systems are arborist saddles as we know them. Some arborist saddles include fall arrest. However, those are more the exception than the rule. Just having shoulder straps on your saddle does not make it fall arrest. Fall-arrest harnesses are rated with a dorsal ring. Suspenders, without a rated dorsal, help hold your saddle up – nothing more. “Work positioning systems” and how we use them is very specific in its wording – work positioning. It keeps you from falling from the tree, but it allows you to have two hands to do your work while staying secured to the tree.

Suspension systems: Last is suspension systems. These are simply harnesses that workers can be lowered down in or hoisted up in to perform work. They can be platforms used in conjunction with either a fall-arrest or fall-restraint system.

It is important to understand the limitations of each suspension system and what each one is designed for. Just a straight suspension system is probably not great for tree work. They can be hard to move around in, very linear. Just a fall-arrest system is a little inconvenient for tree work and climbing. It wouldn’t necessarily allow you to hang in that system so that you can use two hands to work. It might serve as a backup to keep you from falling, but it doesn’t allow you to get into good work positions.

The Z133 standards and the revised changes help lay a framework for safety. By making recommendations and outlining safe work practices, the standards guide arborists to the industry’s best, most accepted practices.

The ANSI Z133 is available through TCIA’s online store. Visit www.tcia.org and click the Shop tab.

Tony Tresselt, CTSP, is director of safety and training for Arborist Enterprises, Inc., in Lancaster, Pennsylvania. His travels and training can be followed at gravitationalanarchy.wordpress.com. This article was based on his presentation on the same subject at TCI EXPO 2012 in Baltimore. To listen to the audio recording of that presentation, go to the digital version of this issue of TCI Magazine online at tcia.org/publications/tci-magazine/archives and click here.
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When Joe and Amy Dement bought an existing tree care company in Medina, Tennessee, in May 2011, they didn’t know much about trees, but they did know about TCIA and the importance of hiring a good arborist.

“They did a lot of research before they bought the company,” says Sam Spence, who has been with Dement Tree Service from its inception. Spence is an ISA-certified arborist, a tree risk assessor and a TCIA Certified Treecare Safety Professional (CTSP) as well as the company’s estimator and business manager.

Joe Dement handles the staffing, hiring, equipment purchases and capital improvements. Amy is in charge of all the financials, including payroll and accounts receivable.

“I was very impressed with TCIA’s information and guidelines,” Spence says. They were helpful in just about every element of setting up the company, including putting the safety manual together and determining how to do the estimating and the training.

Dement’s service area covers a more than 60-mile radius around Jackson. Some 70 percent of their work is residential; the remainder is for utility companies, universities, government agencies and golf courses.

Close to 25 percent of their work is comprised of what Spence calls difficult removals. “They’re our specialty,” he says. “We are one of the best equipped tree care companies in the area. When a competitor can’t handle a removal, even they call us. That sets us apart.”

Dement’s crews are highly trained in all kinds of rigging. In addition, Dement is the only company in the Jackson area that uses non-invasive climbing, i.e. not using spurs and spikes.

“I’ve got to think one step ahead,” he says. “Our philosophy is that we want to be innovative and we want to be the best.”

The company also does cabling and bracing. They use the new Cobra Tree Bracing System, a dynamic cabling system that grows with the tree instead of girdling it, he says. The system also acts as a shock absorber, supporting the tree and allowing it to sway with the wind while protecting it from sudden jerks by strong winds.

Dement’s other services include pruning, tree risk assessments, stump grinding and removal, shrub pruning and removal, as well as fertilizing and pest and disease control. They are also available for storm recovery clean-up in the area.

They employ a three-member crew in the winter and up to two four-member crews in summer. The permanent employees have annual EHAP (Electrical Hazards Awareness Program) training, and crew leader William Ciapponi is a CTSP and an ISA certified arborist. “We’re proud of that,” Spence says.

All the training is done in-house. “We’ve already finished our first pass on the tailgate sessions,” he says. “We’ve done everything from driving to chipping to bee stings.”

They use courses from TCIA’s Tree Care Academy, and have weekly sit down meetings about relevant topics such as upcoming cabling work or how to work around poison oak and poison ivy. They also have open discussions about events that happened in the field: What went well and why, or what didn’t go well, why and what they can do differently in the future.

“We also attend local ISA and TCIA conferences,” he says. “We pick up on stuff there that might not be in a book, from people we meet and from demonstrations on the floor.”

Spence estimates that, conservatively, some 15 to 20 percent of Dement’s clients are repeat customers or referrals, an impressive number for a company that is barely two years old. “We’re getting up
there at this point,” he says. “We’re still in the process of building our reputation, but I’m proud that we’ve managed to do so well in such a short time.”

The company retains membership in several chambers of commerce in the Jackson area, Brownsville/Haywood and Greater Gibson County. On Arbor Day, they speak at a local school, donate a tree and show the students how to plant it, to get them interested in trees, he says. They’ve also done cleanups at local non-profits, pruning at a local church and sponsor a youth baseball league.

They advertise in the yellow pages, on local talk radio, and on their website. If cold calls are made, they are to a specific potential customer base.

“You have to find the need,” he says, and to do that, he ensures that he knows what’s going on in the area. For example, he knew that a local university had changed hands, from privately-owned to state-owned, and that the campus trees were in terrible shape. He talked to the groundskeeper about what needed to be done, and he got the job.

Dement Tree Service was accredited in April 2013. “We knew we needed it,” Spence says.

Using TCIA’s information and guidelines to structure the company from the beginning gave them a leg up in the Accreditation process. Still, they made a few improvements, such as in customer service.

“We already had some of it in place,” he says, “For example, we knew that the sooner we responded to a customer’s concern, the better. Accreditation helped streamline and track the process, though.”

Spence gives all the company’s customers his cell phone number and takes care of their concerns as quickly as possible. “We want our customers to be happy and to know we are always here when they need us, day or night.”

In the future, he’d like to see the company growing their volume of work and adding crews, and possibly opening a satellite office. As the company grows, having the structure that Accreditation helped put in place will ease the growing pains.

“I’ve helped build and grow this company,” he says. “It’s definitely a high point for me. And everybody, from the ownership to the guys in the field, is passionate about what they do – it’s a prerequisite for working here. That’s our business philosophy, and the guys carry that attitude into the field every day: Take care of the trees and do right by the customer.”

While crew leader William Ciapponi limbs a storm-damaged tree, Scottie Pritchett heads off to fuel up another saw.
Have you ever heard of human performance tools? If you’re in the tree care industry, for the most part, I would doubt it. They just aren’t talked about in our trade – yet.

Why do you suppose this might be? Maybe you need a description of these tools before determining that you don’t use them. We know we communicate, but how well are we doing this? Maybe we use them, but we don’t use them well.

Human performance tools are basic communication skills that, when used effectively, will help reduce error potential. This is done through precise verbal communication, following specific written expectations and by creating intentional pause to evaluate your own actions prior to execution, naming a few characteristics.

Human performance tools are discussed and trained for frequently in nuclear work environments, i.e. power plants, but apparently very few others. A search of the Web shows little discussion taking place within other professions. Aviation and military are also users of these tools, but not nearly to the extent of the nuclear profession.

I was involved with an effort to implement human performance tools in the electrical transmission and distribution industry beginning in 2003. This occurred as a result of some leadership personnel transferring from nuclear and becoming aware of mistakes that could easily have been prevented with use of human performance tools. The use of the tools is closely associated with preventing significant risk. If you think of the fields mentioned previously, you can easily identify significant risk.

Imagine poor communication that results in a nuclear incident. The number of lives affected could be quite high. It is well documented that poor communication has contributed to some of the more significant nuclear disasters. Some of these have even been in our own country. Three Mile Island is one very prominent example.

Poor communication has been a dominant theme in many airline disasters. A check on the Web reveals planes have crashed into swamps, mountains and hill-sides solely because of poor communication. Many lives were lost in these incidents. None of these losses had to occur. Use of human performance tools has prevented countless tragedies since implementation.

So, back to the tree care industry. Don’t we have potential for significant incidents? Although we are not likely to cause harm to whole nations or an airplane full of people, we have experienced disaster. Disasters come in many sizes. Anytime a life is lost because of a work-related incident, we likely call that a disaster. We read almost weekly of how dangerous our trade is and that lives have been lost.

We also have the distinct potential to impact numerous people because of a mis-
take, right? Consider the use of a crane to lower large sections of a tree over a house, or addressing storm related tree damage around electric wires. These have definite potential for experiencing significant impact.

Why don’t we intentionally use human performance tools when doing tree work? It’s likely that we’re just unaware of them. We haven’t had much exposure to such language or tools. It seems like this discussion has been centered on trades with much higher perceived risk. We clearly have potential for significant risk. Maybe it’s time we have the discussion. This could be a way to increase our efficiency as an industry.

Although the term “human performance tools” sounds lofty, the tools themselves are actually quite simple. In order to keep this discussion basic, we will look into just five of these communication tools. We will focus on: Three-part, 24-hour clock, job brief, peer check and self-check.

Three-part communication is typically best used when you need to transfer or provide specific information. Key elements include an identification of the message sender, the message and a message recipient. Use of the tool requires verbally providing the message, confirming receipt of the message, and then affirmation that it was received correctly. The most simplistic example would involve exchange of an address.

The 24-hour clock focuses on using military time, designating each hour with a distinct number, rather than separating morning from evening into 12-hour segments of a.m. and p.m. For those unfamiliar with military time, we begin just after midnight. Noon is 1200, the first hour is known as zero-hundred. While many people still believe they can just go ahead without a job brief discussion, many people have noticed great benefits from better group planning and individual involvement.

Job brief involves initiating a documented discussion just prior to any task. This tool is more commonly used than others, but still requires much greater use by our trade. Similarly, the act of conducting formal job briefs was nearly unheard of prior to 2003 in the electrical industry. The concept involves looking over various risks you will likely encounter and implementing barriers known to protect you from that hazard. Use of a written document helps management track whether these risks are at least considered when doing a job. While many people still believe they can just go ahead without a job brief discussion, many people have noticed great benefits from better group planning and individual involvement.

Peer-check and self-check are nearly similar tools. Peer-check requires you to involve a fellow worker on the job site in your decision just prior to taking action. This could provide an opinion from a second set of eyes that would help you see things you may have overlooked. Similarly, self-check is used when you don’t have the support of a peer, but you check your steps. The act of self-checking requires you to pause just prior to taking action and reviewing available information. Often this works best if you talk out loud to yourself, or maybe walk away from the task and take another look to evaluate risk.

Now that we’ve very briefly discussed five basic human performance tools, we’ll see how implementing them will make a difference.

Let’s imagine that your company has been working a large project involving removal of many trees in a large subdivision as a result of an emerald ash borer infestation. The job is basically complete and you are working on the punch list. The salesman doesn’t get his commission until the job is billed and the company paid. The customer has provided a list of two trees

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**Employee Recognition Program Ups Safety**

Kramer Tree Specialists, Inc., an accredited TCIA-member company in West Chicago, Illinois, recently recognized employee Tony Pintor through the company’s Employee Recognition Program for his safety focus.

“He conducted pre-trip inspections two days in a row that identified safety risk. If he hadn’t noticed and corrected the problems, they could have resulted in incidents,” says Tim Ayers, CTSP, Kramer Tree’s safety and human performance manager.

Briefly, the way the program works is:

- Program is open to both office and craft employees (below manager)
- A manager typically determines or suggests who should be rewarded
- Reward is $25 gas card and letter signed by KTS owner (with note from manager also)
- Letters are given to manager for distribution to employee (in manner they see fit)
- Often letter is simply handed to employee one-on-one by manager Kramer Tree started program in 2011 and 45 employees have received a letter to date. Total cost of the program to date is about $1,000. Identified savings recognized by employee efforts is about $3,000.
not yet removed, a pile of brush to load and a cluster of three stumps that needs to be ground before a particular date.

Our example works whether communication is to the customer or the crew. Let’s pretend the company salesperson is meeting with the customer on the job site. Since we are already working on missed items on the punch list, we need this meeting to go well. Things we need to establish up front include the meeting location and time. Depending on the neighborhood, this could involve similar addresses separated by north/south designations or street names that sound very similar. The meeting time is critical. Salespersons have the potential to start very early and work late into the day. This would mean that the hours of 5 through 9 could easily be confused. With these factors in mind, what tools help define the meeting?

While use of the 24-hour clock would clearly be helpful, we can’t expect the customer to use it. That doesn’t mean you can’t use the tools, even if just for your own scheduling purposes. Of course, it can’t hurt to let your customer know that you understand the meeting timing based on the 24-hour clock. Imagine if the customer says, “I’ll see you on Monday at 6 o’clock,” and you clarify, “I understand we will meet at 1800 hours on Monday.” While this could cause some questioning by the customer, it could end up clarifying that they actually expected to see you at 0600 hours instead. It will also drive use of three-part communication by requiring confirmation that the message was understood.

Now imagine using the tools with your field crews. As you review the work for today with your crew leader, you use the human performance tools. This could involve discussion of the work address. You mention the work is located at a particular address and your crew leader simply says, “OK.” This is when you need to ask for a verbal repeat back. Use of this tool will help you know if the crew leader understands the job is at the south end of town, rather than on the north end. Talking about the three different tasks and what’s to be done at each location will also provide benefit through repeating instructions and individual confirmation that they are correct.

Once on the job site, your crew leader can continue to use the tools during job briefings, work assignments and through-out the day. He or she can also use them when letting you know what was accomplished on site. Job brief provides your crew members a voice in the on-site planning of a task. While the crew leader is expected to provide a verbal task overview, the object is to get the entire team on the same page. Ideas from other members of the team could be just the peer-check that was needed to notice an unanticipated risk.

Peer-check will come in very handy when you are getting ready to cut a large limb and you need to know if it will fall as expected. You simply ask your co-worker to look over the situation and provide feedback. You don’t always have someone close enough to gain their critical insight. This is when self-check becomes necessary. This may require you to move into another position and re-evaluate conditions. It is critical when using these tools that you stop just prior to the action. Typically the action is one that, once taken, there is no going back – in other words, consequences you can’t afford.

While going to the wrong side of town or dropping a limb incorrectly doesn’t always end in an unaffordable consequence, every mistake has a cost. The examples we’ve discussed are simple, but we know you have communications daily that are much more intricate. When determining if the tools are necessary for your work, you are deciding how professional you want to be perceived and how important it is to create additional efficiency. Making mistakes is inherently human, but they are not a required outcome. You can eliminate a good portion of your failures by using these tools.

Use of the tools typically starts at the top. As a leader in your company, you can’t expect employees to use them unless you do so. This means you need to model the use of the tools for them. If you were unfamiliar with the tools before reading this article, you can assume employees are new to them as well. This means you shouldn’t walk onto a job site without getting someone’s attention and asking for a briefing. You also need to verbally repeat back addresses, times and instructions when the situation dictates. Although it will take time and persistence, it won’t be long before you see the benefits of clearly communicating with co-workers.

Tim Ayers, CTSP, is safety and human performance manager with accredited TCIA-member Kramer Tree Specialists, Inc. in West Chicago, Illinois. This article was based on a presentation, “Learning Lessons from Apollo 13,” by him and Todd Kramer, CTSP, also with Kramer Tree, at TCIA EXPO 2012 in Baltimore. To listen to the audio recording of that presentation, go to the digital version of this issue of TCI online and click here.
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By Rick Howland

There is a lot to be said about saw chains, more than can be accommodated in a single magazine article. For this article, we’ll focus on those points that apply to professional users.

One thing we learned in researching this article is that the pros often do not know enough about modern saw chains to get the most from their equipment. Or, they are stuck in the past with preconceived notions that no longer apply.

We learned, for example, that it is not uncommon for a user to want to up the ante on a chain saw’s efficiency by selecting a more aggressive replacement chain only to find that the result wasn’t as expected. We also learned that even veteran professionals can have a problem with properly sharpening a chain. And another thing… those off-brand chains from overseas can be spoty in quality and eventually will cost you more money than they save.

Think of your chain in the same way you think of tires for your car; you wouldn’t want to put standard highway tires on an Indy car, nor drag slicks on your work truck. Same goes for chain for your chain saw. The chain needs to be mated correctly to the machine and the work you are doing. It’s true that pretty much any chain of correct length will work, though you’re risking not only productivity but also safety if the chain selection is off, according to the saw and chain manufacturers interviewed.

Randy Scully, national service manager for Stihl Inc., says the selection and quality of the chain is so important to the productivity and safe use of their machines that the company produces its own chain. (Other than Stihl, most chain-saw makers source their chain from companies such as Oregon. Husqvarna recently announced the establishment of its own chain manufacturing facility in Sweden.)

“Stihl has produced its own chains since the late 1970s,” Scully says. “Our philosophy is that the chain saw is a complete tool. We want to be assured of a quality, high-performance product. Certainly, the engine turns the chain, but the chain is critical to how the machine ultimately performs,” Scully says. “By making our own chain, we are more assured of consistent overall performance by matching up all the characteristics of the tool.”

He cites steps Stihl takes, such as pre-stretching chain before it leaves the factory. “This helps eliminate excessive chain stretching during the break-in period, reducing maintenance time and component wear.”

Furthermore, the chrome-finished cutters, sharpened before assembly, stay sharp longer and require less filing. The chrome is very thin but produces a very fine edge,” Scully explains, adding that during sharpening, the softer body of the cutting tooth is filed away first, leaving the harder chrome surface capable of producing a very sharp edge. “If the chain teeth were all chrome (or chrome alloy), they would be virtually impossible to sharpen and would be prone to breakage,” Scully adds.

“If you have a sharp chain, life is good, productive, safer and your machine will last longer. If not, you risk fatigue, injury, equipment failure and extra cost,” says Husqvarna’s Carey Shepherd. Husqvarna’s RevBoost, incorporated into its 550XP shown above, provides instant high chain speed for more efficient de-limbing.

Today’s Saw Chains Are a Far Cry from Granddad’s
Looking at the Stihl chain, he says, “There are features like a built-in file angle indicator on the depth gauge and hardened rivets to help take high loads.” There is a lot that goes into engineering a chain, things we as users rarely know about or appreciate. Scully says the Stihl chain features chamfered rivet holes. “These require a special machining process to assure smooth rivet holes and minimize microscopic cracks that can become larger cracks with use over time.” The process also reduces friction and stretching, he notes.

The Stihl-brand Oilomatic chain also features a channel that funnels oil directly to these rivets, providing more precise lubrication and reducing the amount of bar oil needed. “Since the rivets act bearings, they need good, consistent lubrication. The chain groove acts as a channel so the oil gets injected into the rivets. The oil also functions to keep out debris and keep the chain running cooler,” Scully adds, noting that the angled oil delivery hole in the guide bars are part of the system that improves oil flow.

“There are three basic things a person needs to know about fitting a chain to machine,” according to Scully, “pitch, gauge and length.”

He explains that pitch is the distance between the drive links, which matches the sprocket pattern. “Generally,” Scully says, “the larger the pitch means the larger the chain, and the larger a chain is, the more wood it takes with each pass.”

“Gauge is the width of the link. For pros there are three main types: 50, 58 and 63 gauge (representing thousandths of an inch). Following the same general theory, the larger gauge, he says, is for use on larger machines. “It’s made more durable for what the engine turns out. If I am running a larger saw, for example 6 to 8 cubic inches, I will use a 3⁄8, or .404-inch, thicker gauge chain.”

“Finally, a chain length of 16 inches is self-explanatory. Though it varies a bit from model to model, we measure length in drive-link count,” Scully says, with 60 drive links generally accommodating a 16-inch guide bar.”

After that, Scully says, it’s a matter of cutter types. Chisel and semi-chisel. Arguably, the biggest debate revolves around the cutter, he says.

“Chisel is a square-cut tooth that cuts faster. The semi-chisel has a radius (or rounded) corner. It cuts slower but does not dull as quickly,” he explains.

These are generalities. According to Scully, “As designs have developed over the years, with new advances, we have been able to get a semi-chisel chain to perform almost as well as a chisel. The chisel is primarily intended for high-production users with extraordinary needs, but the chisel has more kickback tendencies than the semi. With new advances in chain, we can get nearly the performance of a chisel with a semi, and it will stay sharper longer,” he maintains.

Low-kickback chains do not prevent kickback, but they are designed to reduce the risk of kickback injury.

“I would suggest to pro users that they consider using Stihl low-kickback saw chains, which perform well, yet reduce the risk of kickback injury and can extend the life of the saw due to their reduced-vibration benefits,” he asserts.

Cary Shepherd, product applications specialist with Husqvarna, concurs, elaborating on the fact that the right chain for the application is key to safe operation. “By ANSI/OSHA requirements, lower-kickback chain must be used on saws up to 50cc. The semi-chisel, rounded corner
more suited for limbing and bucking on the ground,” he explains. Though it takes seven to eight teeth to open a kerf and you’re chipping away more slowly, there is less chatter and smoother cutting with no grab. If you put on a chisel saw, it will be too aggressive. It’s fine for cutting firewood and crosscuts, but not for smaller green branches, limbing and bucking,” he continues.

“When you talk about low-kickback chain there is a lot to it. Kickback-reducing chain features take place in many areas of the cutter – tie strap, depth gauge, angle of depth gauge and drive link center. Any of these can increase anti-kickback in many ways. It is not just the link,” Shepherd says.

Anecdotally, Shepherd says a lot of what is incorporated in the modern low-kickback chain actually came from looking at insects under a microscope. “We found that timber beetles working in hardwood worked or bit in angles and contours. They went quickly through the hardwood by taking smaller pieces, versus large hunks.” He explains that modern chain saw teeth, even though less aggressive with each bite, are at least if not more productive than the earlier generations of chisel-tooth chain.

Another important aspect of the cut is the depth gauge, located on the chain in front of the cutting tooth. “If you are cutting hardwood and select a chain with too low a gauge, expecting to get a bigger bite and speed through the job, while you do get a bigger chip, the speed of the cut is (significantly) reduced. We see this a lot, customers purchasing a smaller chain saw with a low-kickback chain and who are then urged by others to step up to a chisel chain. But it cuts slower and is more dangerous,” Shepherd says.

That is the reason he calls for a low-profile chain with teeth that do not “stick up as high,” but which still have the same pitch as a traditional chisel-tooth chain. Shepherd maintains, “It is not as aggressive but just as productive, and a lot safer on smaller saws used aloft and top-handle saws.”

One of the big nearly universal problems Shepherd sees is that, “Pros don’t know how to sharpen a chain saw correctly. The most common problem with chains I see is operators not being able to file chain correctly. There is a lot of information available and it takes experience, training and reading to get it right. Oregon has a great book on how to use a hand file. Some users like power grinders. I find that half go with each. Results have to do not with the grinder but the grindee,” Shepherd observes.

Even at that, the pros often get it wrong, he says. Shepherd was in the wilds of Maine finishing up a training session and asked his class of pros if the saw he had been using all morning was sharp enough. All said yes, when, in fact, it was not.

“The holy grail is really if you have a sharp chain. You should be looking at a chain that will cut one inch of hardwood per second,” Shepherd says. “If you have a sharp chain, life is good, productive, safer and your machine will last longer. If not, you risk fatigue, injury, equipment failure and extra cost.

A lot of tree care practitioners were taught about chain by previous generations. Things have changed.

“Pros and homeowners have several options for saw chain. They can buy chain from a major chain saw manufacturer like Echo, Stihl or Husqvarna, or buy from well-known brands like Oregon or Carlton,” says Brad Mace, product manager with Echo Inc. “All these chains are very good quality and will perform well for the user.”

Mace warns that the manufacturer of your chain is very critical, and cautions that some of the off-brand or un-branded chains on the market most likely are from China. “These chains may have inconsistencies from one lot to the next. You never know what you’re getting in terms of quality of...
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manufacturing, quality of steel, or hardness of the cutter. This will have a great effect on the performance of your saw and the durability and life of the chain.”

“It is important to buy a replacement chain that is the same as what comes with your chain saw as original equipment. A lot of testing, such as kick-back and vibration, is done to determine the chain that is best suited for the chain saw and for the intended use,” says Mace. “Since top-handle saws are inherently more susceptible to kickback, we always provide chains that comply with ANSI B175.1 Kickback Standard as original equipment. If the user decides to replace the chain with one that’s more aggressive, they should be aware of the susceptibility to kickback and increased vibration.”

Most tree care professionals already know the name Oregon. According to Mike Harfst, advanced development manager for Oregon, a division of Blount, International Inc., “We make cutting systems (bar and chain), and we do have a battery-operated saw, but primarily we make cutting attachments for the OEM and replacement markets.”

With respect to the new age of low-kickback chain, Harfst says, “Older users tend to have a bias with regard to safety toward the low kickback. Older operators favor what they started with and that’s what they are familiar with. They see the new chain as a compromise, but the new ones perform quite well. They are every bit as productive as older designs and much safer,” he maintains.

He pointed to, “elements of the drive link and depth gauges designed into the cutter and chassis that control the way wood is oriented and the way in which the cutter takes each bite. It does not allow for too deep a bite, which will generate that kickback,” Harfst maintains.

“Here is where the chain depth-gauge sizes come into play along with bumper elements to control each bite. Current chains come with bumper drive links. The top of that link allows chips and wood to flow and chain to move across surface of wood but not dig too deep. It is positioned directly in front of the cutter. They control the position of cutter, each bite and how deep, same as with circular saw blades,” he continues.

These new-design chains definitely can be used on older machines, he repeats. “In fact, the bumper has been an element of chain design for years. In recent years the design has been upgraded, improving efficiency and productivity and taking the argument away from the old guard,” Harfst maintains, pointing to the company’s upgraded semi-chisel chain, the 91VXL popular among arborists.

He warns that there are some specialty saws and unique chains, and wrong combinations will definitely pose problems. “You need to buy the right chain for what machine you have. If you go to a big box store there should be application charts to follow; better, go to a servicing dealer who is an expert in this process.”

The next step in chain technology will be to develop high-productivity chains that will work with lower-power systems, such as the new battery-powered saws. In Harfst’s view, “Giant gas saws with 4-foot long bars are becoming rare. The new saws will be battery saws with lower power and even lower speed. I can see that many tree care pros in five to 10 years will convert to battery saws. They will be able to work more easily in the tree, and as the saws become more powerful and lighter with longer battery life, we will see shifts in that direction.”

That’s an accurate description for chain in general. Most of the time you hear about the engine side of the chain saw, its increasing power and fuel efficiency and cutting lengths, but often overlook the chain itself. Manufacturers are working hard to deliver chains that not only match the work, but also keep you working safer with the same productivity.
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Crane operators performing construction-related activities appear to have won a reprieve. The Occupational Safety and Health Administration (OSHA) recently announced that it will propose to extend the compliance date for the crane operator certification requirement by three years, to November 10, 2017.

The proposal would also extend to the same date the existing phase-in requirement that employers ensure that their operators are qualified to operate the equipment.

OSHA issued a final standard on requirements for cranes and derricks in construction work on August 9, 2010. The standard requires crane operators on construction sites to meet one of four qualification/certification options by November 10, 2014.

After OSHA issued the standard, a number of parties raised concerns about the qualification/certification requirements. OSHA is considering addressing these concerns through a later separate rulemaking.

The agency will propose to extend the compliance date so that the qualification/certification requirements do not take effect during potential rulemaking or cause disruption to the construction industry.

As we said last month, none of this has any bearing on companies that operate cranes solely for tree work, which is specifically exempted from coverage under the new crane standard. Those who do hire out their crane and operator from construction contracts now have more time to meet their state’s and federal OSHA’s requirements.

Peter Gerstenberger is senior advisor for safety, compliance & standards for the Tree Care Industry Association.
I am the owner/operator of a successful tree service company in Ohio that has been in business for almost 30 years. I have secured most every kind of work in the industry from residential to commercial and concentrated for 25 years clearing electric company rights-of-way. I have a bachelor of science degree in Forestry Resource Management from The Ohio State University. I receive and enjoy reading Tree Care Industry Magazine, and now am providing feedback you requested in your editorial (“Free or Almost Free as a Sales Incentive,” Outlook column by Mark Garvin) in the April 2013 edition discussing “free estimates.”

First of all, in my opinion, nothing in this world is “free.” Tree companies that offer free estimates are going to make up for that time involved one way or another. Secondly, when talking to potential clients, there are three vastly different communications that I can share with them. These are comprised of an “estimate,” a “bid” or a “consultation.” To me, an estimate is the idea of a client calling on me for my services and my offering a “ballpark” figure of the cost they will incur to me for those services. If I’m told by a potential client that they would like my “estimate” and the “estimates of several others,” then I inform them that what they are really looking for is a “bid.”

This is why, as far as I know, I am the only tree business in the area that does not advertise “free estimates.” First of all, that is because an “estimate” in my mind is often not the same as that of a potential client. And, secondly, because whatever you want to call it – a bid, estimate or consultation – all of these things take TIME. And, as humans, time is our most important asset.

During the bad economic times in this area for the past several years, there was a multitude of “tree businesses” springing up, as people lost their jobs and were looking to survive. It seemed that a lot of people with a pickup truck and chain saw became a “tree service.” Most often there was no insurance, workers’ compensation, proper safety equipment, or prior experience involved, but these “companies” were “cheapest.”

It was at this point that I realized that I wasn’t going to waste any more of the valuable asset of time with people who only wanted dangerous work done on the cheap. Don’t get me wrong. I love talking with potential clients, educating them on what I do and why, and supplying quality work for people who appreciate safe operations by a company adhering to the rules. But over the years, I have been disappointed far too many times by people wanting “cheap” work done. The only satisfaction I get from this happening is that in most of these situations, these “free estimate, cheap companies” totally butcher the assets of the people who hire them.

I hope this sheds some light on my idea of the notion of free estimates. Your publication is greatly appreciated, and hopefully

(Continued on page 64)
To many, the 1960s brought revolution. The evolving world of arboriculture and its professional association went through some major changes as well, and even some turbulence of its own.

By David Rattigan

The 1960s was a time of change in America. The decade is remembered for a controversial war, student demonstrations, assassinations, and a mass media explosion – especially with television – that brought social and cultural revolt. It was the decade of the Cuban Missile Crisis, of psychedelic drugs, women’s liberation, and – surely of great importance to some arborists – the sexual revolution. Digital Equipment Corporation launched the first minicomputer, and Barclay’s Bank in London opened the first automatic teller machine (ATM). The Cold War was going full force, and the Beatles launched the British Invasion. Boeing unveiled the Boeing 747. In 1961 a Russian cosmonaut circled the globe, and in 1969 America landed a man on the moon.

The National Arborist Association, the professional association that later became the Tree Care Industry Association (TCIA), survived its share of good times during the decade, and weathered some turbulence at the end. The association celebrated its 25th anniversary, recognized the retirement of 25-year NAA executive Paul Tilford, and suffered a scandal at the top of its leadership structure. The latter was discovered by arborist Bob Felix, a member of the executive board who over the next three decades would become an even more prominent part of the association’s history.

The optimism of the 1950s carried over into the new decade, reflected in a May 25, 1960, National Arborist Association newsletter piece that read, “Most everywhere, the tree and landscape business is booming right now.” While a boom predicted by some industry experts did not

Bill Stone of Forest City Tree Protection Co., fertilizing in the 1960s. Forest City, based in South Euclid, Ohio, is a 65 year TCIA member. Photos this page courtesy of Lauren Lanphear.
In 1964, the association celebrated its 25th year anniversary in St. Louis, Missouri, where the association was founded during the 14th annual National Shade Tree Conference in 1938. In the book "What did it cost then?" 1964 was the last year of 90-percent silver coinage. The dollar cost of the Vietnam War began to show at the cash register as prices of everything began to creep up. From 1960 and 1969 a new house that cost $12,700 rose 22 percent, to $15,500, as wages skyrocketed 60 percent, from $5,315 to $8,540. Minimum wage was $1.00/hour. The average price of a new car rose 30 percent, from $2,600 to $3,380, over the decade, but a VW Beetle was still a bargain at $1,769. Gasoline averaged 30 cents per gallon. Two dozen oranges cost 89 cents, porterhouse steak was $1.19/pound, and Crest toothpaste was 50 cents a tube. A 26-inch GE color television set cost about $400. Many homes in the East were still using coal furnaces that burned Anthracite for $14.95/ton delivered. Movies (usually a double feature) cost about 50 cents for the ticket, 20 cents for the popcorn, 10 cents for the soda and 5 cents for candy. A trip to the family doctor cost $5 and a special treat at McDonald's was 20 cents for a burger. First Class Mail was 4 cents. The newspaper was 10 cents at the stand and about $2/month delivered. A Singing Telegram from Western Union was a very popular way to remember a loved one. Explaining, that “I’m not that smart,” Eckel’s eyes went directly to the bottom line of the stub, where he was surprised and excited by the pay amount, recalling that, “I didn’t check to see that he’d worked umpteen million hours that week to get that money.” Joining the company to run the New England operation in 1962, he recalls a corporate culture that supported the industry, but otherwise kept to itself. This was possibly because it was so busy, Eckel says, although many of its competitors had fallen off of the Davey tree. After World War II, many tree guys who’d gone off to war – “dozens of them,” Eckel says – started their own companies, buoyed in many cases by the low-rate loans under the G.I. Bill. By the 1960s, with business doing well, a second generation started to splinter off from “the original splinters,” Eckel recalls. “We did not socialize particularly,” says Eckel, now a consultant in Maryland. “Davey would support the NAA in those days, and ISA, but outside of occasionally attending a meeting it was a pretty inbred group. It wasn’t that they were aloof or anything, but they just had their heads down and that was the culture. As years went by, we got more involved.” A milestone year, and an evolving field

In 1963, the association celebrated its 25th year anniversary in St. Louis, Missouri, where the association was founded at the 14th annual National Shade Tree Conference in 1938. In the book
Arboriculture: History and Development in North America, author Richard J. Campana wrote that to celebrate its anniversary, the association planted a black gum tree in the Missouri Botanical Garden near an oak planted by the association in 1938.

In the field, equipment such as chippers and chain saws were being improved and new models were coming out, Campana reported. One example was the Kuemmerling-Fitchburg side-feed brush chipper in 1960. In the middle of the decade, Asplundh developed a chipper, the “whisper chipper,” that was quieter, with a larger feed. Mitts & Merrill was another player in the market, which grew as the decade went on.

Chain saw production was booming, and in 1962, Campana wrote, “McCulloch became the first manufacturer to produce a million chain saws.” It was one of many companies producing the tool, with each model seemingly getting lighter, with McCulloch’s Mac-6 model weighing in at 6½ pounds. Homelite was another leading manufacturer, with its Super XL (extra light).

The lightest equipment was easier to handle, but early models didn’t always hold up to the rigors of tree care. “The small saws didn’t hold up, because they didn’t have the technology at that time to keep them from falling apart,” says Dennis Ryan, professor of arboriculture and forestry at the University of Massachusetts, which includes the Stockbridge School.

The technology continued to evolve, for the better. Stihl and other manufacturers came in with a different design. “You can almost look at the Homelite and the McCulloch as being a Harley-Davidson, and the Stihl and eventually the Huskys (Husqvarna) and what have you, as being a Honda,” Ryan says. “What’s the Harley? It’s very low RPM, a lot of torque. The Honda motorcycle is very high RPM. The newer saws got away from the gear drive and got into the very high RPM with smaller chains, so they were faster cutting. It was a constant evolution.”

The aerial lift, another piece of equipment that debuted in the 1950s, became much more popular in the 1960s after manufacturers realized that they could use insulating fiberglass for the booms on “bucket trucks,” a safer alternative to metals. “Bucket trucks

A Midwest Power Tools ad, circa 1960. Photo above and at right courtesy of Don Blair.

Aerial lifts boomed in the 1960s thanks to an invention in Fort Wayne, Indiana, in the late ’50s. Mobile Aerial Towers manufactured all-steel aerial lift trucks. Plastic Composites Corporation was a custom molder of fiberglass products for various industrial applications. In 1959, Les Myers of Mobile Aerial Towers worked with John Larimore of Plastic Composites to design and develop the industry’s first insulated aerial lift truck by developing a fiberglass upper boom. This insulated unit, including a fiberglass bucket, became the Hi-Ranger. Later, the two companies worked together to develop an insulator for the lower boom to complete the insulation process.

In 1983, Mobile Aerial Towers sold the manufacturing of Hi-Ranger to Tom Dalum, who owned DUECO (Dalum’s Utility Equipment Co.) in Waukesha, Wisconsin. DUECO and Altec had been the two largest dealers for the Hi-Ranger. Plastic Composites made all of the fiberglass for the Hi-Ranger until 1991, when Hi-Ranger was sold to Simon-Telelect. A few years later, Terex Corporation bought Simon Telelect and continued the manufacturing of the Hi-Ranger. In 1991, Plastic Composites Corp. went into the business of making replacement booms and buckets for insulated aerial lifts and safety and efficiency products for lift-truck workers.

Compiled by Craig Keoun, former owner of Plastic Composites Corporation.
In retrospect, Ryan says, the problem was less about the chemical and more about its overuse.

“We used it for everything; it was massively overused,” he says, likening the arborists’ use of DDT to the medical profession’s reliance on antibiotics, which eventually led to the rise of germs that were antibiotic-resistant. “What you did is kill off 99 percent of the insects with the DDT, but 1 percent lived. So, we basically bred superbugs. If we had switched back and forth between two or three different materials, you probably wouldn’t have had some of the resistance that’s built up.”

That concern was part of an environmental movement that started in the decade, and it was not the only societal issue impacting the tree care industry.

In the latter years of the 1960s, the industry began hiring veterans returning from the war in Vietnam.

“This is something that’s true of all wars America has been involved with, as long as there’s been arboriculture,” Blair recalls. “A lot of warriors found peace in the healing of trees.

“They could be their own man, and they had to deal with the public a little bit, but once they got up in a tree they were really in their own world. They found a lot of peace and solace doing tree work.”

**Change of the guard**

In 1965, the association marked another milestone, when Executive Secretary Paul Tilford — hired as the association’s first paid employee in 1941 — announced his retirement. Campana noted that at the winter meeting in 1966, association president Edwin Irish presented Tilford with a letter from U.S. President Lyndon B. Johnson honoring the association for its contributions. “Highly competent, able, and effective, he gave the association a stability and respected professional image,” Campana wrote of Tilford, who had left the Ohio State University as his role with the NAA expanded. After retirement, Tilford was elected mayor of Wooster, Ohio.

The association hired Clarke Davis as its next executive secretary, as the association re-shaped its focus beginning in 1966. His tenure would be short, and ended abruptly three years later.

While Tilford had been an arborist, Davis’s experience was in business administration and public relations, specifically with professional associations. Significantly, he expanded the size of the board of directors and added two new categories of member: one featuring those who supplied and serviced arborists, and another category featuring retired arborists. These associate members could not vote or hold office.

One of those was bucket-truck distributor Tyler, who in 1968 co-founded a new company called CUES – Consolidated Utility Equipment Service, Inc. in Amherst, N.H. In the late 1960s, he attended his first convention with partner Dick Thatcher simply because he knew most of the tree care folks attending and thought it would be fun. At the time, he didn’t even
know there was an association and that it was theoretically a closed convention. “At about that same time, they looked around and saw that we were a vendor attending their convention and somebody got the hot idea, ‘Why don’t we have an associate class of people who want to do business with the tree care industry,’” says Tyler, who joined the association and was soon appointed associate director, although, in his words, “They’d never asked me. Truth is, when I first started going to meetings, I had no idea what my responsibilities were: whether I could vote, not vote, whether I should contribute or not contribute, or was I just a person who now and then had a long weekend, generally at a nice locale, to spend with people who I enjoyed.”

Tyler, who lives in New Hampshire, was a board member for 19 years and later served as NAA president for a year.

Davis’ tenure would be short, and ended abruptly in 1969 amidst allegations of financial misconduct. In his book, Campana wrote, “there arose a question of misuse of funds,” and “following a careful review of the situation by a select committee, his resignation was requested and submitted on 10 September, and his resignation was effective on 30 September.”

Pat Felix, whose late husband, Robert, was the budget and finance chairman on the association’s board of directors, recalls an off-hand conversation that led her husband to take drastic action and uncover the alleged improprieties. “At the time, (Clark) was running two organizations. He was kind of a spender, and very dashing,” she recalls. “Bob and I were out to dinner with one of the association’s suppliers, and the supplier made mention that he had not been paid.”

Davis had told the supplier there was some type of cash flow problem, Felix recalls. Her husband didn’t make a big deal out of it, until they were alone. When the couple finished dinner and were in the car by themselves, Felix turned to his wife and said, “Something’s not right here. There should be plenty of money there.”

That prompted Felix to call the president, Paul Walgren, and soon he and other board members were on their way to the Washington, D.C., building where Davis was headquartered. As his wife recalled, Felix, Bill Lanphear and Bill Rae, who became NAA president in 1970, surprised Davis at the office and made him open the association’s books for their inspection. “He was mixing money between the two organizations,” recalls Felix. There were no charges filed, she recalls, but Davis didn’t dispute the allegations.

A management group was hired to replace Davis, and oversaw the operations for the next few years. When the association finally looked to install its next executive officer, it turned to Bob Felix. Like Tilford, Felix went on to enjoy a long, successful tenure at the association helm.

Winter retreats
In the mid 1960s and carrying through the decade, the association also made another important change – no longer scheduling its winter meeting in the colder climates of northern states, instead putting it in sunny Florida.

To many of those in the industry during that era, the association was not seen as a vibrant organization, but more as what Tyler termed “an old boys’ club.”

Walt Money, who co-founded Guardian Tree Experts in the Washington, D.C., area in 1961 and joined the association in 1971, says that at the time it was, “almost a fraternity of old guys who wanted to get together in Florida for a tax write-off.”

That opinion was echoed by others, although as Money learned after joining, there were benefits to the winter meetings even then, especially in the off hours. “They would meet during the morning hours and be free in afternoon hours, which I think is dramatically smart, because most of what happens, then and now, was gathering around the pool informally to talk tree work,” recalls Money, who later joined the board and served as president of the association. “I got so much in my early years with NAA, from ’71 on, just sitting around informally with the old guys, saying ‘Hey, how did you do this? How do you do it now?’”

“What I did was take their best ideas and incorporate them into my regimen,” says Money, who ran his company until selling in 2001. “That’s what guys are still doing today, and that’s the legacy of the (earlier years).”

Next, the 1970s – the end of another war and the start of a new era for the NAA.

David Rattigan is a freelance writer from Beverly Massachusetts, and a frequent contributor to TCI Magazine.
LEGACY.

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Accident Briefs

Taken from published reports or reported directly to TCIA staff, as noted.

Tree worker hurt by felled tree
A tree worker was hurt May 2, 2013, after being struck by a tree cut by a co-worker in Webster County, West Virginia.

Mitchell Sanson, 23, was part of a crew contracted by the Division of Highways to clear trees left after Superstorm Sandy along Route 15 on Hodam Mountain. A co-worker cut a tree and looked down to make sure Sanson saw the tree falling down the mountainside, but the tree struck Sanson in the head.

Sanson sustained head trauma and was flown by a medical helicopter to CAMC General in Charleston, where he was listed in stable condition, according to a WBOY-TV report.

Man killed by felled tree
Jerald V. Platt, 45, of Camden, New York, was killed May 3, 2013, when a tree he was cutting fell on him in Constantia, Oswego County, N.Y. Platt and another man were logging in a wooded area on a dirt road off county Route 17. He was pronounced dead at the scene. The tree that fell on Platt was more than 3 feet in diameter and likely killed him instantly, according to The Post-Standard report.

Contributed by Brian Skinner, senior arborist in the Central Division for National Grid in New York.

Tree worker killed in struck-by
A tree service employee was killed May 6, 2013, when he was struck by a limb while clearing branches around power lines near Magalia, in Butte County, California. The worker was struck by a branch while working in a tree along the road. No further details were available according to the KHSL-TV report.

Tree worker killed in fall from bucket
A tree service aerial lift operator was killed May 13, 2013, in Winston-Salem, North Carolina, while trimming trees on property along the Silas Creek Parkway.

The victim was operating a bucket lift truck when the boom arm failed, causing the victim to fall into a creek on the property. Emergency Services crews started CPR on the victim when they arrived, but he did not survive, according to the WFMY News 2 report.

Tree worker killed in fall from bucket
A tree service employee was killed May 6, 2013, when he was struck by a limb while clearing branches around power lines near Magalia, in Butte County, California. The worker was struck by a branch while working in a tree along the road. No further details were available according to the KHSL-TV report.

Two taken to hospital after crane tips
A tree service crane being used to trim a 40-foot tree tipped over onto a Spotswood, New Jersey, home May 13, 2013, sending a resident and the operator to the hospital. The weight of the tree limb was too much for the crane to handle, according to the local fire chief.

Crews were working to remove a limb when the crane boom fell. Part of the boom fell on a detached garage. It also damaged a home with a woman inside. She was not hurt, but suffered shock and was taken to the hospital. The crane operator also went to the hospital, according to a News 12 Long Island report.

Man moving tree killed by limb
A man was killed in Arcanum, Ohio, May 26, 2013, when he was struck in the head by the limb of a tree he was trying to clear from a wooded area. James Miltenberger, of Castine, was dead at the scene, about 25 miles northwest of Dayton.

Miltenberger and another man were trying to clear a wooded area and were cutting a tree that was already on the ground. The men were trying to roll the tree over with a tractor. When the tree rolled, a limb struck Miltenberger, who was operating the tractor, according to the Radio 92.3 The Fan WKRK-FM report.

Contributed by David M. Kennedy, a registered consulting arborist in Columbus, Ohio.

Tree trimmer shocked by power line
A tree trimmer contracted by Duck River Electric was hospitalized in stable condition after a jolt from a power line knocked him off his perch behind a residence in Columbia, Tennessee, May 28, 2013.

Steven Keuin of Nashville was in a tree cutting branches near a power line when a limb touched the line. The accident left Keuin dangling from his safety line.

Keuin suffered superficial burns to his hands and was in stable condition when he was airlifted to Vanderbilt University Medical Center in Nashville, according to a report in The Daily Herald.

(Continued on page 65)
CTSP CEU Quiz #2013-4 July 2013

1. The following is a description of which human performance tool: The crew leader provides a verbal task overview, with the objective of getting the entire team on the same page.
   a) Three-part
   b) 24-hour clock
   c) job brief
   d) peer check/self-check

2. Which of the following is the most accurate statement about the ANSI Z133 Standard?
   a) Z133 is not mandated directly, but it is often cited by regulatory authorities as a source of accepted practice, and thus can be backed by the force of law
   b) Z133 is a voluntary standard, meaning the arborist does not have to follow its requirements
   c) Z133 is mandatory, arborists must follow everything it says.
   d) Z133 is a source of best practices that all arborists should strive to follow

3. ANSI Z133 – 2012 contains this statement: “Two means of being secured shall be used when the arborist determines that it is advantageous.” How should a climber interpret this?
   a) Previously the Z only directed using two points of attachment when cutting with a chain saw aloft, but they changed that requirement to use two points of attachment whenever it is advantageous. Tie in twice only when you think it’s to your advantage.
   b) The arborist must have two points of attachment pretty much 100 percent of the time aloft.
   c) This statement is intended to keep others from second-guessing the arborist’s decision of whether or not to tie in twice.
   d) Previously the Z only directed using two points of attachment when cutting with a chain saw aloft, but they added a second requirement to use two points of attachment whenever it is advantageous. Tie in twice when you’re using a chain saw and other times when it’s to your advantage.

4. The most important part of a chain saw for productivity and safe use is:
   a) the plastic bar protector
   b) the chain brake
   c) the chain
   d) kickback

5. One design for a low-kickback chain was inspired by:
   a) observing timber beetles with a microscope
   b) observing the chip size the chain was removing
   c) incorrectly sharpened chain
   d) battery-powered saws

To obtain CEU credit: you may copy this page, answer the questions and either fax the answer sheet to TCIA at (603) 314-5386; scan and email it to ctsp@tcia.org; or mail to: TCIA – CTSP, 136 Harvey Road – Ste 101, Londonderry, NH 03053.

Only current CTSPs in good standing who qualify for professional development CEUs may obtain CEUs for this quiz. Other readers are encouraged to use TCIA’s safety articles for training and may wish to use this quiz to test comprehension.
Why you need to establish and protect your business credit

By William J. Lynott

In the tree care business, credit used wisely can be a profitable friend; used carelessly, it can be a destructive enemy.

When your business has an excellent credit score, you are likely to be offered the most favorable interest rates if you need a loan, suppliers and vendors will be inclined to extend their most attractive terms, and your business is likely to be well regarded by the business community, making it more attractive to potential buyers or investors. On the other hand, a poor credit score can seriously damage your reputation and hamper your business in a number of ways.

Here are some important things you need to know about business credit:

Personal vs. business credit

In order to build a good business credit score, it’s important to understand the difference between personal credit and business credit.

As soon as we, as individuals, receive a Social Security number and apply for our first job, the three major credit reporting agencies start tracking our lives and building our personal credit profile. Any firm that issues credit will usually report their experience with us to the credit reporting agencies. The eventual result is a report that provides us personally with a credit risk rating.

While business credit works the same in many ways, it differs in others. Information about business credit transactions is gathered by the business credit agencies to create a business credit report. Identification includes business name and address, and federal tax identification number (FIN), also known as an employer identification number (EIN), issued by the IRS. The business credit bureaus use this information to generate a report about a company’s business credit transactions. In many cases, companies that issue business credit will rely on the business credit report to determine whether they will grant the applicant credit and how much credit they are willing to give.

Keep in mind, too, that if your personal credit reports are mixed with your business reports, any problems with your personal credit may make it difficult if not impossible to obtain credit for your business.

An important difference between business and personal credit is that business credit information is sent to the business credit bureaus on a strictly voluntary basis. Because of this, the credit bureaus may receive little or no information about your credit worthiness no matter how long you’ve been in business and no matter how well you have handled your business credit. That’s why it’s to your advantage to take steps to establish a positive business credit rating.

How a good business credit score can help your business

Once you have established a positive credit score with the business agencies, it will be easier for you to acquire future lines of credit and get favorable terms on leases and loans. Equally important, a favorable credit history will give your business a reputation for financial stability.

Establishing a business credit report

It’s easiest and safest to establish a business credit report if your business is structured as a corporation or LLC with an FIN or EIN issued by the IRS. If your business is a sole proprietorship or partnership, your business credit information could be mixed in with personal credit data and vice versa, muddying up the credit waters. Also, sole proprietors and partners are personally responsible for the debts of the business, putting all personal assets at risk.

Keep in mind that credit scoring models used by the credit bureaus are complex and not revealed to the public. Therefore, it’s impossible to know exactly which factors affect credit and to what degree. However, the steps outlined here will help you to build a positive credit score.

First, register your business with the business credit bureaus. The major business credit bureaus are:
Dun & Bradstreet: www.dandb.com

Registration with Dun & Bradstreet using your legal business name is free and will provide you with a DUNS number. The DUNS number is a unique nine-digit sequence recognized as a universal standard for identifying and keeping track of the over 100 million businesses in the D&B database.

Once you register, you will probably be solicited to purchase a full credit profile, current list price $549. It isn’t really necessary to do this. Simply registering at no cost will enhance the credibility of your business with potential creditors and enable suppliers and lenders to learn about your business.

You should also register with the other two major business credit bureaus:
- Experian Business: experian.com/small-business/business-credit.jsp
- Equifax Business: equifax.com/small-business/business-credit/en_sb

Once your business is registered with the major business credit bureaus, you can take steps to build a positive business credit report. Almost every business will need to ask for credit at some point. By starting to build your business credit score early, you can avoid having to use your personal credit history or a personal guarantee in order to get the best possible terms when you apply for credit or a loan.

Put credit to work for your business

Here are seven ways to help you put credit to work for you and your business, not against you:
- Be certain to ask any company with which you have a favorable credit history to report their experiences to the business credit bureaus to help you build your credit reputation. Remember, there is no requirement for them to do this. Unless you ask, it probably won’t happen.
- Make sure that your business meets all state, federal and industry requirements for conducting business. It’s important to build your business credit under a Tax Identification Number, not your personal Social Security number.
- Make sure that your business has a current business plan.

While a business plan isn’t always required in credit situations, having one, along with supporting documents, is one of the best ways to demonstrate a solid management approach. This, in turn, enhances the path to a high business credit score.
- Make full use of business credit cards. If you decide to open more than one business credit card, avoid applying for them all at once. It’s best to build up a history with one card before applying for another. Careful use of business credit cards will add to your credit history, make purchases quick and easy, and help to simplify and monitor your bill payment procedures.
- Avoid large credit card balances.

Outstanding balances larger than about 25 percent of your credit limit are a red flag to financial institutions.

- Eliminate pre-approved credit card offers from your mailbox. These packages offer a temptation to identity thieves who might try to open new credit accounts in your name or the name of your business. Once they get their hands on such a piece of mail, they can complete the offer by listing a different address. Then they will have an account opened in your name without your knowledge.

Fortunately, there is a way for you to opt-out of these credit offers. Just visit the official Consumer Credit Reporting Industry website at www.optoutprescreen.com, or call 888-567-8688 to opt-out via telephone.

- Manage your business debt carefully, especially credit card debt. Credit card issuers are unerringly diligent in reporting problems with an account. Any failure to make payments on a timely basis will almost certainly be reported to the credit bureaus, resulting in a negative effect on your credit score.

Despite the inherent risks in the use of credit, there is no practical way to for a business to avoid it. Fortunately, credit in itself is not harmful. Used skillfully, it can be one of most valuable business tools available to you.

Need help managing your credit?

The National Foundation for Credit Counseling, with nearly 1,500 member agency locations across the United States and Puerto Rico, is the nation’s oldest and largest nonprofit organization providing education and counseling services on budgeting and credit. Many NFCC member agencies use the Consumer Credit Counseling Service trademark. To contact the NFCC member office nearest you, call (202) 677-4300 or visit the NFCC website at www.nfcc.org.

Circle 17 on RS Card or visit www.tcia.org/Publications
Have you ever heard managers say, “no sense in spending the time in strategic planning, blah, blah, blah, just a lot of talk and nothing ever happens anyway.”

This is heard in the hallways of many companies. Why? Because the action plans discussed are not followed through on! This happens in both large as well as small companies. And, this not only applies to the action items in planning sessions, but in meetings in general.

One really awesome book on the subject was written by one of my former landscape clients, Larry Bossidy, titled, “Execution, the discipline of getting things done.”

Bossidy can speak authoritatively because he was a high ranking executive at GE under Jack Welch’s leadership (also a client) and became the CEO of AlliedSignal and later chairman of Honeywell. His executional success resulted from his consistent practice of the “discipline of execution.” He truly understood how to link people, strategy and operations together. He said that, “leading these processes is the real job of running a business, not just formulating a vision and leaving the work of carrying it out to others.”

To demonstrate his executional effectiveness, while at AlliedSignal he had 31 consecutive quarters of earnings-per-share growth of 13 percent or more – that didn’t just happen! Are you kidding – that’s almost eight years of increased profits. Holy cow, that is unbelievable, but true.

How did he do it?
In order to execute on any action plan, it must be approached with organization and leadership. The next time you have a plan to execute, why not use the 13 steps that follow to ensure success.

**Discuss**
1. Discuss the action plan or plans with your team for feedback.
2. Ask, “Will this plan accomplish the strategic direction for our company?
3. Will the plan accomplish our short and long term goals?
4. Do all understand the plan and stand behind it?

**Plan the Plan**
5. Break the plan down into small manageable pieces.
6. Identify the tasks and prioritize them.
7. Determine what resources will be needed for each step.
8. Determine the time frame needed for each step and final completion.
9. Most importantly, determine who will champion the process.

**Make It Happen!**
10. Report on a predetermined schedule the progress and/or roadblocks.
11. Measure the effects as the plan is executed.
12. Be flexible and change the plan if needed.
13. Celebrate/reward when the plan is accomplished.

These steps were created after 30 years of experience owning my own landscaping business and 10 years as a business advisor. Try them and see for yourself. But remember the keys to success in the execution of any plan are both discipline and accountability. If there are discipline and accountability, your company will make significant progress and your goals and vision will be met.

Dream, plan, believe and execute!

Ed Laflamme, LIC (Landscape Industry Certified), grew the largest landscape company in Connecticut. Now with the Harvest Group, he is a professional speaker, author, business advisor and coach serving green industry owners nationwide. This article is a taste of the session, “Nothing Happens Without the Sale,” that he will be co-presenting at TCI EXPO 2013 in Charlotte this November. For more information on that presentation or the full EXPO schedule, or to register for TCI EXPO, visit www.expotcia.org.
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Manage an established tree care business in San Antonio, TX. Must have excellent communication skills; and be very familiar with knowledge of tree care; insect and disease problems; fertilization programs and have a strong sense of safety and leadership skills. Must be ISA certified arborist with 3-5 years’ tree care experience in sales. Oversee 1 to 2 crews on a day-to-day basis with an emphasis on quality workmanship and safety. Steady sales year round – familiar with landscape design and installation a plus. Valid driver’s license and vehicle required. Email resume to bminiel@satx.rr.com or fax (210) 822-8356 or call (210) 826-9868.

Climbers Needed

Senske Lawn & Tree Care has been in business since 1947 and is family owned. We need bucket operators and climbers for tall tree pruning and removals. Medical, dental, vacation, holiday, and 401(k). Join a fun and safe team in Spokane, Washington! Email Timm ttumbough@senske.com or call (509) 891-6629.

Crane-assisted Tree Removal, Southern NH

Climber, log truck operator & ground positions. Must have 3-5 years’ exp., CDL & arborist cert. a plus. Competitive wages. (603) 882-0686 or email info@mcguinnessstreetree.com.

Climbers/bucket truck operators, crane operators

Ping’s Tree Service, one of the largest tree services in central Indiana, is seeking climbers/bucket truck operators and crane operators. Must be experienced in residential and commercial tree care, including: crown reductions, thinning, pruning and working with cranes. Must have technical rigging skills of all facets of tree trimming and removal. Lic. drivers only. PHC techs and cert. arborists also needed. Join one of Indiana’s leading tree removal companies. Top wages and great benefits. Apply online without delay at pingstreeservice.com/employment.html.

Climbers Needed

Senske Lawn & Tree Care has been in business since 1947 and is family owned. We need bucket operators and climbers for tall tree pruning and removals. Medical, dental, vacation, holiday, and 401(k). Join a fun and safe team in Spokane, Washington! Email Timm ttumbough@senske.com or call (509) 891-6629.
Tree Climber/Crew Leader, Illinois

Climb trees for pruning and removal & assist crew with cleaning up resulting debris (i.e. brush, branches, logs, etc.). Maintaining the ANSI Z133.1 safety standards & A300 pruning standard in day-to-day operations, full understanding of these standards is crucial. Must have at least 1 year of tree pruning and climbing field experience including the ability to operate all equipment and tools utilized within the climbing industry. The ability to climb rope or tree up to 80’ with equipment and PPE. Morgan.Kitlinski@acresgroup.com; (847) 487-5071; www.acresgroup.com/careers/job-search/

ISA Cert. Arborist, NYC Metro Area

Conduct inventory & condition assessment; on-site monitoring of activities near trees; damage assessment & remediation recommendations; selection of species & planting locations. Supervise tree pruning, planting, transplanting & removals. Provide written reports. Professional verbal & written communication skills required. Degree in related plant science field & F/T professional experience. Email resume BranchingOutConsultantsadm@gmail.com. Full-time and per diem.

Certified Arborist, Springfield VA

Provide costs & quotes, set up crews, supervise work, assure work is compliant to required standards, conduct job safety briefings, & monitor safe work practice compliance. ISA cert., experience in Urban Forestry & Arboriculture, excellent tree & insect/disease identification skills, attention to detail, self-motivated & goal oriented, strong sense of safety, team player, good computer skills, a valid driver’s license with clean driving record. Email resumes to info@gvtreeservice.com or fax (703) 569-2571.

Part-Time Regional Outreach Coordinator - West Coast area

TCIA’s newly created outreach coordinator position will concentrate on creating groups of tree care business owners who meet and interact regularly (face-to-face and online) and facilitating increased participation in TCIA programs via regional workshops that address both owner and employee needs (EHAP, CTSP, etc.). A regional coordinator will live and work in their assigned region to organize member gatherings (breakfasts, after-hour’s gatherings, etc.) where current members interact prospective members are invited to see what they are missing. Coordinator will work to strengthen the visibility of professional tree care through consumer awareness opportunities at events, via social media, and traditional press. Target areas for a coordinator is Southern California base for West coast area, however other locations will be considered depending on strength of the candidate, local industry, location and TCIA strategic plans. For complete job description, requirements and application details, visit www.jobs.tcia.org. Resume and cover letter to: Bob Rouse, Rouse@tcia.org.

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Take Your Career a Mile High. With roots proudly planted in Colorado’s soil since 1947, we’ve grown into one of America’s most respected landscape care services. We’re searching for a Trim Field Supervisor to join our more than 200 passionate green-industry professionals in Denver. Swingle offers year-round employment in the sunny Colorado outdoors, plus top industry wages and benefits. If you are a results-oriented, motivated individual looking for a growing company recognized for safety and legendary service – we need to talk to you.

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Tree Climber/Arborist, Sunderland, MA


Arborist Representative

Bartlett continues to grow in the North, South, Mid Atlantic, Midwest & West with openings for experienced Sales Arborist Representatives, Foremen, IPM Techs & tree climbers. We have locations in Massachusetts, Connecticut, New Hampshire, Vermont, New York, New Jersey, Maryland, Pennsylvania, Virginia, North Carolina, South Carolina, Georgia, Florida, Tennessee, Texas, Illinois, Michigan, Minnesota, California, Washington, Arizona, Canada, UK & Ireland. Bartlett Tree Experts has been in business for over 104 years. We are the largest family owned tree care company with over 80 offices in the USA. We pride ourselves in offering scientific tree care and have unmatched resources with the Bartlett Tree Research Laboratory. If you are someone who is looking for upward mobility and a long term future with a great company, then send us your resume. No phone calls please. We offer excellent compensation and benefits. EEO Employer. Opportunity Grows on Trees. Email your resume to our ad posted at www.jobs.tcia.org.
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Terex Environmental Equipment of Farwell, Michigan, is a full-line manufacturer of hand-fed wood chippers and stump grinders. Represent our products for the territories of Western, Central & Southeast U.S. Prior Arborist sales experience preferred, or sales experience with light forestry equipment including wood chippers, stump grinders, mowers or tree shears. Must have 5 years’ experience in outside sales or equivalent. Interested candidates contact: danny.thiros@terex.com.

Production Manager/Safety Coordinator

Growing tree company in Denver, CO is looking for a knowledgeable energetic individual to manage our tree trimming department and give meaning to our tagline, Integrity in Action. Must have field experience, communication skills, a CDL, and be ISA certified. Duties include scheduling jobs, setting pruning standards, training new hires, conducting our safety program, and overseeing equipment maintenance. Email resume to rosstree@rosstree.net to join our team.

Certified Arborist/Sales

We are seeking a candidate with a selling style that will be: Authoritative in guiding the process toward your goals; Driven to keep the process moving along as quickly as possible. Willing to take risks such as cold-calling or experimenting with a new product idea. Flexible in working with the customer to close the deal in different, and possibly unique, ways. Outwardly focused on your customers, intuitively reading them and adjusting your style to meet their needs if it will help advance the process. RTEC provides: As much independence and flexibility in the activities as possible. Opportunities to learn and advance; for expression of, and action on, your own ideas and initiatives; variety and challenge in your responsibilities; opportunities to prove yourself, and recognition and reward for doing so. Must have: ISA Certified Arborist, or can acquire; horticultural degree or similar; computer proficiency; good driving record; must be able to communicate effectively and professionally. Forward thinking and able to multi-task. Visit our website to learn more about us: www.RTECtreecare.com.

Sales Arborist/Plant Health Care

Northern New Jersey based Tree Care Co. is seeking a qualified Sales Professional responsible for developing and maintaining long-term relationships with residential and commercial clients concerning tree and plant care preservation concerns. Candidate should be able to demonstrate prior sales growth in the green industry. A min of 2 years of direct sales experience. Candidate must be highly motivated, organized and enjoy working in a fast-paced environment. Proven people/communication skills combined with a technical emphasis in preservation programs and knowledge of the green industry. Clean driving record and good background only. Please forward your resume to treecarehr@gmail.com. Please provide salary history/requirements.

Sales, Climbing & Plant Health Care

We need people who love the outdoors, love trees, love people and love to demonstrate quality in their work ethics. Experienced arborists in sales, climbing, plant health care who want to be a part of a moving company should apply. We will even consider hiring the individual with no experience but an outward display of passion for this industry. Send your resume today to see how you can benefit from employment with Sox & Freeman. Email to chris@soxandfreeman.com or fax (803) 252-4858.
Sales Representative, NJ
Self-motivated, with established tree company. Green industry or arboricultural background required. Certified tree expert and/or certified arborist a plus. Full time, commission, 401(k) and health benefits. Call 1-800-822-3537 and ask for Chris.

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For even more up-to-date ads, check out TCIA’s Web classifieds at www.tcia.org/Publications
Equipment For Sale in Kentucky

1985 Ford F800 Bucket, 60’ WH, new motor; ‘03 M&M Chipper; ‘08 Vermeer 352 stump grinder. Call (859) 801-6785 for pricing.

PRODUCTS & SERVICES

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Tree Service Brandon/Tampa Area, FL

$200K, available immediately, offers considered. Sales $350K to $650K annually. Turnkey; est 1983, exc reputation. '07 Intl w/Altec LRV56; '06 Vermeer chipper; 18-ton crane; '84 Intl grapple loader; '06 GMC 1500. Treesteve@gulfcoasttreecare.com, (813) 610-6398.

Tree Business in Scotch Plains, NJ

Gross over $1M per year, turnkey operation, 56-year tradition. Owner retiring, available immediately. For sale: property, name, clientele and equipment. For serious inquiries call (908) 482-8855. Owner available w/transition.

Tree Business Central New Jersey

Thirty-five years serving suburban communities between NYC and Philadelphia. Gross sales $1M. Owner retiring, available immediately. Services include tree removal, trimming, stump cutting and all liquids – tree fertilizing, spraying and injections. Also firewood, mulch mfg., stump-cutting, consultation, etc… EAB expected in this market in one-two years. This is an area in which ash is a natural dominant urban and wild forest tree. Purchase options include name, phone number, web site, ArborGold and Quick Books data bases, equipment, full shop and land. A detailed prospectus available. Reply to grant1386@gmail.com

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Boost your profits by taking a company-wide, systematic approach to increasing upsells, cross-sells and enhancement work. Here are seven tactics that have been tested – and they work!

1. Present your company more comprehensively.
   It is darn near impossible to change a client’s view of your company once their impression is set, so be careful how you present yourself during the first sale. If you give your new client a more comprehensive introduction, your chances of upselling them (throughout their lifetime as a customer) increase dramatically.
   Use role-playing to get this right.

2. Involve your office staff.
   It takes seven impressions for a client to grasp (and consider buying) what you are selling. Your office can have a significant impact on making these seven impressions:
   - Drop “specials” into your statement and proposal envelopes. Try lime green flyers. Every envelope that goes out should have a small marketing flyer.
   - Arm your staff with specials and tips to discuss when clients call in. Educate your staff on the hot issues of the month, and give them lingo to use when talking with clients.
   - Send out monthly email alerts with timely tips and offers. (NOT a newsletter, but a simple email with a picture.)
   - Update Facebook with these same tips and specials, and tweet them as well.

3. Be ready to share ideas.
   Clients are buying you for your hard work and dependable results, but also for your expertise and ideas. Be an “idea” company. Your field staff, salespeople, project managers and account execs can be constantly providing new ideas to your clients.
   Keep in mind that:
   - Wealthy clients want to do projects.
   - Property managers want to keep their stakeholders happy.
   - The average consumer wants to protect his/her investment.
   If your field staff lacks ideas, do one or both of the following:
   - Give them formal training on the other services you offer.
   - Have someone with a bigger vision walk the property and come up with ideas that the field staff can offer up.

4. Be proactive with proposals.
   Clients need to budget their expenses. Giving them actual proposals allows them to consider and start budgeting for your ideas. You can do this a couple of ways:
   - Offer up proposals monthly, suggesting services you think the client and the property need. Don’t use a hard sell, make it “for their consideration.”
   - Offer up a schedule of proposed services, with dates and pricing. Your organized clients – i.e. the “planners” – will appreciate this.
   Role-playing will help here as well.

5. Stop selling from your wallet.
   Ironically, many salespeople in the tree care landscape businesses cannot afford to buy the same level of services they are selling – especially at the higher end. Their household spending habits may make it uncomfortable for them to sell at higher...
prices and higher volumes. Not only that, but they may have been raised in a household where money was not easily talked about, and so they may be uncomfortable talking about money.

Therefore, your job is to get your staff feeling comfortable talking about money, and selling at price points higher than they are personally accustomed to. A couple of ways to do that:

- Take them window-shopping where your clients shop, so they can understand how your clients spend.
- Educate them on how your budget is put together and your selling price is derived, so they can sell with confidence.

6. Use incentives.

Make selling fun in your company. There are three levels of selling opportunities to reward:

- Give incentives for identifying needs and bringing them back to your office for a salesperson to follow up on.
- Give incentives for making a sale.
- Give incentives for finding new clients – perhaps neighbors of your clients, or friends of your employees.

Selling is a sport that can involve everyone, so make it fun. Incentives don’t have to be large, just large enough to make it fun.

7. Don’t call it selling.

Many people whose job is selling don’t actually like to think of themselves as salespeople. They would rather think of themselves as service providers, experts and problem solvers. Moreover, many clients don’t like to be “sold” by overt salespeople.

So get your staff on the same page as your clients by coaching your staff to become customer-focused problem-solvers, property consultants and idea generators.

When selling is fun and it helps your customers, everyone wins.

Jeffrey Scott holds a master’s degree in business, is a business consultant and is author of The Referral Advantage and The Leader’s Edge. At age 34, he took over and built his family’s landscape business into a $10 million enterprise. He consults with more than 50 landscape organizations across the U.S., and has created a process for running highly productive peer groups for tree and landscape business owners who want to transform and profitably grow their business. Visit www.GetTheLeadersEdge.com.
Letters & Emails

(Continued from page 43)

we can all continue to do all we can to get all of the unqualified, unsafe individuals out of our industry, to improve the industry for businesses and customers alike.

Timothy L. Brooks, owner/operator
B & B Tree Service
Dellroy, Ohio

Where was that cover photo taken?

Editor’s note: We had a few inquiries as to where the cover shot for the May 2013 issue of TCI was taken. We were remiss in not including that info in the “On the Cover” box on page 6 in that issue. It was in San Rafael, in Marin County, California, according to J. David Driver, “the Xman,” president of Xtreme Arborist Supply Inc. and Arbor-X Inc., a 13-year TCIA member located in Bel Air, Maryland, and the climber in the photo. Driver offered this explana-

This photo, used on the May 2013 cover of TCI, was taken in San Rafael, in Marin County, California, according to J. David Driver, the climber in the photo.

At TCI EXPO in Baltimore, I met a guy from California at my booth who showed me pictures of some huge eucalyptus trees they removed. I said, “I have to climb a eucalyptus one day.”

He said, “Well, I can set that up. You can fly out here and remove one with us.”

Tad Jacobs, owner of TCIA member Treemasters in San Rafael, Calif., set up the eucalyptus for me to experience.

It was a two day tree removal. Amazing how heavy the wood was. I spent one day doing the eucalyptus removal and the next day I went to another area and did a recreational redwood climb, since I was in California but only had a few days.

It was a great trip. I paid the way for another co-worker/climber to go with me as well.

He (Jacobs) was going to write up an article for TCI Magazine about how it’s so nice to network and meet other business owners and share information. He’s got some good pictures of his crew and my co-worker and I all together for a group picture. He has become a friend now.

Help us to build a stronger industry for all. 1-800-733-2622 www.tcia.org
The first lightning strike the workers witnessed struck beside the young man on the ground. The lightning hit a tree nearby, and went through the young man’s legs. He received serious electrical burns. The worker in the bucket felt a tingle from the lightning, but was not seriously injured.

Both workers were taken to hospital. The second worker was released from hospital shortly after being admitted and was back at work on the next day. The 19-year-old was kept overnight and released the next day.

One of the workers described the lightning strike as “the loudest noise he’s ever heard in his life,” according to The Edmonton Journal report.

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**Accident Briefs**

*(Continued from page 50)*

**Tree worker survives lightning strike**

A 19-year-old ground worker for a tree service surviving being struck by lightning May 29, 2013, in Edmonton, Alberta, Canada.

Two workers were pruning trees in Devon, southwest of Edmonton. The young man was on the ground, while his co-worker was working in a bucket. The weather was grey and gloomy, but there were no signs of thunder or lightning, according to a supervisor of the tree company.

The second worker was released from hospital shortly after being admitted and was back at work the next day. The 19-year-old was kept overnight and released the next day.

One of the workers described the lightning strike as “the loudest noise he’s ever heard in his life,” according to The Edmonton Journal report.

**Tree workers seriously hurt by cut tree**

Two North Carolina Department of Transportation tree service contractors were seriously hurt May 30, 2013, when a tree landed on them in Henderson County, N.C. The pair were part of a crew cutting trees along the shoulder of Sugarloaf Road.

Randy Self, 45, and Jimmy Roberts, 39, were rushed to Mission Hospital, one with a chest injury and the other an injured hip. Self reportedly suffered seven broken ribs and a collapsed lung, but was in good condition. Roberts was in fair condition, according to the WLOS News13 report.

Send your local accident briefs to editor@tcia.org.
By Carol Kwan

I was working on a project in a city park, monitoring demolition and excavation near existing trees and doing root pruning in a parking lot in Waikiki, a neighborhood in Honolulu on the island of Oahu, Hawaii. We’d been having hot and humid Kona weather, with winds from the southeast instead of our usual cool trade winds. It was 3 p.m. – pau hana (quitting time) for me as the construction workers were cleaning up and putting things away for the day.

I wanted to use the restroom before I hit rush-hour traffic, but I was in a hurry because my daughter had a function at school that night. I’d been using the comfort station about 100 yards away rather than the Porta-Potty at the jobsite, but I’d seen the truck servicing it that afternoon so I figured it wouldn’t be too bad. Because the floors of Porta-Potties can be disgusting and there’s no hook for hanging things, I left everything in my vehicle except for the key and remote to my Toyota 4Runner. Those I shoved way down into my pocket to keep safe.

Well, apparently when I peeled my jeans off of my sweaty body, they worked their way to the top of my pocket. When I leaned over to work the flush lever, PLOP! They hit the bowl and went straight down the little hole.

I ran out of the Porta-Potty and told the first worker that I found what had happened. He pointed me to Danny, the foreman. I told Danny and he grabbed a rubber glove from his pick-up truck. The only access to the blue fluid and contents in the Porta-Potty was through the tiny hole at the front of the bowl. Danny’s hand was too large to fit through, so I put on the glove and prepared to go diving. I was somewhat concerned because the depth of the liquid appeared to be more than the length of the glove.

Meanwhile, the story of what had happened had spread through the crew like wildfire. Danny stepped outside of the Porta-Potty since only one of us could fit in there at a time. Someone called his name and he told me to hold up on my diving endeavors. The young apprentice, Brandon, had a telescoping magnet device that might work. Thank goodness the key was steel! Brandon went fishing for my key with his gadget while Danny supervised, telling him it should be on this side because of the angle of the bowl. In less than a minute, Brandon had rescued my key and remote. My hero!

I took both the key and the gadget to the ladies room at the comfort station and washed them off with water and then cleaned them again with hand sanitizer once I’d opened my 4Runner. The remote even worked!

I actually managed to make it to my daughter’s school function on time and my husband had a good laugh when I told him what happened. I think I gave all of the guys at the jobsite a good laugh that day as well, and they will always remember me as the tree lady who dropped her car key down the Porta-Potty.

Carol Kwan is a Certified Arborist and president of Carol Kwan Consulting LLC in Mililani, Hawaii, on the Island of Oahu.
DIRECT FROM THE FACTORY

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