Designed By Tree Care Professionals
For Tree Care Professionals

We set out to create the first suite of tree injection devices with the technician involved from the beginning. We interviewed dozens of applicators and business owners across the country about what features they hated about current devices and what they would love to see on a new device. The result is the IQ Suite, born from the collective smarts of all the people who would actually use it.

For Small Jobs
Q-Gun
- Durable and ergonomic design
- Dial-in your accurate dose
- No plastic plugs!

For Everyday Jobs
Q-Connect
- Improved valves so you know when it’s on
- Hardy design with few breakable parts
- No plastic plugs!

For Large Jobs
IQ Infuser
- Accurate dosing with no calibration
- Designed for all-day use
- No plastic plugs!

FOR MORE INFO AND UPCOMING EDUCATIONAL EVENTS:
877-272-6747
www.treecarescience.com

©2014 RTSA. Patents pending.
RC1220G

UNSTUMPABLE
SINCE 1978

89HP GM GASOLINE ENGINE
12”H X 20”W THROAT OPENING
PLANETARY FEED WHEEL DRIVE MOTOR
20” DIAMETER FEED WHEEL
6,000 LB LEAF SPRING AXLE
X-CHARGE DISCHARGE SYSTEM
EASILY REMOVABLE BELT GUARD DOOR
VERSAFEEDE
AUTOMATIC FEED CONTROL
SEE YOUR DEALER OR CALL 1-800-392.2686

Circle 25 on RS Card or visit www.tcia.org/Publications
Here at TCIA, spring is the time of year when we begin building our speaker program for TCI EXPO in November. With three tracks – Business, Safety and Arboriculture – we’re looking at a broad spectrum of ongoing and emerging topics that will be of interest to the industry.

A perennial, potential topic for a session is ethics – for which there is no shortage of speakers. To be frank, we’ve had classes on “Ethics in the Arboriculture Profession” before, but they have never been well attended.

I think the primary reason is that most business owners and working arborists believe they already operate in an ethical manner and don’t have much to learn in this area. Yet they strongly insist the room should nevertheless be filled with their competitors who don’t act in such a highly ethical manner. The truth is probably somewhere in between.

Beneath the surface, deciding what is ethical practice isn’t as easy as it sounds. Certainly, some actions are clearly unethical and others are both unethical and illegal. Following the law is a good place to start for deciding what is ethical in the tree care industry, and treating both employees and customers alike in an honest fashion is a good second step.

Simply following the law and refraining from cheating people is hardly the outer boundary of ethical behavior, however. Even if something is legal, you still need to ask if it is ethical. How do you answer that question?

Different people have different ways to arrive at a satisfactory answer. Some look to the Golden Rule, which demands that we treat others in a manner in which we would like to be treated. Some follow the tenets of their faith. Others who are less philosophical would argue that doing the right thing is always an easy and clear choice between several options. They know it when they see it.

I tend to blend the three approaches above, with an added factor that probably dates to my days working on political campaigns: If my choice were suddenly laid out in detail on the front page of the newspaper, could I defend it without embarrassment or equivocation? Would others, knowing all the facts behind a decision, agree that my choice was ethical?

So how do you, as individuals and leaders, follow ethical practices and see to it that those who work for you maintain our standards? Are you working within your business to ensure that policies are created that will create and sustain an ethical environment?

A good next step beyond legality, honesty and core values are the TCIA and ISA codes of ethics, which are easily found online. They contain solid, broad principles that help define ethical behavior in the profession. Read them, use them as guides within your company. They can help you determine what conduct is ethical. And after some thoughtful discussion within your organization, you might attend a session on ethics to gain an outside perspective on how you are really doing.

Mark Garvin
Publisher
Upward mobility has a new meaning these days...

As the only national trade organization dedicated to tree care businesses, becoming a member of TCIA is the best investment you can make.

TCIA BUSINESS TOOLS – From professional standards to the latest publications, TCIA provides members with dynamic tools to run your business safely, efficiently, and successfully.

TCIA EVENTS – Enjoy members-only savings and deep discounts for TCIA hosted workshops and events around the country.

TCIA SAFETY TOOLS – Worker safety goes hand in hand with professionalism and it’s a primary focus of TCIA. We build programs, tools and resources to improve safety for our members and the industry.

TCIA MAJOR SAVINGS – Enjoy deep discounts on training, educational materials and other valuable tools.

TCIA MARKETING – You need customers. Use our exclusive marketing materials to find, keep and impress them. From videos to radio ads, we’ve got what our members need.

Start taking advantage of membership benefits right away for first-time members, at the price of only $195. Limited time offer.

Join today!

Tree Care Industry Association
Advancing tree care businesses since 1938

membership@tcia.org
www.tcia.org
1-800-733-2622

Circle 32 on RS Card or visit www.tcia.org/Publications
Features

8 Soil Tree Treatments – Lessons learned from invasive insect control
By Phil Lewis, Ph.D.

22 Useful Tools in Plant Health Care – Phenology and Degree Days
By Sylvia McNeill, BCMA

38 What’s Behind the Mini Lift’s Growing Popularity?
By Rick Howland

46 Aerial Rescue: The Complexities of Preparation
By Sam Kezar, CTSP

62 Mr. Arborist, Save My Ash
By Howard Gaffin

Departments

4 Outlook
By Mark Garvin
Ethical and honest.

14 Management Exchange
By Rick Weden
Tactics for managing workers’ comp costs.

16 Cutting Edge
New products and services, and news in the tree care industry.

20 Industry Almanac
Important regional and national meetings.

21 Washington in Review
By Peter Gerstenberger
EPA enacts stronger protections for pollinators.

Features:

Arborist Innovations
By Tim Basham
Use crane hanger hook to avoid struck-bys.

Management Exchange
By William J. Lynott
Eight ways to leave competition in the dust.

TCIA Accreditation
By Janet Aird
Townsend leads on Utility Contractor Accreditation.

Arborist Techniques
By Tony Tresselt, CTSP
A systematic approach to tree climbing.

Safety Corner
By John Ball, Ph.D., CTSP
The Ten Commandments for tree workers.

Business of Tree Care
By Patrick McGuiness
Hiring safety-conscious employees.

Classified Advertising

Letters & E-mails

Tree News Digest

Advertiser Listing

From the Field
By Amara Lorch
Viewpoints from a female industrial athlete.

TCI Equipment Locator, tipped to 21

ON THE COVER: The Omme 2750 RX Arborist Lift from Tracked Lifts. Mini lifts are helping arborists be safer and more productive. Story, page 38.
Reduces Hand Labor
Safe and Easy Operation
Wide Range of Attachments

Increases Bottom-Line Productivity

When it comes to “Big Power in All Places” the Boxer 532DX packs the punch you need to reduce hand labor while increasing your bottom-line productivity. Featuring best-in-class operating and tip capacities, the Boxer 532 DX compact utility loader offers an integrated track-widening system and an expansive range of attachments for digging, lifting, carrying and placing materials—wherever and whenever needed.

For more information about our complete line of Boxer mini-skid steers, call 800.831.0042 or visit us at www.boxerequipment.com.

Circle 19 on RS Card or visit www.teia.org/Publications
When they write the history books for destructive tree pests for the 21st century, there will be two extensive entries for the emerald ash borer (EAB) and the Asian longhorned beetle (ALB).

Both insects are thought to have first arrived in the U.S. in the 1980s or so, when both our economy and our trade with China experienced exponential growth. At the time, this appeared to be good for both countries, but there were hidden costs that we are now paying for. Wood-boring insects that were concealed within untreated wood crating, pallets, dunnage and other wood packing materials that are a part of international commerce came through our ports and transportation systems. Often this wood is piled up for future disposal or reuse, but enough of these invasive insects were able to establish themselves and infest our trees. Treatment requirements for wood packing materials were initiated in 2005 but the damage had already been done.

Asian longhorned beetle

Awareness that insects inadvertently being brought into our ports were a cause for concern first became apparent in 1996 when a concerned citizen spotted adult ALB coming out of street trees growing in a Brooklyn, New York, neighborhood. That infestation ended up encompassing four of the five boroughs of New York City – Brooklyn, Manhattan, Queens and Staten Island, as well as two areas located on central Long Island. Subsequent confirmation two years later of an ALB presence in the city of Chicago initiated a focus to control and eradicate this exotic cerambycid pest of hardwood trees (Fig. 1).

Much effort and expense in the eradication effort has been put forth by both the USDA and state and local governments over the last decade. While a number of additional cities and localities in North...
America have been identified recently as having ALB infestations, populations in Illinois, New Jersey and Manhattan, Staten Island and Islip, New York, have been declared eradicated, and progress continues to be made. Figure 2 displays in yellow the maple forests that are at risk were this pest to escape the mostly urban beachhead that it currently occupies.

Eradication efforts for ALB are a multi-pronged approach that involves more than the typical attempt to find and remove infested trees and to chemically protect uninfested trees. The eradication program has seen great success as it has included the additional components of regulatory and exclusion measures (quarantine boundaries and enforcement to prevent infested wood transport) along with outreach and education of not only the arborist community but also the general public through events, media buys (billboards, newsprint, etc.), and even the development of a school science curriculum. Nine times out of 10, it has been a call from an informed, concerned citizen that allows us to identify new ALB infestations.

Emerald ash borer

The report of massive ash tree mortality and decline in and around Detroit in 2002 hit like a bombshell, and the presence of EAB was quickly confirmed as the cause. Hopes of containment and control of this runaway pest rapidly vanished as it became apparent that this destructive buprestid wood-borer was being readily transported by firewood and other means (Fig. 3).

While mortality of mature trees by ALB does happen, it typically takes a number of years and there is a steady decline. This is not the case with an EAB infestation, where rapid and total decline of even large, mature ash trees is the norm due to the cut off of water and nutrients from the vascular feeding of these buprestid larvae. American ash is apparently totally susceptible to this insect, which has a high reproductive rate and adults that readily take to flight.

It is thought that the entire ash resource of North America is at risk, as evidenced by the expanding threat that began as a tri-state mid-West infestation in 2005 to the current status of 22 infested states, with four states being added in 2013 (Fig. 4). While eradication of ALB is and has been the goal, such attempts for EAB are not feasible at this juncture, although control and protection of individual trees and areas is possible and is being practiced by a number of municipalities.

Chemical control

Chemical treatments for ALB include the use of soil applications or trunk injections of the systemic insecticide imidacloprid (Merit). Non-infested trees within a certain distance (up to ½ mile) of the infestation area are targeted for treatment. Since treatments were initiated in 2000, the USDA has overseen more than 1.2 million tree treatments and there has

Figure 3. Emerald ash borer (Dave Lance, USDA APHIS PPQ).

Figure 4. Map of EAB infested areas as of March 2014. The red dots indicate initial detections. Courtesy of USDA APHIS.
not been a single case of ALB adult emergence from a tree that has received the ideal regimen of three consecutive years of treatment. Detection of ALB infested trees at the active infestation sites continues trending with steady declines.

While the burden for EAB control rests solely on the homeowner or on the municipality, there are a number of effective chemical tools available (www.emeraldashborer.info/files/Multistate_EAB_Insecticide_Fact_Sheet.pdf). Early application to ash trees of soil-applied imidacloprid is a viable option, and should be marketed to homeowners and clients in the early stages before EAB is readily apparent in a community. There is also the more expensive, but very effective multi-year control afforded by a single trunk injection with emamectin benzoate (Treeäge). This treatment has been used successfully, at times, as a rescue treatment for ash trees that are in serious decline.

My research emphasis and experiences developing and implementing control methods for these two pest insects has led to some recommended methods for both soil and trunk injection treatments that should be considered when putting out chemical treatments for landscape trees – whether you are keeping it simple with a soil drench or grid application, or you have...
Insect Invasion Control

For the best defense against insect attack, turn to Abacide™ 2 from Mauget. This effective, proven insecticide is formulated for use with forest, woodland, Christmas and ornamental trees and, with new higher dose rates and a more concentrated formula, treated trees stay protected longer than ever before. Whether you’re preventing a future attack or battling the early stages of an infestation, rely on Abacide 2.

Kills more bugs. Lasts longer.

Call 800-TREES Rx (800-873-3779) or visit www.mauget.com to learn more.
the tools and means and are putting out trunk injections. These recommendations are based on chemical residue values of imidacloprid that were measured in either the sap or the leaves of trees that have been a part of studies conducted over the last 10 years as we have sought to establish science-based protocols in our fight against these exotic insect invaders.

Best practices for soil applications

Imidacloprid and other systemic chemicals that are applied through the soil for uptake by the root system will take some amount of time to enter into the leaves and twigs that pest insects are feeding upon. For the larger insects such as ALB, which need a stronger dose of the pesticide to impact them, it may take two or three months before suitable levels of chemical are present. For smaller insects and especially for ones that are feeding on the sap stream (aphids, mealybugs, thrips), impact will be much more rapid. We have also found that there is excellent year-to-year buildup of chemical residue in the plant tissues when repeat soil applications are made.

When putting out a soil application for a landscape tree, the highest return in chemical residue is when the application is made as a drench or by soil injection right around the base of the tree. When we compared trees treated out to the dripline (grid or circle applications) to those that had been drenched at the base, chemical residue values were up to 100 times higher (Fig. 5) for those treated around the base of the tree. This seems to make sense as we know that the bulk of the root mass is near the base of the tree, and applying out to the dripline is a hit-or-miss operation. If there are no roots to take up the chemical that is delivered to a particular site, it will sit there unused by the tree.

Depending on how dry the soil is, more or less water can be used to make the chemical mix – and trees under drought stress will probably appreciate the extra water as well! We did find that using too much water (say, 1 or 2 quarts per inch diameter dose) may lead to less chemical getting into the tree, perhaps by the chemical leaching beyond the reach of the root system.

Keep in mind that while soil applications are not for emergency applications, chemical residue can be as high or higher as compared to a trunk application method when a tree is treated annually.

Best practices for direct tree (trunk) applications

There are many tree injection systems that are being sold to the arborist community, each with a slightly different take on the approach. As you consider the (perhaps) difficult choice of a suitable tree injection system, you may want to think along the lines of how we choose which truck or car to drive. I don’t know of any “Yugo” injection systems, but each one has its benefits and detractions, so keep in mind that any injection system should fit the needs and usage patterns of your company. Items that should be considered as you approach this task are any desired characteristics (be it low pressure injection, no plugs, etc.) that may help with a sale to your clients. Other things to keep in mind are any maintenance and training costs that may be associated with the device, as well as repeat application considerations.

So how long does it take for systemic insecticides to get into a treated tree and be effective? There is a report from treating ALB infested trees in China where the researcher noted dead beetles under the trees when they came back from lunch following a morning injection. For a quantitative answer, I have found from my work with street trees in the Northeast that chemical residue is present at high levels (close to or at the maximum) just a week following treatment. Distribution of the chemical in a tree canopy is variable, but overall trees do a good job of moving systemic insecticides throughout their vascular system.

Besides the quick delivery, chemical residue found in trees the year they are trunk injected is two to three times higher than a similar tree that is treated by a soil drench. And what about large trees, do they need an extra dose of chemical? We know that the mass of a tree increases on an exponential scale as compared to stem diameter, such that a 10-inch DBH tree is far more than double the weight of a 5-inch DBH tree. When treating trees between 24 to 30 inches in stem diameter by trunk injection, I have found that these large trees, for the most part, have sufficient residue in their canopies using a standard dose. Repeat treatment of larger trees in subsequent years is probably prudent if the pest pressure is heavy in order to get better overall chemical coverage within the canopy.

Fall or spring treatment?

Whether you are treating by soil or trunk injection, you will not see a great amount of carry-over of chemical residue from a single treatment into the following year.
There will be some, but it can be quite variable between individual trees as well as within a tree. Which brings up the topic of what time of the year is it best to treat a tree?

Chemical levels in trees are known to decline over time and some have advocated against fall treatments. My laboratory has just completed a three-year study looking into the amount of chemical residue in the summer foliage of four different tree species following successive fall or spring treatments using both soil and trunk injection; over 500 trees were used. Final-year results are still pending, but data from the first two years of work are compelling. After one year of treatment, soil treated trees lagged behind trunk injected trees in amount of residue, as expected. But after two successive years of treatment, statistical differences between treatments were negligible, meaning that trees treated early or late in the fall by either soil or trunk injection had similar amounts of residue as trees treated in the spring.

The ability to put out fall tree treatments may free up needed resources during the busy spring season, and could be considered as a viable option based on our preliminary results. Whether you are treating trees by soil or by trunk injection, or both, I hope that the information presented here is valuable to you and used to improve your business and marketing decisions.

Phil Lewis, Ph.D., is a research entomologist with USDA-APHIS and focuses his work on the chemical control of exotic, invasive insects of trees. This article was based on his presentation on the same subject at TCI EXPO 2013 in Charlotte. To hear the entire audio recording of that presentation, go to this page in the digital version of this issue of TCI Magazine online at www.tcia.org, under Publications, and click here.
Workers’ Comp Policies for Payroll and Worker Classification

By Rick Weden

Being a provider of insurance programs for a number of tree care companies, I find myself explaining the various workers’ compensation classification codes, rates, and rating rules to tree care company owners on a more-than-regular basis. Candidly, I have to say that not all of these “conversations” that I have with my clients run smoothly. Workers’ compensation insurance is costly for those in the tree care industry and as a result, the subject can understandably become a lightning rod of sorts during insurance reviews and negotiations.

Further fuel to this challenging subject is the fact that many tree care companies offer a wide range of client services other than specific tree work and, as a result, a tree care company can legitimately have available to them a number of varied worker classifications and rates. The availability and use of these various worker classifications can have a significant impact on one’s insurance costs.

The basis of this article is to take a closer look at some of the worker classification issues specific to the tree care industry.

The workers compensation worker classification system involves a lengthy and comprehensive series of detailed industry descriptions that all insurers who offer workers’ compensation insurance use when determining which categories an insured company’s workers will be assigned to and which rates they will charge for them. These “rules” can vary to some degree from state to state, so what may apply to a tree care company in one state may not apply in another state. If a company has operations in multiple states, then they may be subject to more than one set of state classification rules and exceptions.

I will address some of the more common areas where worker classification can come into question. There are, however, potentially numerous situations where other classifications may be applicable, depending on the specific services your tree care company offers.

Classification of ground crew workers vs. aerial tree workers

There is a common misconception that these workers fall into two separate work categories, with the Landscape Gardening class (0042) being assigned to all ground crew workers, and the Tree Pruning/Spraying class (0106) assigned to the aerial workers. If you break out the payrolls in this manner, the end result will be a significantly (and erroneously) reduced workers’ compensation cost simply because the Landscape Gardening rate is generally lower than the rate for Tree Pruning. The fact is, however, that under the workers’ compensation rating rules, the Landscape Gardening Class is not allowable for these workers and all must fall under the Tree Pruning and Spraying class.

The reasoning behind this is fairly understandable and no surprise to the reader, as ground crew workers are subject to much the same hazards as their elevated co-workers, and in some cases more so. Working in drop zones, they are at risk of struck-bys, exposed to electrical hazards, and operate much of same mechanical equipment as their aerial co-workers. They are also exposed to chipper related injuries, as well as lifting and falling injuries. There is also the likelihood of interchange between ground crew, and elevated workers on any given job.

It should also be noted that insurers are becoming increasingly aware of this and, as a result, their auditors are often on the lookout for situations where these two different classes are being used in these types of work situations.

Tree care companies with established and defined landscape gardening and planting services divisions

But what about cases where a tree care company has an established landscape gardening, planting, and maintenance division? In these situations it is possible to have workers performing these duties fall under the (0042) Landscape classification. Care must be taken however to properly document and report the payroll of these
workers, as well as managing their operations so they are physically separated from the actual tree care operations. It is also highly advisable that you obtain verification from the insurer that they are agreeable to the combined use of the tree work and landscape classifications, and that this practice is permissible in the state(s) they are operating in. This should include an established clear understanding between the insured and their insurer on the manner in which the payroll information is to be reported as well as how the work divisions are to be managed and accounted for.

**Snow services**

In cases where a tree care company offers snow removal services, insurers may want to use Class Code (9402) Street Cleaning and Drivers to account for the payroll of snow removal equipment operators. In many parts of the country, the payroll for this class has a tendency to fluctuate greatly from year to year due to varied snow fall from one season to the next.

**Logging or lumbering classifications**

Tree care companies that perform land clearing and other similar kinds of services may have these operations assigned to the Logging and Lumbering class (0702). This class usually carries a higher workers’ comp rate than the (0106) Tree Pruning/Spraying class. If you are contemplating offering land clearing or similar types of services, it is advisable that you take this up with your insurer to familiarize yourself with this class and understand its potential effect on workers’ compensation insurance costs.

**Other classifications may be applicable**

A tree care company may have other employee categories that call for other worker classifications and some of these can result in workers’ comp cost reductions. Salespersons, consulting arborists, clerical workers, fleet and equipment maintenance and other yard type workers who solely and separately perform these and other duties may qualify for a less costly classification and rate. Again, it all boils down to what rating rules might apply in these situations as well as the agreement of one’s insurer to use them.

**Special state exceptions**

Although too numerous to mention here, some states have special exceptions that may allow for some added flexibility in worker classification. This could have a positive effect on one’s insurance costs. For example, in Massachusetts, under certain situations, one can separately classify workers in their PHC divisions separately, whereas in most all other states these workers always fall under the tree work class. Always consult carefully with your insurance providers, or your insurer’s auditors on the availability of these to avoid problems with misclassification.

**Fraud and abuse in the workers’ compensation system**

Sadly, there remain numerous instances of policy holder abuse in the workers’ compensation system where business owners intentionally misclassify workers and “hide” payroll figures with the express intent to lower insurance costs. Even worse are more egregious situations, where employers may have no workers’ compensation coverage at all. Company owners operating unlawfully in this manner not only pose a serious threat to their own workers, but also cause collateral damage as their practices are usually accompanied with unrealistically underpriced and poor workmanship that above-board companies cannot compete against nor will they tolerate. Insurance fraud is now considered a felony in most all states, resulting in harsh penalties of imprisonment and/or stiff fines levied against violators.

**Communication is important**

As a final note, I cannot emphasize enough the importance and benefit of strong communication between policy holders and their insurance providers when it comes to worker classification on workers’ compensation policies. Errors in payroll reporting or record keeping, or the offering of new services can result in costly surprises that no one likes to get. As we say, knowing about something now is always better than learning about it later!

Rick Weden is a senior account executive and practice leader of the Tree Care Division at Corcoran & Havlin Insurance Group, a TCIA associate member company located in Wellesley, Massachusetts. He is also an associate member of the Massachusetts Arborists Association. He has spoken on insurance topics as part of the “Business Boot Camp” series at past TCI EXPOs, as well as at the School of Arboricultural Sciences at University of Massachusetts-Amherst.
Bandit expands dealer network

Bandit Industries recently added seven new dealers to serve customers in the United States.

“As Bandit experiences record growth, the ability to serve our expanding customer base becomes more important every day,” said Jerry Morey, Bandit president.

“Having qualified dealers committed to our products ensures that our customers continue to get best possible service and support available.”

Bandit’s newest dealers include Equipment Inc. serving Jackson, Miss., Hattiesburg, Miss., Shreveport, La., and Mobile, Ala.; A-Ok Power Equipment in Santa Barbara, Calif., serving Santa Barbara, Carpinteria, Anaheim and Solvang; Fairbank Equipment Inc. serving western Kansas and South Dakota; Stowers Machinery Corporation serving eastern Tennessee; Chipper Pro LLC and Forest Pro Inc., serving central Virginia; Quality Equipment and Parts Inc. serving Lake City in central Florida; and, Forestry 21 Equipment, serving Alabama.

All dealers will offer the superior level of service and support customers come to expect from Bandit Industries.

“We are very grateful for the hard work our dealers do in representing Bandit and serving our customers,” said Morey. “It’s not enough to just have a good product. We have built a reputation for taking care of our customers, and that would be impossible to do without a strong dealer network.”

Echo and Kubota announce U.S. dealer alliance

Echo Incorporated and Kubota Tractor Corporation announced today a U.S. Dealer Alliance aimed at growing their combined sales within the commercial turf and consumer lawn and garden markets.

As part of the alliance, Echo & Shindaiwa will become the preferred brands of hand held outdoor power equipment within the Kubota dealer network. The alliance also names Echo Bear Cat as a preferred brand of chippers, shredders, log splitters and wheeled trimmers within the Kubota dealer network.

“There is a tremendous amount of synergy between our companies and brands,” says Mike Best, Echo VP of sales & marketing. Both parent companies are headquartered in Japan, both are known for engineering and manufacturing professional grade products and both target commercial users and large land owners.

“By leveraging our common strengths, both companies will be well positioned for future growth in the months and years ahead,” says Best.

The Kubota dealer network includes over 1,100 sales and service locations.

Petzl reissues ZigZag mechanical Prusiks

On April 25, 2013, Petzl recalled all ZigZag mechanical Prusiks. The new version of the ZigZag was made available in the United States and Canada in March 2014.

A summary of all changes made to the product can be viewed here [www.petzl.com/us/pro/descenders/verticity/mechanical-prusik-arborists/zigzag]. If you live in the U.S. or Canada and still own a ZigZag affected by the recall (serial number below 13108******), Petzl America has units available for immediate exchange and requests that you use the ZigZag End User Return Authorization Form [http://petzl.force.com/ZigZagRecallWebForm1] to take advantage of the standard exchange procedure for your ZigZag.

All costs will be covered by Petzl. (Users outside of the U.S. or Canada, contact the After Sales Service Department in your country via www.petzl.com/en/pro/contact.)

(Continued on page 36)
THE NEXT EVOLUTION IN STUMP GRINDING HAS ARRIVED.

FEATURING & BENEFITS OF THE REVOLUTION WHEEL:
- **Greater productivity.** Traditional wheels take a 3" cut... the Revolution wheel makes a 6" deep swath!
- **No chatter.** A smotherer cut uses less energy and reduces vibration throughout the grinder.
- **Protected pockets.** Unique design and spiral pattern protects the tooth and wheel, reducing wheel and tooth maintenance costs.

CHECK OUT THAT CHIP CONTAINMENT!
SPEND LESS TIME CLEANING UP DEBRIS AND MORE TIME MAKING MONEY

Introducing the Bandit Revolution™ cutterwheel system. Experience for yourself what the Revolution cutterwheel can do for you! From amazing chip containment that cuts time and money out of your stump removal project, to the exclusive design that allows for reduced wheel wear and superior cutting. The Bandit Revolution™ is the wheel of the future! Now available for tow-behind, self-propelled, or any other stump grinding applications from all manufacturers.

Call today and learn more about converting your existing grinder to the industry-best Revolution™ cutterwheel!

Scan this QR code with your smartphone to see the Revolution wheel in action!

Circle 6 on RS Card or visit www.tcia.org/Publications

Order today!

1-888-322-6348

Bandit Industries, Inc.

Banditchippers.com
Onlinearboristsupply.com
Terex EE’s new TBG 640 Horizontal Grinder

Terex Environmental Equipment’s new TBG 640 Horizontal Grinder is for the wood processing and recycling markets. The TBG 640 features user-friendly controls and good fuel efficiency. It is built with ease of maintenance in mind, reducing downtime by having components easily accessible in the field for service technicians. The TBG features a hammermill 65 inches wide and 34 inches in diameter, an infeed opening 41 inches high and 63 inches wide and a 700 hp engine, with a 755 Tier 4 option. The TBG 640 is capable of producing 300-400 yards of green waste and hour and 400-500 yards of scrap wood. TEE will also launch the TBG 640 with the new color scheme, introduced in 2014 for the large biomass and recycling equipment. Key Features include: Engine Load Management System to save fuel and increase production; Heavy duty design and manufacture for extended service life; Tail conveyor position can remain folded for easy maintenance; Quick and easy screen changes; PTO belt tensioner for ease of maintenance. Operator and product safety features include break-out anvil and screens, clutch kick for engine protection, and torque limiter. (www.terex.com/environmental-equipment)

Circle 90 on RS Card or visit www.tcia.org/Publications

Echo Tool-less chain tensioning

Echo’s new CS-370F and CS-400F chain saws are based on the popular CS-370 and CS-400 models, but feature the new FasTension Tool-less Chain Tensioning System. The FasTension System makes quick and easy chain tension adjustments or bar and chain replacements without a scrunch or tightening tool. A rotating lever takes the place of locking nuts and a tensioning wheel replaces an adjustment screw. Adjustments can be made anywhere in four simple steps. The CS-370F is equipped with a 16-inch bar and chain and the CS-400F comes with an 18-inch bar and chain. Other product features include a tool-less access, automotive-style air filter; a dual-post chain brake; an i-30 starting system for reduced-effort starting; and an automatic, adjustable oiler. An after-market accessory is also available to retro-fit the FasTension Tool-less Chain Tensioning System on any CS-370 or CS-400. As with all Echo chain saws, the CS-370F and CS-400F are covered by a one-year commercial warranty and five-year consumer warranty. (www.echo-usa.com)

Circle 91 on RS Card or visit www.tcia.org/Publications

Tree Armor Tree Guard Protector

Tree Armor’s Tree Guard Protector is designed to provide tree trunks protection from deer damage up to four feet high. Most tree guards only protect trees from 1 to 3 feet up. Its patented, tapered design grips small ornamentals as well as large-caliper trees. Tree Guard Protector now comes in a new, rich-brown bark color, instead of white or black metal tubes, and is perforated, which adds protection from mold and mildew. Proudly made in the USA and almost invisible, Tree Armor is certified lead free and non toxic. Some other tree guards contain heavy metals that leach into the ground. And, coming later this year, a Tree Guard Protector that blends a scent that repels deer into the vinyl guard. (www.mytreearmor.com)

Circle 92 on RS Card or visit www.tcia.org/Publications

Cat 586C Site Prep Tractor

The new Cat 586C Site Prep Tractor, a multi-purpose, heavy-duty machine with the muscle to run power-hungry mulchers and brushcutters, is designed to run cool and not collect debris, so you spend less time cleaning and more time working. New Cat work tools, including the HM825 Mulcher and BR624 Brushcutter, have been developed to match the powerful capability of the 586C. Other attachments, such as buckets and rakes, are offered by Cat dealers. The PowerDirect Plus system optimizes performance by monitoring operator and attachment hydraulic demand and delivering power where and when it is needed. The 350 hp engine and oversized hydraulic system push more flow to the attachment for faster recovery without slowing other functions. PowerDirect Plus also helps with fuel efficiency by maintaining a consistent load on the engine. The high-capacity cooling system and on-demand reversing fan keep the machine running cool. An oversized, hydraulically driven fan spins at a slower speed overall and only turns as fast as needed to maintain proper hydraulic and engine temperatures. In colder weather or when the machine is first started, for example, the fan spins more slowly to conserve power and fuel and reduce noise. The machine is segmented into separate compartments that are pressurized to prevent debris from entering. The pressurized airflow also keeps electronics, sensors and other key components cool during long workdays. The Cat 586C, along with the mulcher and brushcutter attachments, will be in production in May. (www.cat.com)

For more information on products featured here, circle the number on the Reader Service Card, or visit www.tcia.org/Publications.

Send Cutting Edge Product information to: editor@tcia.org
Go Green
With Ford Advanced Technology Engines.

A Green Alternative to Diesel from

SECURITY AND DURABILITY

YOUR Tier IV Solution

Reliable — Durable — Clean — Green.

Featuring a complete line of EPA and CARB Certified 1.6, 2.5,
and 6.8 L LSI Engines ranging from 20 to 200 hp. Available in Gasoline, LPG, CNG,
Natural Gas and Dual Fuel. Our engines are the solution to high priced Tier 4 Diesels.
Secured Volumes, Longer Life Cycles, Dry Fuel and Flex Fuel Valve Trains —
You Can Find It At EDL. Performance you can count on!

Contact One Of Our Distributors Today!

Our line of LSI industrialized Ford engines are serviced through a Global Dealer Network.

Andersen Industrial Engines Co.
Omaha, NE 402-558-8700

Southwest Products Corp.
Phoenix, AZ 877-779-3581

Diesel Power Equipment
Chicago, IL 877-876-3732
Farmington, MO 800-876-3732

Engine Distributors Inc.
Archdale, NC 800-220-7080
Blackwood, NJ 800-220-2700
Ft Lauderdale, FL 800-257-6605
Holliston, MA 800-220-2700
Jacksonville, FL 800-342-3575

Engines, Inc.
Jonesboro, AR 800-562-8049

Powertech Engines Inc.
Fresno, CA (800) 750-1776
Fullerton, CA (800) 784-1776

Perkins Pacific
Ridgefield, WA 877-877-3311

McDonald Equipment Co.
Willoughby, OH 800-589-9025
Portland, ME 800-445-5273

M. G. Bryan
Equipment Co.
Grand Prairie, TX 972-623-4300

D A C Industrial
Engines Inc.
Dartmouth, NS, Canada 902-463-3765

Marindustriel
Montréal, QC, Canada 514-342-2748

Oakville, ON, Canada 800-374-6766

Calgary, AB, Canada 800-374-6766

Port Coquitlam, BC, Canada 800-374-6766

Nanaimo, BC, Canada 800-374-6766

Prince George, BC, Canada 800-374-6766

All Marine Spares
Mona Vale, N.S.W., Australia 61-2-99972788

Compagnia Tecnica Motori S.p.A.
Milano, Italy +39 0245058238

Fornaut Ehm Sa
Le Pre St Gervais, France 01131418450394

Power Torque Engineering Ltd
Binley, Coventry, UK 011-44-247-663-5757

Sauer Motive Systems
Sauer and Sohn KG
Dieburg, Germany 011-49-607-120-6330

Engine Distributors Inc. • 400 University Court • Blackwood, NJ 08012
Phone: (856) 228-7298 or (800) 220-2700 • www.edl-dist.com

Circle 15 on RS Card or visit www.tcia.org/Publications
Events & Seminars

April 5–10, 2014*
Western Chapter ISA: Arboriculture on Parade
Pasadena, CA
Contact: www.wcisa.net

April 7, 2014*
Electrical Hazards Awareness-EHAP workshop
Western Chapter ISA Conference, Pasadena, CA
Contact: TCIA 1-800-733-2622; kritchotte@tcia.org

April 8, 2014
Invasive Plant Certification Part A3
Milford, MA
Contact: www.tcia.org/events

April 11, 2014
Chipper Operator Specialist Workshop
Marietta, GA
Contact: wendy.hopkins@morbark.com: 1-800-831-0042

April 14-17, 2014*
Certified Treecare Safety Professional/CTSP Workshop
Mauget headquarters
Arcadia, CA
Contact: 1-800-733-2622; peter@tcia.org

April 17, 2014
Chipper Operator Specialist Workshop
Garden State Bobcat Group
Green Brook, NJ
Contact: wendy.hopkins@morbark.com: 1-800-831-0042

April 22, 2014
Invasive Plant Certification - Part B
Milford, MA
Contact: UMass (413) 545-0895; www.tcia.org/events

April 23, 2014
Scouting for Early Season Landscape Pests
Amherst, MA
Contact: UMass (413) 545-0895; www.tcia.org/events

April 25, 2014*
Chipper Operator Specialist Workshop
Round Rock, TX
Contact: 1-800-733-2622; www.tcia.org/events

April 30-May 29, 2014 (10 days)
Arboriculture I – Basic Tree Climbing
Quail Hill Scout Camp, Manalapan, NJ
Contact: (732) 833-0325; www.caanj.org

May 6, 2014
Chain Saw Safety
Quail Hill Scout Camp, Manalapan, NJ
Contact: (732) 833-0325; www.caanj.org

May 13, 2014
CPR & First Aid
Quail Hill Scout Camp, Manalapan, NJ
Contact: (732) 833-0325; www.caanj.org

May 20, 2014
Electrical Hazard Awareness & Aerial Rescue
Quail Hill Scout Camp, Manalapan, NJ
Contact: (732) 833-0325; www.caanj.org

May 27, 2014
Chipper, Stump Grinder, Skid Steer Awareness Training
Quail Hill Scout Camp, Manalapan, NJ
Contact: (732) 833-0325; www.caanj.org

June 8-10, 2014
Trees Florida
Innisbrook Resort, Palm Harbor
Contact: www.TreesFlorida.com

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:

**May**

- Machinery & Equipment: Wood Processing/Biofuel/Mulch
- Tools & Supplies: Sprayers, Tree Planting
- Services: Insurance
- Safety: Hazard Tree Assessment
- Special Regional Section: West, Mountain, Pacific

**June**

- Machinery & Equipment: Cranes, Attachments/Grapples
- Tools & Supplies: Herbicides/Pesticides
- Services: Consulting
- Safety: Climbing Safety

Contact editor@tcia.org
Advertising: Sachin Mohan, mohan@tcia.org

July 31-August 1, 2014*
Certified Treecare Safety Professional/CTSP Workshop
Milwaukee WI
Contact: 1-800-733-2622; peter@tcia.org

August 2-6, 2014*
ISA International Annual Conference and Trade Show
Milwaukee, WI
Contact: www.isa-arbor.com

August 13-14, 2014*
Certified Treecare Safety Professional/CTSP Workshop
La Quinta Hotel, Hayward, CA
Contact: 1-800-733-2622; peter@tcia.org

September 28-30, 2014*
New England Chapter ISA Annual Conf. & Tradeshow
South Burlington, VT
Contact: (978) 844-0441

November 13-15, 2014*
TCI EXPO 2014
Hartford Convention Center, Hartford, CT
Contact: 1-800-733-2622; dmorgan@tcia.org; www.expo.tci.org

February 8-12, 2015*
Winter Management Conference 2015
Cabo San Lucas, Mexico
1-800-733-2622; dmorgan@tcia.org; www.expo.tci.org

* Indicates that TCIA staff will be in attendance
At what is the beginning of the season for many, pesticide applicators will see some new pollinator protection language on certain insecticide labels.

This new language will likely move the industry toward other application methods, with systemic products applied as a liquid solution (i.e. soil, trunk spray, trunk injection) or the use of dry broadcast formulations.

The Environmental Protection Agency’s Office of Pesticide Programs completed its review of revised neonicotinoid insecticide labels containing new pollinator-specific language in December, according to an agency official. Meredith Laws, chief of the Insecticide-Rodenticide Branch of OPP’s Registration Division, said December 9 the agency made it a priority to complete review of the revised product labels, which are required for products containing imidacloprid, dinotefuran, clothianidin or thiamethoxam.

Laws spoke during a semiannual meeting of the State-FIFRA Issues Research and Evaluation Group (SFIREG), a group of state pesticide officials. The EPA reviewed 110 revised labels submitted by product registrants. She made a point of emphasizing that that new language is targeted at foliar sprays.

The EPA sent letters to registrants in August 2013 informing them of new label requirements, including a prohibition on outdoor foliar applications to the leafy portions of plants while bees are foraging and an advisory “pollinator protection box” informing consumers and applicators that the product is hazardous to insect pollinators.

The EPA imposed a February 28 deadline for companies to have the revised labels on products ready for shipment.

The Oregon Department of Agriculture announced in November that in 2014 it will require registrants of products containing either of those active ingredients to add label language prohibiting use of the products on linden, basswood or other *Tilia* species, which are attractive to bees.

The EPA is asking registrants of products that are subject to the revised federal label requirements if they would also like to add language that would comply with the Oregon requirements.

**Other products**

The EPA is planning to extend new bee language beyond neonicotinoids to other acutely toxic products that are already labeled; for instance, pyrethroids. EPA is also requiring the protection language for new active ingredients that are acutely toxic to bees.


**State rules**

The EPA is using the label revision process as an opportunity to enable product registrants to implement new use restrictions on dinotefuran and imidacloprid.
Crabapple blooms. Malus spp. have a get many cultivars, which can vary tremendously in their bloom time, so may prove as indicator plants for a large variety of insect pests. Courtesy of the author.

By Sylvia McNeill, BCMA

Caught up in the depths of winter, we hold fast to the knowledge that spring will indeed come. We know it will … it’s on the calendar. It appears every year on the exact same day with the exact same circumstances. Or does it? Calendar-wise it can vary just a couple of days, but climatically, it can vary a lot. We know buds will start to swell, birds become active and insects start to develop. In addition to providing pleasing fragrance and visual appeal, those beautiful blooming plants offer an opportunity to assist plant health care (PHC) professionals in predicting the emergence of insects.

Arborists are most often called only after the homeowner has noticed a problem with his or her trees or shrubs. This generally entails immediate mitigation, which is reactive rather than proactive. However, this call presents the opportunity to introduce a client to your PHC program. PHC is multi-faceted and includes the opportunity to assist plant health care (PHC) professionals in predicting the emergence of insects.

Arborists are most often called only after the homeowner has noticed a problem with his or her trees or shrubs. This generally entails immediate mitigation, which is reactive rather than proactive. However, this call presents the opportunity to introduce a client to your PHC program. PHC is multi-faceted and includes the opportunity to assist plant health care (PHC) professionals in predicting the emergence of insects.

A proactive approach enables addressing potential and significant problems before they become damaging.

Monitoring and scouting for problems and pests are cornerstones of a comprehensive and proactive PHC program, generally conducted on a regular basis. Identifying and cataloging plant species on a property, noting potential pests and problems associated with these species, are important steps in developing an individualized program.

It is just as important to be able to identify the insects in your area as it is the plant species. Determine if:
1) they are pests or beneficial insects
2) the damage caused is aesthetic or truly capable of compromising the tree or plant’s health and longevity, and
3) management is necessary, what is the best option taking into consideration the individual client’s goal(s), environmental responsibility and efficacy of product.

The importance of knowing the species of plant you are examining and the insect for which you are considering treatment cannot be overstated. Without this knowledge, how can you prescribe a treatment option? How do you even know it is/they are a problem? Some insects do aesthetic-only damage to plants and may be otherwise beneficial. A chewed leaf does not automatically warrant control.

Geographic variety within a region can make emergence of pests and timing of applications very diverse, even with similar species. Individualized PHC programs are essential rather than using the philosophy of “one size fits all.” Here is where plant phenology and a working knowledge of degree-days can be of immense benefit.

Phenology is the study of periodic biological events, such as budding or flowering, and insect development in relation to environmental factors, such as temperature. Degree-days is a measurement of heat units over time equivalent to the number of degrees that the average temperature is above a baseline value. Tracking of degree-days allows you to anticipate bud break, flowering and insect development.

The use of plant phenology combined with degree days gives you a heads up on what might be happening soon, allowing you to set a narrower window for scouting
and, if necessary, treatment. For instance, if your regular monitoring visits are scheduled on a quarterly basis, visual identification of indicator plants can help narrow the window for timing a visit to the most likely time for onset of a known or highly potential insect problem. Being prepared ahead of time may shorten the window from an overly broad 90 days to a more effective two weeks. With more people becoming environmentally conscious, the more accurate your timing of short-lived, low-impact controls, the better results you will be able to deliver.

Accurate knowledge and understanding of insect emergence and development is challenging but necessary for efficient use of controls. Applying a control when the insect is not vulnerable will result in wasted effort, money or product. This applies more to short-lived contact controls, however, it can still be pertinent when using systemic materials needing uptake time to maximize the product efficacy.

Why are plant phenology and degree-days relevant? Both plant and insect development are stimulated by environmental factors. Below a certain temperature there is little to no activity, above a certain temperature development dramatically slows or stops. The tracking of degree days can be used to anticipate when insect development, such as egg hatch or adult emergence, is likely to occur. For plants it may record first bloom or full bloom.

Determining degree-days is simple, but the record keeping on a daily basis can become cumbersome and requires a weather station that tracks maximum and minimum temperatures. Utilizing one of the many resources available that already perform this task may save you a lot of time. University extension services are helpful, and some weather websites also offer this information.

Calculating degree-days is based on having a lower developmental threshold temperature. As this is known for only a few insects, the suggested base line is 50 F. The resources you find will state what base line was used. Several university extensions have published studies in their areas on phenological sequence with average date of occurrence and cumulative degree-days for plants or pests. This information gives you a guideline from which to start.

As you search for phenological charts, you will note that emergence dates between areas can vary significantly. Identifying the degree-days will get you close to a target date for control when compared with your local degree-day accumulation. Reliable resources from which to draw information may originate quite some distance away from your service area in some parts of the country. However, this need not translate to inaccuracy. Find the source closest to you with the most current dates of data accumulation. Confirm or validate this for local accuracy remembering you may have variations within your own region of service.

Finding a correlation in stage development of an insect to a common plant in the area can be very helpful in planning a treatment strategy. Blooming plants are readily observed as you are driving through an area. Establishing a customized list of prevalent indicator plants whose bloom time is close to the developmental stage of insects of concern gives you a heads up to perform an onsite confirmation of insect activity.

An illustration: Information taken from Secrest Arboretum in Wooster, Ohio, from records obtained between 1997-2001, show the Eastern tent caterpillar egg hatch requires 92 cumulative degree-days. The Manchu cherry first bloom requires 93 degree-days, therefore, this may be a good indicator plant for this insect. If these are a pest and plant common to your site(s), you can validate whether or not this correlation is going to be helpful to you and/or make the necessary adjustments in the actual degree-days observed.

Note: The indicator plant does not have to be a host to the insect. It is merely a plant that has the same or near cumulative
degree-day requirements for a stage of development that is readily visible to us in correlation to a specific stage of development of a target insect.

As you develop your personalized chart for insect and indicator plants, a matrix appears that is a useful tool in your PHC program. For an excellent example of how to format a chart, go to http://extension.unh.edu/Agric/GDDays/GDDCheck.htm. Scroll down to “Monitoring and Management Checklist.” This comprehensive checklist may provide very helpful correlations from which to start developing your own.

Not surprisingly, there are limitations and drawbacks to this system. The actual environment an insect is living in may differ widely from where your degree-day information is being taken. And since plants react to photo periods as well as to temperature, environmental conditions in some years may cause a disparity. However, this information still gives you a baseline from which to work. It is much better than picking a calendar day and hoping for the best.

In an interview with Patrick Parker, an ISA Board Certified Master Arborist, Register Consulting Arborist and director of SavATree’s Plant Health Care program, he stated that there is no replacement for onsite observation. SavATree has a cadre of highly experienced and knowledgeable field operatives who provide feedback of “who is seeing what” during weekly meetings. Further, he takes advantage of the numerous university extension sites that send out newsletters providing valuable information. But then Parker also says, “… some years you can just toss all your guidelines out the window.” Well, we are at the whim of Mother Nature.

Todd Kirchner, ISA Certified Arborist and plant health care manager at Arborwell in California, knows the value of networking and says developing relationships with the university system, educators, product manufacturers and other arborists is important. The sharing of information on what is happening and when, how effective treatments are, and what is being developed is very helpful. In addition to monitoring and.
scouting, Arborwell keeps computerized records of species for sites that are helpful in projecting what problems are likely to occur. Kirchner also noted phenological events, such as first bloom, are cues for other PHC treatments as well, such as fruit reduction applications.

Sarah Eilers, ISA-Certified Arborist, with Nitro Green in Helena, Montana, has developed a “Treatment Guide for Pests” specific to their service area, with a tree and plant identification field guide for technicians to take out in the field.

These professionals know the importance of gathering as much information as they can and adapting it to their service areas. SavATree on the Atlantic seaboard sees very different conditions than SavATree further inland. Arborwell covers much of California; however, southern California can be three to four weeks ahead in development to northern California. Helena, Montana, is vastly different from Eilers’ previous locale in Bozeman. Even in comparatively small regions, elevation makes a significant difference in plant and insect development.

The use of degree-day information for insect development combined with common and readily-noted indicator plants can be a powerful tool in developing your management strategy for the best possible results. The more precise you can be, the more effective your treatment plan will be, and the call backs you receive are going to be the ones you want – those requesting future services.

References and helpful websites
1. http://climate.usurf.usu.edu/includes/pestFactSheets/degree-days08.pdf
2. http://www.weather.com/outdoors/agriculture/growing-degree-days/USCA0638:1

* Extension sites
http://extension.umass.edu/landscape/landscape-message
http://extension.unh.edu/agric/gddays/GDDCheck.htm
http://extension.unh.edu/Agric/GDDays/GDDiced/growth.pdf
http://nysipm.cornell.edu/aes_ornamental.asp?cmd=search&debug=&pe_id=1396&ho_id=&pe_category=&sy_id=
This website has a search engine. The insects with * have Web factsheets that contain GDD and indicator plant information.

http://www2.ca.uky.edu/entomology/entfacts/ent66.asp

Sylvia McNeill, BCMA, Certified Urban IPM Practitioner-Montana, Licensed Pesticide Applicator-Montana, and her husband, David, co-own and operate McNeill’s Tree Service, a TCIA member company located in Corvallis, Montana.
On February 11, 2013, Townsend Tree Service, a subsidiary of The Townsend Corporation based in Parker City, Indiana, became the first company in the country to achieve TCIA’s Utility Contractor Accreditation.

“We’re a large utility line clearance company, probably the fifth or sixth largest in the country,” says Phil Chambers, president of The Townsend Corporation and a member of TCIA’s Board of Directors. “We’re also a family-owned business. Our core values are safety, excellence, integrity, character and accountability, and we live them every day. Accreditation is an extension of that; it’s a validation of the fact that we run a company that has the wherewithal to deliver to utilities.”

Townsend Tree Service, founded in 1945 by brothers Don and Vern Townsend, is the largest of five operating subsidiaries of The Townsend Corporation. It provides line clearance for investor-owned utilities, municipal systems, electric cooperatives, pipeline companies and state departments of transportation in more than 32 states. A small portion of their work is storm and disaster emergency response.

Invasive and non-native vegetation and tall tree species are common problems in the rights of way (ROWs) of power lines, roadways, pipelines, and wellheads. Townsend removes and manages vegetation for its customers to ensure that it doesn’t interfere with their operation.

Most of their work is for utility companies. Approximately 40 percent takes place in rural areas, on ROWs for transmission lines, which carry electricity from power plants to electrical substations. Townsend trims the trees that grow into the ROW and treats other vegetation to control its growth, says Chambers.

Some 60 percent of the vegetation management on utility lines is done on rights of way for distribution lines, which carry electricity from electrical substations to consumers. These lines are usually much lower and narrower than distribution lines. Townsend trims the sides of trees that grow into the ROW as well as above and below the lines to obtain the approved clearance.

They always use ANSI standards and try not to trim in a radical fashion, but some trees haven’t been trimmed in quite a long time, Chambers says. Occasionally they have to be removed.

Townsend uses two methods to manage vegetation. First, they have extensive equipment, including a fleet of all terrain aerial buckets (ATAB) for trimming trees, and large brush mowers to take brush to an acceptable level.

Second, they use integrated vegetation management (IVM) to treat invasive and non-native vegetation.

“IVM provides the best in habitat management,” Chambers says. The treatments they use target invasive species and don’t affect native and endangered ones, according to Chambers, which encourages the growth of native plant species and can increase plant diversity and wildlife habitat.

The utility companies are responsible for any replanting, although Townsend may be hired by departments of transportation and municipalities to reseed certain parts of some rights of way, he says.

Townsend Tree Service has approxi-
mately 2,300 employees. All but some 100 work in the field.

“Safety is everything to us,” Chambers says. “Our ambition isn’t to be the biggest; it’s to be the safest. We put our folks through intensive training, including hazmat, aerial lift, CPR, so they can be certified to trim, and operate buckets and heavy machinery.” Some certifications are internal and others are conducted by TCIA.

Employees also are trained to deal with homeowners whose property abuts the ROWs and who aren’t pleased about the line clearing.

TCIA’s Utility Contractor Accreditation places a very strong emphasis on safety and ANSI standards, as does Accreditation for residential and commercial tree care companies, says Bob Rouse, TCIA’s chief program officer.

“We adapted the residential/commercial checklist to the utility checklist. The requirements are essentially the same.”

TCIA made two exceptions, to reflect the reality of working for utilities, he says. “We didn’t want to make the Accreditation program not viable.”

The first difference is that while utility contractors prune to ANSI standards, they’re not necessarily pruning for aesthetics. The standards have to reflect that, Rouse says.

In addition, there may be contractual reasons that make it impossible to prune to ANSI standards. For example, Homeland Security may have its own safety reasons around airports. Accredited utility contractors are required to reach out to utilities that many not know about ANSI standards and encourage them to adapt to the standards if possible. “Most major utilities are up to speed on the standards, but the smaller ones aren’t,” Rouse says.

The second difference is that while accredited residential and commercial tree care companies are required to have one certified arborist on staff for every 10 crew members, utility contractors are required to have just one, or one per major division in the company. That person has additional, specific information related to the utility industry and is an ISA Certified Arborist Utility Specialist. Some utilities have their own certified arborist.

“The feedback from companies that have become accredited has been very good,” Rouse says. “TCIA’s Utility Contractor Accreditation Council will make changes if necessary.”

Utilities are just beginning to hear about Accreditation, says Chambers. “Clients we’ve talked about it with have been very impressed. It’s a great way to sift through their list of contractors. It also sets the bar for other contractors. It has been a positive for us and I think a positive for the industry. It’s a great idea that utilities should embrace.”

Becoming accredited isn’t easy, he says, but it sets Townsends apart. “There are a lot of things utilities look for when they’re dealing with a contractor like us: our experience, safety record, financial strength, OSHA records, if we have the personnel to do the job.

“Accreditation provides us with third party validation. TCIA observes our crews, inspects and audits our records, programs and equipment, talks with field and office personnel and ask about the integrity of our operation.

“We want to grow our presence in the marketplace, and continue to be profitable and to have an excellent safety record. Accreditation helps with all these things.”
In the not-so-distant tree climbing past, one system served for ascent, work, descent and everything in between. In many cases, this was the most efficient method. However, as more techniques creep in from other high-angle disciplines and/or are created by clever tree climbers, a “one-size-fits-all” mentality falls short with regard to efficiency and safety concerns. The work we engage in is multifaceted, often complex, and hazardous on easy days!

A climbing system that is super efficient for ascent may not be safe during lateral movement in the tree. A basic descent system meant to get a climber to the ground quickly might be a terrible, unsafe working or ascent system, yet sometimes it is just the ticket for coming off a spar at the end of a long hot day.

Through a systematic approach we see production tree climbing as a system or set of tasks that can be subdivided. As we accomplish this, we can better suit the particular systems we use to the task at hand.

The Phases

Assess: The pre-climb inspection and work plan development part of climbing.

Ascent: Going up to establish a tie in point (TIP). A climber may or may not set the line remotely, a la “throw bag.”

Work Positioning: The climber has installed and inspected the TIP and the tree while ascending. Hazards are eliminated or mitigated as necessary. This phase involves comprehensive lateral movement in the tree.

Descent: Here the climber is finished working aloft and is simply coming to the ground. This is different than descending on a work positioning system. A straight “descent” system allows for very little, if any, lateral movement.

What is the difference? Why differentiate between ascent, descent and work positioning?

The forces on the rope are different. More rope in one system as opposed to another and different angles as the rope passes through the canopy all serve to alter forces during a climb. Inspection of TIPs is different, the end goal or task is different, the activities performed are different, and the equipment as well.

For example, let’s look at ascent. For our discussion, this is where the line has been set from the ground and the climber’s goal is to go up. In these cases, redundancy can have many benefits. Here are some features that any ascent system should include:

- The inability of the climber to capsize.
- The ability to proceed up or down should any equipment fail.
- The inability to fall should one piece of equipment fail.

These seem simple and necessary precautions for a tree-ascent system, but overly protective for a work-positioning system. Once the climber has ascended, secured him or herself in the canopy and closely inspected the TIP, he/she prepares to move laterally. This is opposed to the ascent with a remotely set TIP in a superficially inspected tree. The situation changes through means of more information, reset ropes, and task(s) at hand. Therefore, the system must change and hence the equipment, techniques and, most importantly, the mindset must change as well.

What has changed? The climber, during work, has access to the tree’s structure. The TIP in the tree is better assessed for hazards and limitations. Lateral movement is necessary. Cutting tools will be used and most likely will require the climber to use two points of attachment.

To lump one system into the “climb” category is oversimplified and fallacious. It seems analogous to saying, “I am going ‘tree cutting.’” Yes, we are, but there are many shades of “tree cutting.” For years, tree climbers have used one method to ascend, work, and descend. It worked, but with sacrifices in efficiency and ergonomics.
Conclusions

Today we have more knowledge, techniques and “thinking” at our disposal, yet I feel some climbers still “lump” too much together, looking for the Holy Grail, the one system that “does it all.” In the process, safety may be compromised. That system may exist, but we need a way to justify it, to objectively say, “Yes, we have found it!” One way to do this is to look at how efficiently a climbing system can change from one task to the next, from one phase of the climb to another without compromising safety or efficiency. Without phases delineating our specific tasks, we lack an objective measure.

I am not really concerned with systems or even specific techniques. Those will sort themselves in time, by climbers better and more creative than me. What I see the need for is a systems approach or protocol so we can look at, describe and then use systems, tools, and techniques in the safest, most efficient manner. We need a way to break down the complicated aspects of any system so climbers can make good decisions. We also need a system of common terminology. We may not use the same words, titles or nicknames, but we speak to the same approach, methods and ideology.

Not a “why?” mentality, but a “why not?”

What makes an action or attitude safe? One way to look at it is repeatability and consistency. An action, a tool, an attitude can be considered safe if it reliably and to the best of our ability produces the same predictable action. The tool, action or attitude may contain risk, but how we manage, use, or act makes the whole process, act or situation predictable.

Look, for instance, at rigging chunks of wood from a spar with a line. The risk is high. There are many things that could go wrong. The consequences are steep. Taken as a whole, without proper tools, training and knowledge, the act itself is hazardous. But with proper tools, training, techniques and knowledge, it can yield consistent, predictable results.

I realize that often the best acts and intentions can go awry. We cannot account for every variable, nor see into the future. “Safe” actions may yield unpredictable results. However, we must move forward and draw a baseline where reasonable.

Taking redundancy and backups to the extreme is not the answer. However, when easy to do, when not offering interference or compromising safety, then we must ask “why not” instead of “why.” I often use my lanyard when sitting still for a drink of water and quick break. Not because I need it, but because I can think of no reason not to.

This is the struggle. The struggle to progress, but not forget the tragic mistakes of the past. The struggle to borrow judiciously from other disciplines. The struggle to innovate for tomorrow and its challenges. The struggle to develop systems, tools and, most importantly, processes in which others can be educated, and which promote, first and foremost, safety through procedure, intelligence and efficiency. We must approach the phase system of climbing, safety and productivity not with the question “why?” – but “why not?”

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 2013 in Charlotte. 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.
The TEN COMMANDMENTS for TREE WORKERS

By John Ball, Ph.D., CTSP

Tree workers look, or at least should look, to the Z133 as their bible regarding working safely in their high risk environment. The word bible, with a small “b,” is used to describe any preeminent authoritative book on a subject. The American National Standard Z133 for Arboriculture Operations – Safety Requirements certainly fits this definition. It is the guide for safely performing our work from 1.1 Scope to 8.11 Fertilization/Soil Management. However, as with most bibles, it is rather lengthy, 71 pages including the annex and index for the 2012 revision, and some workers may not willingly wade through it section by section, just as many folks cannot recall many Bible verses. However, most folks know the Ten Commandments (didn’t say follow them). So perhaps in addition to our bible, the Z133, we need our ten commandments (or our top 10 list for all you late night television fans). A list of rules that, if followed, would result in saving the most lives.

A beginning step to determine how many tree worker lives could be saved is to know how many lives have been lost during a year. Almost every week during the year tree workers die while performing their duties, but the actual number of workers who suffer fatal injuries is not accurately known. Even the various mortality estimates lack much precision. I have read estimates as low as 30 to 40 deaths to a high of near 200.

One problem with these estimates is that exactly who is a tree worker is not well defined. Is it anyone working on or in a tree; or someone being paid to do this work regardless of their job title; or is it limited to workers for tree companies? Another problem in calculating reliable numbers is that tree workers die quietly, their deaths rarely generating much notice in the media, even the government misses fatal incidents where the worker is the sole employee, working for a very small company or is undocumented. Their passing may only be noted by coroners, the attending police, fire, or emergency medical services personnel and their family and friends.

The TCI Magazine “Accident Briefs,” while perhaps a morbid take on the industry, is probably one of the most read items in this magazine. If you page back through the Accident Briefs monthly calendars, it is common to find between three and eight fatalities documented for every month, or about 60 or more over the course of a year. This is not a complete list, as TCI notes, but is compiled from random reports that come to them from the industry, Google media alerts and government investigations.

The U.S government’s Bureau of Labor Statistics Census of Fatal Occupational Injuries (CFOI) reports about 170 landscape services workers, an occupational sector (North American Industrial Code System 5617300) in which tree workers are included, are killed on the job each year. Obviously, tree workers are not the only fatalities within the landscape services industry, but we are probably at least half if not the majority of them. When we were a separate industry sector (Standard Industry Code 0783) back more than a decade ago, the annual fatalities numbers published by the CFOI were about 60 for tree workers. This is probably an underestimation, as the Bureau acknowledges it does not capture every occupational fatal injury in any industry and some industries that have good fatality data find that the actual numbers may be half again to more than double that which the CFOI reports.

So let’s assume for the purpose of this article the number of tree worker fatal incidents is 140 a year, and that this includes anyone working for pay on trees in managed landscapes, whether in a residential yard, along a city street or near an electrical line. The number is probably not too far off from, though still under, the actual total and there is good documentation for at least this number of fatal incidents.

Now it would be hard to come up with a list that incorporates only 10 commandments to prevent all tree worker fatal incidents; tree workers just find too many ways to die on the job. We have tree work-
ers who climb trees that have been notched and the back cut started just to remove a limb they forgot (... and who) would (be) swept into another tree or building when the tree fell through its arc – and with a predictable outcome. Workers have also died when they slipped off the headache rack on the lift and fell. But these are the “ones,” incidents where typically a single worker dies over the course of a year. Every death is a tragedy of course, but what are the ones that result in the most fatalities, the big 10 so to speak? The ones that if we had a commandment for it, that everyone always obeyed, it might drop our mortality rate to that of professions like office workers; ones that might eliminate the need for TCI to have an Accident Briefs in every issue.

The Tree Workers Commandments

I shall work every day as though no one cared or was the least bit concerned with my safety; I alone am responsible for my life. Lives saved, about 120.

Wow, observing this commandment might drop the rate quite a bit! The root cause to industrial fatal incidents falls within two broad categories, unsafe acts or unsafe conditions. Unsafe acts are actions (or inaction) by individuals that results in an incident. As an example, a worker operates an aerial lift without fall protection and falls from the bucket. Unsafe conditions are physical conditions or circumstances that create a hazard. An unsafe condition would be the mechanical failure of the lift while being operated (and the failure due to a condition that would not have been detected during the daily inspection). Another way to look at this is a worker not wearing a harness and fall protection while operating an aerial lift is an unsafe act; the worker not being provided a harness and fall protection to wear is an unsafe condition.

The root cause of the majority of tree worker fatal incidents is unsafe acts. As ANSI Z133 1.4 states, “Each person (employee or otherwise) shall be responsible for their own safety while on the job site.” Why would anyone choose to climb a tree that had already been notched and the back cut started? We have to take more responsibility for our own safety and recognize when we are making (or about to make) decisions and take actions that put us needlessly at risk. If we obey only one commandment, this is the one. The remaining nine are good reminders of how to avoid those needless risks.

I shall always establish and observe a drop zone. Lives saved 34.

Stuck-bys are a very common incident in tree worker deaths, with most involving being struck by a limb, either a limb that was pruned and dropped free or a limb that breaks from a falling tree. A second source of struck-bys is being struck by the falling tree, and the two combined often result in more fatalities than any other type of event during a year. A frequent reason for being struck is the ground worker walks through an unidentified, so unobserved, drop zone and their path intersects that of a UFO (unobserved falling object). Establish a zone, make the boundaries clear to all, and observe it.

I shall always assume every job site has electrical conductors present and work accordingly. Lives saved 27.

Oh, come on you say. You can see that this job doesn’t have a conductor anywhere near it. Guess what? That’s what the majority of tree crews thought before a worker was electrocuted. Touching the conductor with your hand or back or through a metal pole pruner or ladder are the most common reasons a tree worker dies from electrical shock. No one in their right mind would brush against a conductor or sweep a metal pole pruner on a wire, but you would if you did not know the conductor was there.

“Our wireless headsets save time and money - Now jobs are faster and safer!”

- Unlimited Crew Talk Simultaneously
- No Buttons to Push
- Self Contained - No Wires or Beltpacks!
- Completely Portable - 800 Yard Range

1.800.399.5994 www.eartec.com

Circle 13 on RS Card or visit www.tcia.org/Publications
While the industry cannot make you look for conductors (only cite the company if you didn’t and an incident occurs, a little late and not much help to you), we ought to ban the use of any metal ladders or pole saws – period. Touching the conductor, or a branch on a conductor, with a metal pole saw is the single most common electrocution event. True, line clearance tree workers are not using metal pole saws and neither are many tree companies, but lots of workers employed in landscape maintenance and lawn care companies do carry these and if they are working on a tree they are tree workers.

I shall never work on or from a tree that has not been assessed for hazards. Lives saved 16.

Every year we have trees fall apart while someone is felling them or aloft. Sometimes it’s the decayed branch they have used to anchor their climbing line. Other times it’s a tree breaking beneath them as they cut a limb. Frequently it is during rigging when the system is overloaded and the weakest link is the tree. A comment often made by the crew after these incidents is everyone thought the tree was fine, after all it was an oak (or other tough tree) and they don’t fail. Any tree can fail.

I shall take a first-aid class every two years and practice my skills and knowledge so I am prepared to help. Lives saved 12. Too many tree workers “zone out” during their first-aid class and the first time they actually need the skills panic rather than perform.

I shall never forget the first rule of the trapeze: “Never let go of something until you’re hanging on to something else.” Lives saved 9.

Back in the ’70s, it was routine (at least in the companies where I worked) that you would free climb to the top before tying in. It was not very smart then and is something not permitted now. Yet each year tree workers fall when unclipping from a line momentarily to work around a branch, or cut through their single fall protection with a chain or hand saw.

I shall take a first-aid class every two years and practice my skills and knowledge so I am prepared to help. Lives saved 12. Too many tree workers “zone out” during their first-aid class and the first time they actually need the skills panic rather than perform.

I shall practice “good housekeeping” on every job site. Lives saved 9.

Good housekeeping means the job is organized and everything is staged properly. It is not a job where tools, lines, trucks and debris are scattered randomly across the site. Poor housekeeping leads to inefficiencies – you are always looking around for a piece of gear or a saw, and tripping hazards. It can also kill. This past year we had workers killed when cables became caught in stump grinders and chippers, which leads us to the next commandment.

I shall respect that a chipper can chip more than just wood and pull in more than just brush. Lives saved 8.
We have had years where chipper fatalities were occurring almost twice a month during the summer and years where only a few occurred during the year. Regardless, chippers are one piece of equipment that is routinely involved in fatal incidents. The most common event is being pulled in hands first while feeding in some small twigs and branches, followed by attempting to kick in stuck brush and being pulled in feet first. Workers have also been killed working on chippers that are still running. There has been an increasing number of deaths to workers being struck by a line or cable that is accidently fed in along with the brush (remember commandment 6).

*I shall never assume that cones and a high-viz vest will alert all drivers to my presence. Lives saved 7.*

Traffic is a common part of the work environment. Many of the trees we work on are next to the street, or at least our truck and chipper is parked on the road. I am willing to bet there are others reading this who have felt the mirror as a truck roared by – an eerie feeling. I swear motorists aim at cones and vests. Now, with attention deficit disorder so common among drivers (texting), tree workers have to be particularly attentive. Don’t turn your back on passing traffic – the phrase “he never saw what hit him” might apply.

*I shall always wear my seat belt as shall everyone else in the vehicle. Lives saved 4.*

You would think by now everyone would know better, but always “buckle up.”

Well, there are the 10 commandments, and if we follow them perhaps we can save more than 120 tree worker lives per year. This is not to say these are the only rules to follow. Most incidents occur from unsafe acts, not an unsafe act, so there are multiple factors in an incident. However, if everyone started the work day with these in mind (maybe recite them at the first job briefing ... just kidding) and took them to heart, we could make a significant drop in our fatalities. I would like someday to come to TCI EXPO to give my annual safety update and report no one had died during the past year. I know that is probably an unrealistic goal, but goals are often more about the journey than a destination. Following these 10 commandments is a first step down that long path.

John Ball, Ph.D., CTSP, is a professor of forestry at South Dakota State University, where he instructs courses in arboriculture and forestry. He also instructs the emergency medical technician and rock climbing courses as well as serves as a campus arborist. This article is based on his presentation, “Arborist Safety Update: What Happened in 2013?,” at TCI EXPO 2013 in Charlotte this past November. To hear the entire audio recording of that presentation, go to this page in the digital version of this issue of TCI Magazine online at www.tcia.org, under Publications, and click here.
Tree worker killed by cut tree

A tree worker was struck and killed by a cut tree February 3, 2014, in Ware, Massachusetts.

Brian Smith, 27, of Palmer, Mass., was struck on the head by the tree. He was pronounced dead at the scene. It is not known whether Smith was wearing a helmet at the time.

Smith was part of a crew from a local-tree care company working on the job, and was apparently trying to guide the falling tree with a rope when the accident happened. Two other tree workers were also working along with Smith, according to a report in The Republican and on MassLive.com.

Florida tree service employee electrocuted

A tree service company employee was electrocuted on the job February 8, 2014, in St. Petersburg, Florida. St. Petersburg Fire and Rescue found the man, approximately 50 years old, hanging from a tree. He had come in contact with a power line.

Fire rescue crews had to retrieve the motionless man from 35 to 40 feet in the air, where he was hanging from his safety harness. The man was in cardiac arrest, and was treated and transported to Bayfront Medical Center where he later died, according to a Bay News 9 report.

California tree worker electrocuted by power line

A tree worker was electrocuted February 17, 2014, in Malibu, California, after touching a live electrical wire while up in a tree. Authorities received a call reporting an unconscious man stuck in a tree 25 feet above the ground. After being lowered, the man was pronounced dead at the scene.

The unidentified male Hispanic was 50 years old, lived in the San Fernando Valley, but was from El Salvador and not known to have family in the United States, according to a report in The Malibu Times.

Golf course owner struck, killed by cut tree limb

The owner of a golf course in Dallas, Gaston County, North Carolina, was killed after he was struck by the tree limb of a damaged tree on the course February 18, 2014. The victim was identified as Joe Herman Ratchford, 63.

A large tree had fallen to the ground in an awkward position. Ratchford was working to remove the tree when a part of it struck him in the head, according to the WSOC-TV Channel 9 report.

Homeowner killed in struck-by

A homeowner man was killed February 19, 2014, in Summerville, South Carolina, when a tree limb fell and struck him on the head while he was doing yard work.

Jason Couch, 43, was doing yard work at his home in the Legends Oaks neighborhood when a tree limb fell out of a tree and struck him. Cause of death was brain injury due to blunt force trauma to the head.

Officials say Couch was by himself when the incident happened, and was found by his wife when she arrived back home with their two children, according to a WCSC Live 5 News report.

Tree worker trapped by tree top

A tree service climber found himself trapped February 21, 2014, when a limb he was cutting fell on top of him, pinning him into the tree’s branches in Oak Hill, Fayette County, West Virginia. The 20-year-old man was trapped for at least 30 minutes.

Oak Hill Fire Department led the rescue. Fayetteville, Nuttall, and Ansted fire departments were also on-scene with a high-rescue team, a wrecker service, and a tree climbing team, according to a report in The Register-Herald.

Tree company owner killed in struck-by

Bernardo Teran, 49, owner of a tree trimming company, was killed February 26, 2014, while he and his sons, along with two other employees, were removing a large date palm from the yard of a home in El Cajon, California, near San Diego.

The group was attempting to remove an 18- to 20-foot-tall date palm from a yard. They expected the large tree to fall onto a

(Continued on page 36)
Introducing the NEW Morbark Beever M15RX

15" chipping capacity. High productivity. Lighter-weight design.

Find out if the compact Morbark® Beever™ M15RX brush chipper is right for you.

Locate your local authorized Morbark dealer at www.morbark.com.
Will Maley ascends to TCIA Board chair; Bartletts’s Alan Jones joins TCIA Board

Will Maley, long-time owner of Cedarlawn Tree Service, Inc., a TCIA-accredited member located in Ashland, Massachusetts, was sworn in as chair of TCIA’s Board of Directors during TCIA’s Winter Management Conference 2014 in Atlantis, Bahamas, in February.

However, assuming the position of chair is not the only big change for Maley this year. On January 1, The F. A. Bartlett Tree Expert Company acquired Cedarlawn. Maley had been at the helm at Cedarlawn since graduating from Stonehill College in 1981, however he will not be joining Bartlett along with the rest of the staff. He has started Clarity Advisors, LLC, a tree care and business consulting company.

In his 33 years in the industry, Maley has been a strong proponent of volunteerism and giving back, serving as chair of the Massachusetts Arborists Association certification committee, representative to the Green Industry Alliance, a legislative advocacy group, and serving as president of the Massachusetts Arborists Association (MAA) in 2000. Once his stint on the state organization’s board ended, Maley listened to the encouragement of colleagues and joined the TCIA Board of Directors in 2007.

Alan Hill Jones, a vice president and division manager at The F. A. Bartlett Tree Expert Company, was sworn in as a new member of TCIA’s Board of Directors during Winter Management Conference.

Jones joined Bartlett in 1989 as an arborist representative in the Shenandoah Valley, Virginia, having previously spent three years as a cooperative extension agent with the University of the District of Columbia, in Washington, D.C. He was promoted to local manager in Charlottesville, Virginia, in 1991, and to assistant division manager of the Mid-Atlantic Division in 1993. He became vice president and division manager in 2001. His current duties include operations management, personnel management, recruiting and ensuring the financial success of 10 offices and five satellite operations.

* * *

Accident Briefs

(Continued from page 34)

designated path to the ground, but the tree ended up falling on Teran, killing him.

According to a report released by the medical examiner’s office, as reported by NBC 7 San Diego, after one of the employees in the group cut the tree, it became unstable and then suddenly collapsed on top of Teran, who became partially pinned under the tree. His sons and employees were able to remove him from under the palm and one of his sons called 911. Emergency crews rushed to the work site, but the father was pronounced dead at the scene, according to the NBC 7 San Diego report.

* * *
You work hard. Your insurance should work hard for you.

ArborMAX®
insurance for tree care companies

Includes expert Tree Care Industry-specific Loss Control provided by TCIAF

ArborMAX is the only insurance program endorsed by TCIA.

Coverages Available:
- Commercial General Liability
- Commercial Automobile
- Inland Marine
- Crime
- Property
- Umbrella

Workers’ Compensation
TCIA Accredited companies and companies that have a full-time CTSP are eligible for consideration.

Tree Care Specific Coverages:
- Arborist & Landscape Professional Services (Errors & Omissions)
- Pesticide & Herbicide Applicator
- Tools & Equipment
- Per Project Aggregate
- Blanket Additional Insureds (including Primary Wording)
- Plus numerous additional customized products

Call today and start saving!
1-877-602-7267

www.arbormax.net

Insurance program brought to you by General Agency Services, Inc., endorsed by Tree Care Industry Association

Circle 5 on RS Card or visit www.tcia.org/Publications
When the mini lift arrived on American shores a bit over a decade ago, it would have been difficult to see how quickly they’d grow into such a key part of the tree care equipment fleet, overtake climbing and challenge the venerability of the bucket truck. After all, these mini lifts were just re-purposed aerial units designed largely for building maintenance.

However, as soon as the mini lift started reaching into the branches, it became clear that they would be here to stay, based on two business needs: safety and productivity. If you’ve been in business for any period of time, you’ll recognize that safety and productivity are often at odds. Will safe practices slow productivity (and thus impact the bottom line), or will increased productivity threaten safety (and drive up labor costs)?

In retrospect, the mini lift has come to represent a rare moment in time when those in tree care (arguably a potentially dangerous vocation) can have it all – safety and productivity.

One manufacturer maintains that in the U.S., the number one use of the mini lift is in arbor care, secondarily in building maintenance, whereas in the rest of the world the markets are reversed.

So, what’s driving the mini lift demand among tree care professionals, and where are demands and trends heading?

Altec Industries, Inc., has offered the mini lift for several years, according to Andy Price, Altec market manager. “Our lifts are manufactured in the United States,” says Price. “While there is not a lot of new technology for this type of equipment, one thing is consistent – the demand from users is increasing.”

Typically, when you ask a tree guy how high he wants to go, the answer is as high as possible, says Price, adding that when asking customers a specific height they are looking for, the most common answer is about 60 feet.

Unlike truck-mounted or bucket-type units that rely on high-horsepower master

“The single most defining event supporting the growing popularity of the mini lift is the dying out of the American ash tree due to the effects of the emerald ash borer.”

Mike Hrycak
power to run the truck or chassis, the mini lifts require little horsepower, resulting in improved efficiency. These units are also favored for high reach and versatility.

“Most engines are relatively small,” says Price. “When selecting a lift, there are two main things to think about: the engine has to not only get you in the air, it also has to drive the carrier and tracks.” While most engines are predominantly diesel, some are gasoline, according to Price. “We could see a shift to more gasoline powered lifts due to the dramatically rising price of the new (cleaner burning) diesel engines,” says Price.

The real interest in the growing popularity of mini lifts is in backyard work, according to Price. If you can keep a worker in a (mini lift bucket), he or she can be more efficient and work safer than when climbing, he says.

Many tree care companies see the lack of productivity when a climber is getting into position, according to Price, adding that, in a lift, one worker can accomplish much more in a workday – and, it’s also a very safe option.

Machines can cost anywhere from $90,000 to $200,000, and range from 32 to 90 feet, according to Price, with the cost for a typical unit going into tree care about $140,000.

“The cost increases as the reach increases, specifically units with 50 feet or higher working heights,” says Price. “The reason is that as you go higher, you need additional – and heavier – materials, and larger outriggers.”

Altec offers an insulated mini lift with a 42-foot working height – the AT37GW. “More and more, we are seeing tree care companies that require insulated lifts for site work,” says Altec’s Andy Price.

The demand can drive average prices up due to the manufacturing process of insulating, Price says. However, he recommends putting a high priority on safety, adding that an insulated boom can help prevent serious injuries or fatalities at the job site.

In the opinion of Mike Hrycak of Tracked Lifts, Inc., “The actual acceptance of mini lifts in arbor care has been governed a lot by natural events, including severe hurricanes and, very recently, ice storms. But the single most defining event supporting the growing popularity of the mini lift is the dying out of the American ash tree due to the effects of the emerald ash borer,” he says.

“This problem has reached past the Mississippi River and upper Midwest. The problem is so massive that even most hardened opponents of the technology are
simply having to admit that the mini might be the only safe and efficient way to bring down dead American ash trees. These trees have become totally unsafe to climb if dead a few months or longer. In my opinion, this is the single most defining moment in the broad acceptance of the mini lift in America,” Hrycak maintains.

Unlike many other machines, trends in mini lifts for the tree care industry have not been technical. He says, “As far as technological advancements go, there is drive to simplify these machines and to ruggedize them to allow crews to be able to operate them in demanding, sometimes abusive outdoor environments. That means dealing with dust, snow, sawdust and even road salt.”

“It’s been a matter of refining existing models to further enhance their applicability to tree care so they can withstand rigorous operation,” Hrycak says.

Much of this change is driven by tree care users. “I see these changes as the main focus among manufacturers,” Hrycak says. He points to what he says is the industry’s first mini lift unit dedicated to arbor care. We carry this unit called the Arborist by Arborists, and it is a direct result of years of tree care professionals’ feedback. (It is one of seven models his company offers.) These are made in Italy and are vastly simplified.” Most notable among changes, Hrycak notes, are the removal of systems and options that do not apply to tree care. “The result is a much more reliable and durable machine specifically designed for the harsh tree care environment.”

“U.S. arboriculture is a dynamic and still-unfolding field. Despite initial reluctance to adapt mini lifts to tree care fleets, things have changed to where many, if not most, forward-thinking companies are using the mini lift in their day-to-day operations,” he adds.

Hrycak reports, “Throughout world markets, only in the U.S. are the vast majority of mini lifts sold for arboriculture use. In just about every other culture they are sold for general maintenance and rental purposes, with arbor care being a sideline. The U.S. is just about the only world market I know of where this is the case.”

One of the first distributors of the mini lift in the U.S. was Lenny Polonski, head of marketing and sales for All Access Equipment. From the start, he says, “The mini lift has given the tree care worker an added dimension in safety and the ability to work faster. They were and are the way of the future,” he maintains,” because they virtually eliminate climbing gear and the expense of a bucket truck.”

“The trend among users right now is to try get to 75 to 100 feet,” Polonski says.

“The mini lift came on the scene in America about 10 years ago and in the tree care industry followed a path similar to the bucket truck,” says Polonski. “Just as the bucket truck was designed for the utility industries and re-purposed for tree care, mini lifts, developed first in Europe, were repurposed in the same way. They started as equipment used in indoor cleaning and maintenance in high and difficult spaces and were very soon adapted for tree care operations.”

“Over the years, there have been
When the US Army needed a dependable, versatile, go-anywhere lift for the tree dept at a military base, they chose the only lift that made the cut:

**THE NEW RUGGEDIZED CRAWLER 78SCS**

Get the skinny on the specs of the CRAWLER 78 at: crawlerlifts.com
AllAccessEquipment.com | info@AllAccessEquipment.com | (978) 712-4850

HYDRAULIC LONG REACH CHAINSAW now at a reduced price of $895.00 when purchased with the Crawler 78 SCS!
advancements that directly impact the tree care industry, for example the use of remote controls and much stronger, more rugged machines,” Polonski recounts.

From Polonski’s perspective, “What I see coming will be the adoption of technologies from other industries, specifically automotive technology. Some examples would be the ability for remote diagnostics, communicating with the machine via smart phone and the Internet. Already, offices and factories can keep track of their mini-lift machines right on their desktop computers, monitoring use and condition. It is very similar to a Blue Tooth-enabled smart phone control you might find in a new pickup, where the truck can talk to the factory about its condition. Plus, some owners would like to keep tabs on the mini-lift’s use to check on hours of run time and to ensure that it is not being abused.”

“All of this technology is headed in the same direction for the mini lift,” Polonski maintains.

“Ultimately, the mini lift is a technology that cuts labor costs. You can do more with less labor cost and be safer,” he says.

Polonski says his company soon will unveil a new series of tracked, crawler-type mini lifts from its main supplier, but was reluctant to discuss nomenclature and specifications prior to an early summer (likely July) launch. He adds that his supplier is ramping up to triple production, largely to meet tree care needs.

“In my experience, even though mini lifts come with small engines, they get the job done and can save up to $10,000 a year in fuel costs. Many tree care companies are starting to base their purchase of a mini lift on that fact.”

Lenny Polonski
NO BOUNDARIES

"With Teupen, we’re able to competitively bid jobs that were previously considered unsafe, winning more bids and performing the work safely."

-Mike Pavlis
AllCare Tree, Hilton Head, SC

NOW THAT’S WORK WITH NO BOUNDARIES!

SCAN ME!

teupen-usa.com/NoBoundaries | 877-838-7361

Circle 34 on RS Card or visit www.tcia.org/Publications
According to Polonski, “These mini lift machines consume maybe one to two gallons of fuel on a very busy day. Let’s say the lift uses two gallons a day; that’s $8 a day or $40 per week. At 52 weeks, that’s about $2,000 versus $10,000 just in fuel. Right away the mini lift offers an $8,000 advantage in savings a year. They help pay for themselves.”

Polonski adds, “Couple that with insurance costs, which are cheaper than for a truck, and factor in that there are no road excise tax or other truck-related expenses and it is easy to see why the mini lift is gaining favor in the tree care industry.”

Looking back on monthly issues of TCI Magazine for the past two to three years, one will find many articles on the mini lift. The reason for that is the impact on the industry. If the first decade or so of development and acceptance is any measure, the next decade should see the mini continuing to give a major boost to tree care.

ReachMaster’s BlueLift 72, or B72, features a 72-foot working height, 440-pound basket capacity, automatic outrigger setting and remote and wireless control.
WORK SMARTER, NOT HARDER with Tracked, Self Propelled Mini Lifts from 60’ to 120’ WH

Extremely reliable non-computerized, simple live hydraulic and electric-over-hydraulic operating system. Honda gas or “Green” Hybrid diesel/24V power. Extremely low ground pressure for over-turf driving. Units 31” & 44” wide. 40% slope driving and deployment ability.

1-866-543-8575
www.trackedlifts.com

Circle 35 on RS Card or visit www.tcia.org/Publications
During my presentation on this same subject at TCI EXPO in Charlotte last November, I asked the audience how many of them practiced aerial rescue. Most raised their hands. Then I asked, “How many of you do crane removals?” A handful raised their hands. Then I asked, “How many of you practice an aerial rescue for an accident involving a crane?” No one raised a hand …

Emergency response takes a lot of careful planning for it to work effectively if the need arises. This article outlines those challenges, and the planning, preparation and protocols needed to be ready for a rescue.

There are many challenges we face as arborists every day. That is what makes it a fun job for me, every tree is different. But that is also what makes it challenging for a rescue plan. I think of the challenges that a particular crew has and how that can help or hinder a rescue. What is the crew’s dedication to safety? I am a firm believer that safety IS an attitude. It is how and who you are.

A good friend and mentor of mine taught me that, “How you do Anything, is how you do Everything.” Therefore, it is your responsibility to be safe and help the others around you be safe and do any task as if it was everything. Because if you cut corners on the “little” tasks, at some point you will not be as focused on a “big” task, and cut a corner there. And that can be the difference between life and death in this industry.

The next set of challenges is the level of knowledge and skills of the crew. Give your employees or yourself the best opportunities to learn and grow. Learn the new techniques, teach the right way of using tools, and always know as much as you can about the trees you’re working on. Not knowing the tree is like being a mechanic and not knowing how a car works inside and out, only knowing how to turn a wrench. The newer techniques won’t replace what you already know, and won’t make them wrong, but they will add to that toolbox of skills, and at some point probably come in very handy. Who knows, you may find that your productivity increases as well as your level of safety.

When developing your rescue plan, the first thing to consider is what type of work, specifically, you do. Aerial rescue and emergency response preparation is not a cookie cutter system for all arborists, because not all arborists work the same way, on the same trees, in the same areas, or with all the same equipment. Therefore, it is your responsibility to develop a plan that fits exactly with what could happen to you based on the type of work you do.

As in my opening example, if you do a lot of crane removals, then practice and prepare for an accident that can occur with a crane. It may end up involving more discussion and planning than actual rescue, but preparedness is the key. Similarly, do not waste your time practicing an aerial rescue of scenarios that you will most likely not ever be involved in. Whatever it is that you end up developing as a rescue plan.
– write it down, practice it, and incorporate it into your normal everyday worksite routine. The more you plan and prepare, the better off you will be. Time is never wasted on reconnaissance!

A key part in the planning stage is to try and coordinate with your local fire and rescue departments. It may work, it may not. But at least you are trying and showing an initiative for your company’s safety. Develop and maintain an Emergency Action Kit (first-aid kit) that fits your operation. It should be as much a part of your everyday operation as a chain saw. Take it out and practice with it. Have it visible and available on every job site.

Finally, have an easy resource for anyone to know where you are and to be able to contact 911. A great example that was mentioned to me was to have a white board on the dash of every truck with an old (charged) cell phone velcroed to it. When the crew arrives at a site, the address and any other rescue plan particulars are written on the board. That way, it is easily found, and there is a dedicated phone that will work to dial 911.

If you ever played a sport in high school, you know the amount of practice and precise preparation it took until you played your first game or had your first race. That analogy applies when preparing your company’s or crew’s emergency and aerial rescue response plans. You can only expect yourself and your fellow arborists to do what you/they have been trained to do.

I suggest starting with a ground rescue scenario. Once everyone feels proficient in that, then maybe you can move to tougher scenarios. When practicing aerial rescue, there is no need to be 50 feet off the ground. The dangling on the rope experience can be felt just as effectively five feet off the ground. That way, more people can participate and watch without getting sore necks, and if something does go wrong, a five-foot fall shouldn’t hurt as bad. Also, make sure there is no time limit. Since when was practice ever a race?

Change up the injuries and scenarios as you go through the practice. Have different people do different scenarios. Use the opportunity of the potential accident to teach the importance or reason to use a certain work process (e.g. practicing a

A tree trimmer was rescued July 13, 2013, after spending 90 minutes in a palm in Las Vegas, Nevada. Firefighters first cut away the fronds of the palm skirt that had pinned the climber, then firefighters assisted the victim onto a ladder and down. Courtesy of Tim Szymanski, Las Vegas Fire and Rescue.

Don’t Just Climb. Elevate.

Introducing Our Premium WLC-760 & WLC-790 Saddles

- Double rope suspension bridge constructed from top-of-the-line rope that’s the preferred choice of arborists and rock climbers.
- Diamond knot at one end of suspension bridge offers elevated performance and security.
- Black and orange suspension bridge features a white core, making wear readily visible with a quick glance.
- Flexibility of multiple attachment points with lightweight black anodized rigging plates.
- Enhanced extra wide back pad extends further forward on hips, giving you amazing comfort and support.
- Memory foam reduces pressure points, wicks away moisture and offers cool comfort!
- Spaces at each hip for the convenient attachment of carabiners.
- Snap in with just one hand with the fixed position, angled side dee rings!

Circle 40 on RS Card or visit www.tcia.org/Publications

TREE CARE INDUSTRY – APRIL 2014
chain-saw cut scenario and reminding as to the importance of two hands on the saw at all times). And, most importantly, keep your practice and training fun and full of energy. People learn more and respond better to energy and fun.

When it comes time to implement your emergency action plan into your everyday work, there are a few parts that must be practiced or reviewed before you’re ready to respond to an incident. A crew’s readiness for a job or job-site setup when arriving at a job should establish the implementation and details of your plan. The crew should review: where they are, who will do what in the event of an incident, where the location of the first-aid kit is, and if the plan will adjust as the job progresses. Practicing enacting the plan should be done just as much as the rescue practice so that it is fluid and doesn’t waste valuable time during an emergency.

In an actual emergency, every member of the crew should have a specific job or task. In stressful situations, people often don’t know what to do and they revert to their natural instinct, to help. But that could become a problem if they are getting in the way or not attending to some other important task that needs doing. In your planning, designate a task for every crew member. Whether it be crowd control, traffic control, flagging down the ambulance, or assisting with the rescue, everyone having a set job or task will help your rescue plan flow smoothly.

I want to cover the basics of emergency response protocol:

How do you initiate your emergency action plan? Three whistle blasts, horn honks, or air horn honks are examples of ways to activate an emergency action plan. Having everyone on the crew know what the signal means is the most important part.

Secondly, call 911 and relay as much information as you can to the dispatcher about the casualty. Make sure you let them know if the situation is aerial or on the ground. Do not assume they know anything about your situation or what you were doing before the accident.

Thirdly, do not start to attempt a rescue or give help unless it is safe to do so. Do not become the second victim. Electrical contact accidents are the best example for this. Any EMT or firefighter will not proceed with a rescue with electricity present until they have confirmation from the utility that the power is off. This may be hard to realize and it will probably be very hard to resist the temptation to break contact or rescue near the lines, but risking your safety to conduct a rescue is not advisable.

Additionally, do only what you can and are trained to do in regard to the rescue and first aid.

Fourth, it may not always be necessary to extract or move the victim. Conduct the rescue in accordance with the casualty’s vital signs. When the rescue professionals arrive, listen to them and do what they ask you to do. They will assume control of the situation when they arrive, so going with the flow will ultimately help the rescue. Again, working with them ahead of time and being familiar with each other will also help with the overall rescue response and effectiveness.

Finally, document your policies, procedures and training. You can then provide your employees with written documentation of your policies so they can better understand them, and it serves as proof of your intent on safety if it ever comes under scrutiny by OSHA or anyone else.

Practicing and preparing for a potential accident can take a lot of time and effort. It is important to first start looking at the work you do and what accidents could occur based on that work, so you can then know what to prepare for. It also pays to work on a company-wide attitude of safety and safe work practices to avoid accidents and reduce risk. And when it comes to the preparation – practicing specifics, being flexible for varying scenarios, and focusing on the casualty’s needs and not necessarily the extraction – will help you be ready for a potential accident in this risky business of a job we call arboriculture.

Sam Kezar, BCMA and CTSP, is owner of Aspen Arboriculture Solutions, in Lennox, South Dakota, an arboriculture and safety consultant, and an instructor with North American Training Solutions. He has consulted on safety programs for arborists as well as oil companies in North Dakota, and provides expert witness and litigation support for arborist safety- and arboriculture-related cases throughout North America. This article is based on his presentation on the same subject at TCI EXPO 2013 in Charlotte this past November. To hear the entire audio recording of that presentation, go to this page in the digital version of this issue of TCI Magazine online at www.tcia.org, under Publications, and click here.
Introducing the Atlas™ Rigging Line.

The New Choice of Arbor Professionals

Atlas™ is Sterling Rope's latest arbor addition: a tough, burly rigging line with great knotability and the strength to tackle your biggest jobs. Designed to seamlessly work with a Portawrap, capstan winch or rigging blocks, the Atlas™ delivers unmatched compatibility along with durability and longevity. The 9/16" (13.5mm) polyester sheath, nylon core construction is built to withstand the elements and outlast other rigging lines. Over two decades of rope engineering experience means you can rely on Sterling to provide superior performance and value over time. Make your next rigging line the one professionals choose: Atlas™.

Contact us at 800-788-ROPE or arbor@sterlingrope.com to learn more and request a sample.

Proudly Made in America

Circle 29 on RS Card or visit www.tcia.org/Publications
FIVE STEPS FOR "OFF-THE-GRID" SALES SUCCESS

By Lance Cooper

Many entrepreneurs and high-activity salespeople get stuck in survival mode. They don’t organize activities to establish a better, more stable way of living. They end up doing sales activities to provide for survival needs, such as mortgage payments, food and minimum debt payments. This earns them a high-tension, on-the-edge financial existence. Salespeople automatically default to activity levels that keep them eating, sleeping, communicating and traveling. As a result, they make subsistence—not ambitious lifestyle goals—their organizing focus. Today’s matrix, or on-the-grid norm, then turns into selling to survive and not to prosper.

Other high-activity sales reps focus on the goals set by their sales managers. Sales quotas and resulting incomes typically reflect the company’s minimum requirements, and not each rep’s present or future needs. Reps do their duty, and though this is a commendable character trait in many settings, it obscures the future reality of their own sales and income goals and causes a lack of fiscal stewardship. Many sales reps get a high-five for their faithful service only to borrow money to pay for a new roof.

Even those with higher aspirations may work without aligning income, sales, activity levels and lifestyle requirements. In some cases, top salespeople pay little attention to where their money goes, and they don’t work on a plan for a better lifestyle or future. They chase more money, more recognition, or faster advancement without anticipating what lies around the bend of the next accomplishment. Their list of achievements grows, but their quality of life suffers with more debt, higher credit card payments, wasteful expenditures and no safety net of savings. The stress and financial problems soon begin to burden these high achievers and their families.

Here are five steps that break this cycle and lead reps and their sales managers to greater productivity and prosperity.

1. Answer lifestyle questions. Imagine one year into your future; your life has improved because of the income you make and its uses at home. You’re receiving the sales recognition you need. You’re making an income that provides for more than your survival needs. Ask yourself, what you did with your excess income. For example, did you reduce your debt? If so, by how much? Did your savings increase? Were there improvements with your home? How does life feel now? Why? What changed in the past year, specifically? Answering these and other similar planning questions prepares you to envision the future you want and to do the next steps.

2. Find out what it takes for you to survive. Calculate your default survival income and write down the monthly payments you must make to just keep from going backward. Add these up and arrive at your “Survival Number.” This monthly total will include: housing, utilities, fuel, credit card and loan payments, IRS and state taxes.

3. By answering the lifestyle planning questions in the first step, discover your “Better Lifestyle Number.” For example, if you want to reduce your debt by $12,000 in 12 months, then you will need $1,000 additional per month above your Survival Number. If you want $6,000 more in savings by the next year, you will need to make $500 per month for that purpose. Continue doing this with other dreams and the monthly requirements for them. Add them up and arrive at your “Better Lifestyle Number.”

4. You can now design a “Monthly Income Goal” that motivates you (yes, you, not your company, not your sales manager, but you). How do you do this? Add your Survival Number to your Better Lifestyle Number. When you do this, you will know what monthly income it will take to achieve your dreams. From this planning, you will receive a committed and directive energy that 90 percent of reps today do not have.

5. Take your monthly income goal and turn it into a monthly sales goal and its related sales activity levels. (If you need help, ask your sales manager) Determine how many sales you must make each month to achieve your monthly income goal. Using a conservative closing ratio, calculate how many quotes, presentations or proposals you will make. Next, know how many first appointments you will set and hold to get the right amount of quotes, and the number of leads it will take each month to attain your appointment levels.

If competition and recognition drive you at this stage of your life, there is one additional step you must take. Find out what the top achievers are doing. If, after doing the five steps shown above, you find that your monthly sales goal needs to be adjusted higher to enter the top rankings, then adjust it up and plan how you will use the extra money for your future lifestyle.

These five steps prepare you for off-the-grid sales success. They focus you on your commitments, passions and needs, and the activity levels it takes to achieve them. Rather than survival numbers, frenetic achievement or boring duty, your sales goal will now relate to your current and future fiscal needs.

You will sell beyond survival. You will achieve lifestyle goals or greatness and make them your daily focus. You will align your income, sales, activity levels and lifestyle requirements. Your passion will not depend on the goals of your company or your sales manager. As you grow in your achievements, your quality of life and financial condition will improve. You will replace misguided stresses as you provide for your family and those who need help around you. You will be a high-activity sales professional.

Lance Cooper is a keynote speaker and author of Selling BEYOND Survival: The Essential System for High-Activity Sales Professionals. He is president of SalesManage Solutions, a company that teaches sales leaders how to recruit sales superstars and coach teams to greatness.

To learn how Selling BEYOND Survival can help you achieve off the grid success, visit www.lancecooper.com or email lcooper@salesmanage.com.
Solutions for hard work.

PROVEN TIER 4f EU STAGE IV TECHNOLOGY.

The Scania all-new engine platform features compact dimensions and a common footprint which enhances flexibility, simplifies installation and shortens time-to-market. Last but not least: Proven reliability, outstanding operating economy and industry-leading fuel efficiency vouches for long-term profitability and satisfied customers. In addition, without DPF! Power at work. It's here for you today.

www.scaniausa.com

Welcome to visit us at CONEXPO 4-8 March 2014, Stand No 82851 Hall No 3

Circle 27 on RS Card or visit www.tcia.org/Publications
S
o you are in need of some new employees. You need them to start soon, as in now. There is work to be done and the hiring process takes too much time. OK, STOP. Hiring the wrong employees quickly will cause you to spend tenfold the time dealing with them later. You know the employees I am talking about because you have them on staff currently. You spend more time dealing with the mistakes from one bad employee than you do dealing with all of your good employees.

Put a stop to this merry-go-round of bad hiring by putting a process in place. It is simple and can prevent headaches in the future by helping you hire competent, responsible workers. Follow these steps and you will be on your way to solving many of your future employee-related problems.

Consider Your Company Culture. You can hire the best employee ever and it won’t make a difference in safety within your company unless you have a company culture that is safety centered. Here is what I mean by that: Embrace safety standards and their implementation. Encourage reporting of safety violations. Brief existing employees on safety procedures and the consequences for failing to follow them. Make safety concerns an evident part of interactions at all levels of your company.

Being slow to discipline is another important aspect of having a safety-based culture. Yes, it is important to have good order and discipline to make your company run well, but take the necessary time to figure out exactly what happened and why when something goes wrong. Never discipline or discharge an employee for bringing a potential safety problem to your attention; even if it turns out not to be a big deal, it is always better to be safe. Creating a culture that is centered on safety is the first major step you can take toward hiring new employees that will be safety conscious.

Take the time to set up the process. I know you are in a hurry, but if you need employees immediately, use a labor agency. To truly hire the right people, force yourself to take the time to set up a hiring process. It will take time and energy to create a good hiring process the first time. However, once it is created, you can use it over and over again to achieve good results.

Write a good job description. Draft a job description that tells a little about what the job entails. Nobody wants to work in an unfriendly, not-fun work environment, so don’t make your job description sound that way. Set a deadline for applications and list what materials the applicant should submit. You will attract candidates who are best for the job if you have a description that actually describes what the job is.

Skills: Discuss the skills required for the position. These skills are the minimum skills necessary to be competent in the position. Don’t skimp on this part due to fear of being too restrictive. If you are less descriptive you may get more applicants, but chances are it will simply be a bigger pool of unqualified applicants. Also list skills that are desired but not necessary. These value added skills may prod people to apply, who would otherwise consider it an entry level position.

Education: Is there a minimum education level required for the job? If so, state what it is in your help wanted ad. Discuss the skills required for the position.
Compensation: Obviously this is a very important part of the job description for the applicant. They want to know what they will earn. Many companies will list “Depends on Qualifications/Experience” when addressing compensation. While it is OK to give yourself flexibility in determining the final wages, it is also beneficial to list a range of compensation available. Be careful not to make the range too big, however; applicants have a tendency to think they will be offered the highest amount listed, even if they are not fully qualified. List any other benefits that come with the position, too. Health care, paid vacation, flex time, or whatever else could be viewed as a benefit.

How to Attract Applicants: The more places the job is posted, the more people will see it, but will the right people see it? If the position you are filling is very general and could be filled by a person from any industry (bookkeeper, accounts receivable, etc.) then posting many places may be fine. However if you are looking for an industry specific skill (tree climber, bucket truck operator, etc.) then you should post in places where people with those skills will look. Local technical colleges often have free job postings. TCIA also has a great online job board.

Have an interview process. Use phone interviews first. Spending 10-15 minutes on the phone with a candidate is a great way to see what their communication skills are like. You can narrow down your field by eliminating those candidates who look good on paper but are terrible at communicating. Once you have narrowed things down by phone interviewing, figure out who you will bring in for an in-person interview.

Work with an attorney or HR consultant to develop a set of questions to ask each candidate you are interviewing. You can deviate from these questions as the interview progresses, but they should be a good starting point. Set a time limit for each of the interviews and stick closely to it. The idea is to create a level playing field for the candidates so they can be evaluated objectively. Let the candidate know about the time limit at the start of the interview and tell them to manage the length of their responses accordingly. This will give you some insight into the candidate’s time management abilities.

For the interview, come up with questions that will give you clues to the candidate’s abilities to perform well on the job you are hiring for. When looking for candidates who will be safety conscious, you should look for the following traits:

- Teachability: is the candidate willing and eager to learn new skills and procedures or are they stuck in their old way of doing things?
- Standards: does the candidate strive to meet specific standards you lay out?
- Job ownership: does the candidate take responsibility for their actions?
- Teamwork: does the candidate work well in a team? This trait is very interrelated with communication skills.
- Challenging attitude: does the candidate simply say what you want to hear or are they willing to have a challenging (yet respectful) attitude? A person with a challenging attitude will bring safety concerns forward.
- Avoids complacency: does the candidate pay attention to detail over and over again with tasks or do they start to cut corners?
- Communication: is the candidate a good communicator? This is necessary to let others know of potential safety problems.

Asking the Questions. Make sure you ask questions in an open-ended manner. This will give you more honest responses from candidates. For example, compare the question, “Would you be able to travel 40 percent of the time?” to “Ideally, how much would you be willing to travel for this position?” Of course the candidate is going to say that, yes, absolutely they would like to travel 40 percent of the time, if you phrase the question the first way. Often, candidates will flounder on the second question and respond that they would be willing to travel as much as necessary. You must be willing to push the candidate to give you a solid answer with your follow-up questions, such as, “Given everything you have going on in your life, give me the ideal amount of travel you would like to have as a part of this position.” If the candidate still gives a non-answer, then they aren’t very good at...
following directions and may not be the ideal candidate.

Consider a simulation. It can be a good idea to include a simulation as a part of the job interview. Have the candidate perform a simple task that would be a part of what they would be doing for the job. It could be as simple as changing the spark plug on a piece of small equipment, or having them show you how they would load/unload the truck. Just make sure it isn’t something that is going to injure them during the interview. Also, make sure you have everyone you interview do the same simulation so that you can accurately compare their abilities. If an actual simulation is not feasible, consider a descriptive simulation in which you describe a situation to the candidate and then have him or her write down exactly what steps they would take to complete the project or fix the situation.

Second Interviews. For some positions, a second interview may be a good idea, especially if you have multiple candidates that meet your criteria and did well in the first interview. Use your judgment on whether a second interview is necessary.

References. Always check references. So often a candidate will seem great on paper and do well in the interview, so you skip the reference checks because they take time and can be awkward. Don’t skip them. Take the time to follow up with the references provided by the candidate. Of course if the candidate is smart they will have given you a list of people who like them and will say good things about them. Requiring references from past jobs or of past supervisors is another way to get the whole picture. You can also see if you know anyone at any of the candidate’s previous employers and give them a call to find out more. What you find out may be surprising and prevent you from making a bad hiring decision.

Hiring. Once you know who you’d like to hire, make them an offer in writing. However, make sure it is an offer letter and not a contract for employment. An offer letter is simply a letter that states the terms
of employment and also emphatically states that their employment will be “at-will.” Under certain circumstances, an employment contract may be a good idea; however it is good to have “at-will” employment as your default.

What NOT to do in the hiring process

Do not hire someone who is very similar to you, unless of course the job you are hiring for is the same as yours. Look for skills and traits that will work well in the job being hired for. Look for skills that will complement the skills of others the candidate will be working with.

Do not assume that you will have an epiphany when interviewing people. Many people believe they will “know the right candidate when they see them.” This often leads to disappointment. The process should be put in place so that you can objectively evaluate and rank all of the candidates. Assuming you will “know it when you see it” can leave you asking, “who was the best candidate?” after all the interviews have been completed and you haven’t had that “ah-ha!” moment.

Do not hire friends of current employees. Sure, it is fine if you do this after the friend has gone through the same application process as all the other candidates and ends up being the best suited for the job. However, do not simply rely on your current employee’s recommendation that his or her friend is a great worker. Chances are your employee is looking out for his or her friend’s interest more than your bottom line. Friends who work together may be more likely to mess around on a site and create safety concerns. Again, this isn’t always the case, but having a process will help prevent this.

Follow these steps and you will be on your way to setting up a great hiring process. It will eliminate headaches further down the road, and yield quality workers to improve your bottom line.

This article provides general information on employment law matters and should not be relied upon as legal advice. A qualified attorney must analyze all relevant facts and apply the applicable law to any matter before legal advice can be given.

Patrick McGuiness is a partner at Zlimen & McGuiness, PLLC. His law practice focuses on assisting small business owners on a wide range of legal issues. This article is based on his presentation on the same subject at TCI EXPO 2013 in Charlotte this past November. To hear the entire audio recording of that presentation, go to this page in the digital version of this issue of TCI Magazine online at www.tcia.org, under Publications, and click here.

Always check references. What you find out may be surprising and prevent you from making a bad hiring decision.

Circle 14 on RS Card or visit www.tcia.org/Publications

TREE CARE INDUSTRY – APRIL 2014
**HELP WANTED**

**Arborist Climber, California**

Bartlett Tree Experts is currently searching for experienced climbers in all our Bay Area locations. The ideal candidates will have 1+ yrs’ experience climbing with rope and saddle in the tree care industry. We are looking for candidates who are looking for a long-term career with a company. Performs all required ground, climbing, and aerial lift duties in support of specific job assignments, as directed by crew leader or designated supervisor. Responsible for carrying out other duties as assigned by the crew leader or designated supervisor, arborist representative, or local manager. Great Benefits and competitive compensation. We will assist with relocation for the right candidates. EOE Employer. Having a CDL is a big plus. Email your resume to our ad posted at www.jobs.tcia.org.

**ABS Tree Care**

ABS Tree Care is currently seeking motivated Arborists interested in taking the next step in their careers. We have openings for both management and production employees. We are seeking motivated team players who are looking to advance their career. We believe in investing in and developing our people. We put a high value on character and integrity. Insurance, retirement, paid vacation and profit sharing. (402) 960-8667; cforrist@cox.net

Manager: PHC and tree trimming/removal sales experience; setting and achieving sales and production goals; Certified Arborist.

Production: Climber/bucket operator; CDL; Drug Testing.

**Arborist Climber, California**

Bartlett Tree Experts is currently searching for experienced climbers in all our Bay Area locations. The ideal candidates will have 1+ yrs’ experience climbing with rope and saddle in the tree care industry. We are looking for candidates who are looking for a long-term career with a company. Performs all required ground, climbing, and aerial lift duties in support of specific job assignments, as directed by crew leader or designated supervisor. Responsible for carrying out other duties as assigned by the crew leader or designated supervisor, arborist representative, or local manager. Great Benefits and competitive compensation. We will assist with relocation for the right candidates. EOE Employer. Having a CDL is a big plus. Email your resume to our ad posted at www.jobs.tcia.org.

**Manager and Crew Leader, Omaha, NE**

ABS Tree Care is currently seeking motivated Arborists interested in taking the next step in their careers. We have openings for both management and production employees. We are seeking motivated team players who are looking to advance their career. We believe in investing in and developing our people. We put a high value on character and integrity. Insurance, retirement, paid vacation and profit sharing. (402) 960-8667; cforrist@cox.net

Manager: PHC and tree trimming/removal sales experience; setting and achieving sales and production goals; Certified Arborist.

Production: Climber/bucket operator; CDL; Drug Testing.

**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@mcguinnessstree.com.

**Trim Field Supervisor, Arborist Foreman**

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.

- 2-5 yrs’ climbing & pruning
- Supervising 5-15 treecare employees
- CDL (or ability to obtain in 90 days)
- ISA Certification, Degree & CTSP preferred

Visit our website at www.myswingle.com to learn more or to apply online or send a resume and cover letter to careers@swingletree.com. When it comes to your career…choose Swingle.

---

**Fly the best, fly FEVA!**

QUICK DELIVERY • STOCK UNITS • CUSTOM UNITS
PRICED RIGHT • FINANCING AVAILABLE

www.feva.net sales@feva.net 434-525-2929

Forestry Equipment of VA
Arborist/Sales Representative – Boston’s North Shore

An outstanding career opportunity with an industry leader! Carpenter Costin Landscape Management has provided arborealicultural solutions to the North Shore, Merrimack Valley, and Greater Boston area for over 65 years and strives to meet an excellence in quality unmatched in the industry. We are currently seeking an Arboriculture Sales Representative to handle an established territory. Ideal candidate must have at 3-5 years’ experience in green industry sales. Certified Arborists are preferred.

Prepare estimates on sales consultations; supervise your job’s work crew; build relationships with clients and partners; maintain client database with Salesforce.com.; manage and expand existing client base. Join the growing team and earn excellent pay and benefits. Forward resume and cover letter via email, jobs@carpentercostin.net, or fax (781) 595-5850. Contact Bonnie at (781) 598-1924. For more company info visit www.carpentercostin.net.

Climber/Arborist, Fort Worth, TX

Work on 3-man crew, prune and remove trees according to ANSI Standards. Manually climb and use bucket truck. If skills and professionalism are there, could move to Foreman position quickly. Must have a valid DL and 4 years’ climbing experience. Contact gjennings@arbormasters.com; (817) 386-6200.

Tree Surgeon/Climber, St. George’s Bermuda

Brown and Company Ltd. is Bermuda’s premier landscape and tree care service and the Island’s only TCIA accredited contractor. We provide the highest-quality, industry-leading horticultural and arboricultural services to the island, carrying out primarily private residential, with some commercial and resort, and Bermuda’s only utility vegetation management contracts. We offer a generous pay and benefits package to the right candidate in a tax free sub-tropical paradise. Climber/Tree Surgeon with at least 3 years’ experience climbing and bucket truck operation. Must have recognized qualifications and/or operator’s certificates; have a current, solid grounding in all techniques and aspects of pruning, rigging and removals; proven experience in the care and operation of a wide range of associated equipment. Should have a valid First-Aid Certificate and a strong grounding and understanding of all current and relevant Health and Safety practices. Electrical hazard training or utility line clearance qualifications and previous experience training junior staff would be a benefit. (441) 297-5521; fax (441) 297-6153 or email martin.brown@brownandco.bm

Arborist/Tree Care Professionals, Lexington, MA

Matthew R Foti Landscape & Tree Service, Inc. is one of the premier tree care and landscape construction firms in the west suburban Boston area with 37-year commitment to high-quality service. We currently have year-round employment opportunities for arborists /tree climbers who have experience in current tree care techniques. Email resume to: mrftree@aol.com.

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.

Part-Time Regional Outreach Coordinator – Northern West Coast area

The Tree Care Industry Association’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 and 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 area for coordinator based in Northern California, 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.

Experienced Bucket Truck operator/Climbers, Salem, OR

We provide high-quality tree care for residential and commercial clients. We offer a 4-day work week (10 hrs), benefits and vacation. Email ftreei@proaxis.com Attn: Elwood

---

**Expert recruiters use TCIA Job board, where qualified candidates go to find their next position.**

**3 Ways to Find High Performers ....**

1. **Source** candidates proactively, don’t wait for them to apply. Search through resume databases for the best candidates and reach out to them.
2. **Track** which job boards deliver the most qualified candidates and refine your strategy based on what is working.
3. **Keep your candidate pipeline full** by using Tree Care Industry Association, where qualified candidates are actively engaged.

For more info call Sue Bianchette 1-800-733-2622 or email classifieds@tcia.org

www.jobs.tcia.org

---

Disclaimer: Under no circumstances will TCIA or its directors, officers, employees, or agents be liable to you or anyone else for any damages arising out of use of any product or service advertised or presented in Tree Care Industry magazine.
Arborist Representative, Huntington, NY

The ideal candidate will have 5+ years’ experience selling and managing residential and commercial properties and have a proven track record of success. ISA Certification; Degree in forestry, arboriculture or related field; Hands-on knowledge of trees, insect, diseases; Attention to detail; Strong listening skills; Clean driver’s license; Strong sense of safety; Strong leadership. Bartlett Tree Experts has been in business for over 100 years. We are the largest family-owned tree care company in the USA with over 90 offices. 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. We offer competitive compensation & benefits. EEO Employer. Opportunity Grows on Trees. Email your resume to our ad posted at www.jobs.tcia.org.

Professional Climbers in NC

At least 2 years’ experience must be efficient in free climbing and in the use of proper pruning techniques, considerable knowledge of tree care industry and clean valid commercial driver’s license (CDL) required. Enjoy year-round work with a company that promotes safety, training and excellence in service. Benefits include health and dental insurance. For more info visit www.jdtreepros.com. Email resumes to info@jdtreepros.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. PTC 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.

Certified Arborist/Arbor Management, Sales Rep., Palm Beach County, FL

Clean driving record (CDL a plus), 3-5 years’ minimum experience and knowledge in the green industry, good communication skills, DFWP. Growing company seeking a motivated, energetic candidate with the ability to be a strategic leader with an optimistic and successful attitude while demonstrating positive behaviors on ethics and integrity. Prepare estimates, develop new and maintain existing relationships with clients. Crew management, development and training, hiring, and scheduling. Have a desire and willingness to be proactive, an understanding of budgets and financial reporting and pricing and selling, computer experience and excellent organizational, strong communication, time management and leadership skills. Email resume to admin@ashemgroup.com.

Experienced Climber Position, CT

Medium-sized tree care company seeking an experienced climber with a CDL, who is also skilled in rigging, pruning, crane work, utility lines, and large takedowns. Drug-free workplace and highly competitive benefit packages including hourly pay between $15 and $25, health insurance, profit sharing, and 401(k). Relocation package for the right candidate. Signing bonus available! Fax or email resume to (203) 272-0393 or arborist@totaltreecare.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 rostree@rostree.net to join our team.

Sales Arborist, CT

Growing tree and lawn care company in business since 1957 looking for an experienced, goal-driven sales arborist with more than 3 years’ experience. Offering highly competitive benefit packages including health insurance, disability insurance, profit sharing, and 401(k). Base salary plus commission and a signing bonus. Please fax or email resume to (203) 272-0393 or hr@totaltreecare.com.

Plant Health Care Specialists, Waldwick, NJ

The ideal candidates will have 1+ yrs’ experience working in Plant Health Care OR a 2/4-year degree in Forestry or a related field. Certified Pesticide Applicator License is preferred. We are looking for candidates who are looking for a long-term career with a company. Performs all functions of Plant Health Care: SM, tree injection, root invigoration also including administration, scheduling, inspections, sampling, treatments, inventories, equipment maintenance, record keeping, report writing, and customer relations Great Benefits & Competitive Compensation. We will assist with relocation for the right candidates. EOE Employer. See complete job description and email your resume to our ad posted at www.jobs.tcia.org.
Tree Climber/Crew Leader, IL

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/.

Almstead Tree & Shrub Care Co.

Experienced Arborists (including Branch Manager), Climbers, Plant Health Care, Organic Care and Lawn Care Foremen needed for TCIA-accredited, leading regional firm with New York, Connecticut & New Jersey locations. Full benefits including health insurance and 401(k). Celebrating our 50th year serving commercial and residential clients. Competitive salaries and year-round employment. For more information, go to almstead.com/careers, or send your resume to jobs@almstead.com.

Tree Climber/Crew Leader, IL

Climbers and Bucket Truck Operators

A fully accredited TCIA company. The largest tree care company in Baton Rouge, LA, and continuing to grow. We can’t keep up with the demand and are in need of bucket truck operators and climbers. Must be experienced, drug free and have a valid DL. Good attitude and fun personality is a must. We offer competitive pay, work during the winter months, modern equipment and a safe working environment. Send resume to contact@boftree.com or call (225) 755-8088. Check us out at www.bofingerstreeservice.com.

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.

TCIA-Accredited growing Treecare/Landscape Company looking for a Super Foreman

Highly skilled in removals, pruning technical rigging, training, safety standards, and climbing techniques. Drug-free work place and advanced competitive benefit package: hourly rate between $25-$30 per hour, OT, health insurance, 401(k) with match. Relocation paid to the right candidate. We are looking for leaders, CDL, Certified Arborist+, must be willing to obtain. Email resumes info@kinnucan.com or fax (847) 234-3260.

Certified Arborist/Sales, Tree Climbers, Trainees

RTEC Treecare provides arboricultural and horticultural management to residential, commercial and government customers in VA, MD, DC. We provide customer-focused solutions with flawless delivery of services. Our unwavering commitment is to improve the safety, health and beauty of properties. We embrace technology, training, education, and continuous improvement in a drug-free environment. Learn more about us: www.RTECtreecare.com.

Certiﬁed Arborist/Sales, Tree Climbers, Trainees

RTEC Treecare provides arboricultural and horticultural management to residential, commercial and government customers in VA, MD, DC. We provide customer-focused solutions with flawless delivery of services. Our unwavering commitment is to improve the safety, health and beauty of properties. We embrace technology, training, education, and continuous improvement in a drug-free environment. Learn more about us: www.RTECtreecare.com.

Circle 26 on RS Card or visit www.tcia.org/Publications

Change for the good

"I'm a new arborist at SavATree. It was really important for me to work in a company that uses the very best management and sustainable practices including integrated pest management. I'm impressed by the safety disciplines that SavATree follows, and the continual improvement philosophy of the company. This assures a promising future that benefits the company, its employees and its customers."

Are you ready to join forces with SavATree?

Offices in CT, DC, IL, MA, MD, NJ, NY, PA & VA

Please fax or email your resume to 914-242-3934 / careers@savatree.com savatree.com

Rewarding Work | Career Development | Cutting-Edge Equipment Amazing Properties | Expert Mentors | Continuous Improvement

“FIFTEEN YEARS IN, I'M STILL MOTIVATED TO DO MY BEST EVERY DAY.”

—TREVOR, ARBORIST REP. Hired 1999

Enhance your skills and advance your career with the #1 tree and shrub care company in the world.

bartlett.com/careers
An equal opportunity employer.
**Consultant, Marin County, CA, just the other side of the Golden Gate Bridge**

Award winning tree service seeks certified arborist to join our team. You are ready to work, experienced in consulting and sales. Very experienced in PCH treatments and a strong leader who can work within, but also capable of helping improve, an existing system/structure. Excellent pay for exceptional people. Contact tad@treemasters.com (415) 672-3424.

---

**Arborist/Climber**

Our team is looking for a certified arborist who is ready to work, experienced in consulting and sales. Must be customer focused, detail oriented, motivated and be ISA Certified. Our team is also looking for a climber with 2+ years’ experience. Valid driver’s license required. Relocation assistance may apply. Send resume & reference to bigdogdisposal@bellsouth.net.

---

**EQUIPMENT FOR SALE**

**Opdyke Inc.**


---

**Safety Tech Outrigger Pads**


---

**Bean Tall Tree Sprayer**

Stainless-steel, 600-gallon tank with 65 hp Wisconsin Motor. Plumbed for multiple hose reels. Has 300’ of ¾” hose on electric hose reel. Unit is in good condition and ready to use $3,750. (301) 854-5990 or Rmead@meadtree.com.

---

**AlturanaMATS, Inc.**

Your Single Source for Ground Protection! Mats are available 2’x4’ up to 4’x8’ and feature a Limited Lifetime Warranty! Built Tough Guaranteed! 1-888-544-6287, sales@alturamats.com; www.alturamats.com.

---

**2008 75’ Teupen Aerial Lift, LEO 23**

Excellent condition. Work smarter not harder, self-propelled minilift. Compact design, be able to access backyards with a min of 39-inch opening. $75,000. Call or email Tim, (973) 296-8998 tim@greenwoodtreeandlawn.com

---

**1998 Isuzu Cab-Over Truck**

With a 1998 GreenPro Polaris 1000-gal. tree sprayer w/body. 143,976 mi. PTO-driven UDOR Beta 150 pump system. 40 GPM 700 PSI w/hyd agitation. Non-CDL, 4-speed auto, 6-cyl diesel, air assist brakes. $20,000 OBO wyatt@hughestree.com.

---

**1998 Isuzu Cab-Over Truck**

With a 1998 GreenPro Polaris 1000-gal. tree sprayer w/body. 143,976 mi. PTO-driven UDOR Beta 150 pump system. 40 GPM 700 PSI w/hyd agitation. Non-CDL, 4-speed auto, 6-cyl diesel, air assist brakes. $20,000 OBO wyatt@hughestree.com.

---

**The Perfect Tree Truck**

Curbside (sidewinder) with chipper built into a 1976 GMC Crew Cab, 1-ton truck w/a dump bed! Good Condition $30K. Call (610) 952-5209.

---

**Dyed Mulch Plant, Norcross, GA**

30-yards-per/hr capacity. Currently produces 25,000 yards per yr. Being upgraded. Includes Steparator Inclined screen, Amerimulch midi-mite colorizer, Allatoona radial stacking conveyor; $55,000 firm. Call (678) 361-8187.

---

**Tree Service in Southern NH**

Great customer base, residential and commercial. Work with buyer to transition. Customer base, phone number, bucket, log truck, and chipper included. Partial owner financing possible. Contact jor-ley02@aol.com; (603) 321-9268.

---

**Make plans now to attend**

**TCI EXPO 2014 in Hartford, CT**

**Thurs-Sat, Nov. 13-15, 2014**

---

**VENDOR SERVICES**

**ArborGold Software**

Complete job management! Tree Management Systems, Inc. delivers cutting edge software specifically designed to help tree care companies close more sales, create repeat business, reduce cost and monitor crew productivity, works with QuickBooks. Visit our website www.ArborGold.com for a FREE in-depth video demo or call 1-800-933-1955 today for more information.

---

**BUSINESS FOR SALE**

**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 Service in Southern NH**

Great customer base, residential and commercial. Work with buyer to transition. Customer base, phone number, bucket, log truck, and chipper included. Partial owner financing possible. Contact jor-ley02@aol.com; (603) 321-9268.
Although it was a sad sight to see, I cannot deny the delight I took in calling this one. A virtual classroom of cracks, included bark, and excessive end weight, a main scaffold of a white ash tree had ripped out of its defective attachment point during a late summer weather event.

I had been to this property a few years earlier after an almost identical event took place on another white ash. It is a duty as a professional arborist to notify the property owner when potential high-risk situations are noted. Beyond the obvious ethical reasons, an arborist may even find themselves liable for injuries associated with trees they’ve worked on or were in the vicinity of.

The potential liabilities of the subject tree were discussed, this particular defect among others. Being a rental property, the owner was reluctant to devote resources toward this tree, despite my attempts to convey the obvious shade and screening benefits provided (ironically, these benefits have been shown to enhance the financial return for rental properties).

Countless arboricultural relics mock me in my travels. I had been all but certain that many of the decrepit beings I observed would have met their demise long ago. At this point, it’s a crap shoot as to whether they or I will return to dust first. But this time … this time I was right!

Unaccustomed to that outcome, I took a moment to bask in my arboricultural prowess before heading over to inspect the damage and offer options to rectify the situation.

A barn stood to the south of the tree, and was currently adorned with a leafy head-dress, courtesy of the fallen limb it now supported. Part of the root zone was compacted and used for parking. A modest-sized yard was located to the east, and an apartment building adjacent to that. Despite less than desirable site conditions, the tree exhibited good health, with respectable foliage color and density. Its architecture, however, was another matter entirely.

Three major scaffolds arose from the trunk at about four feet from the base. V-shaped, with included bark and cracks, this configuration was clearly trouble. Devoid of a true center, the main scaffolds of the tree all grew with a lean away from one another.

While my valuable words of wisdom went unheeded on my previous visit, perhaps this recent development would give me credence. The owner, who hoped to retain the tree, was now alert to my apparent psychic abilities.

With visions of cables and bracing rods dancing through my head, I began to assess my options. It soon became clear the architecture of this tree made it a poor candidate for supplemental support. Oblique angles, old wounds and incompatible scaffold sizes combined to make cable installation an option with limited support capabilities. This in turn would reduce the effectiveness of any bracing rods that could be installed near the scaffold unions. Beyond that, this is a rental property. There would be a budget, and it would not likely be generous. If this tree was to have risk reduced to an acceptable level, it would have to be done another way. Perhaps a reduction pruning could do the job.

In these trying moments, I am inspired to turn to the good book. I’m talking about ANSI A300 publications, of course! The A300 (Part 1), Pruning guideline describes reduction pruning as pruning to decrease height and/or spread. Consideration is given to the ability of a species to tolerate this type of pruning. The location and size of parts to be removed should be specified. Guidance for the size cuts to be made come from A300 (Part 1) 5.3.4.: “When pruning to a lateral, the remaining branch should be large enough to assume the terminal role.”

While this particular pruning plan was...
developed on-site by the seat of my trousers, spiritual guidance from the Pruning Specification Writing Flowchart was channeled to develop a reasonable plan of action:

- Client’s pruning goal – Retain the tree while reducing the risk with a minimal investment.
- Considerations
  - Tree architecture and budget considerations limit the possibility of supplemental support systems.
  - Reduction of height and spread of this tree by as much as 25 percent would be desirable to reduce risk to an acceptable level.
  - White ash is a poor compartmentalizer, but this tree exhibits good vigor.
- Pruning Objectives – Remove as much weight from the crown as possible without compromising tree health or ability to react to the pruning wounds.
- Pruning methods – A reduction pruning using an aerial lift shall be performed to meet objectives.

Specifications

- Remove 20 to 25 percent from the height and width of the crown
- Remove any dead, broken or diseased limbs
- Cuts should be no larger than 3 inches in diameter, preferably less
- Cuts should be made to a lateral branch no smaller than 1/3 the diameter of the cut.
- Timing of treatment should allow the tree time to react to wounding.

We were able to easily access the branch ends with the bucket truck. Approximately four hours later, voila! A stouter tree with
an improved ability to handle loading was left in my Gomataro’s (Silky handsaw) wake. As keeping to specifications trumped aesthetics, a somewhat unflattering form ensued. Though woefully sparse, with sort of a hunch-back feel to it, I felt this Quasimodo tree could now safely handle a loading event. I also cleaned up the large wound left from the torn out scaffold.

The mid-September time frame was much later in the season than I wanted to do the job, but I sensed that leaving it in its current state would court disaster. My mounting psychic powers came through again when a freak, late October snowstorm wreaked havoc on any deciduous trees still sporting leaves. This tree would have likely been hit hard without the pruning, but in its reduced state, little damage was done.

Two years later, Quasi looks remarkably well. No change is evident in the defective branch unions. The foliage is lush, and most of the laterals that were cut back to exhibit little breakage or die-back. I will have a better view when the foliage is off, but wound response seems to be good at this time.

Oblivious to my heroics, the tenants still enjoy the shade and screening this tree provides. Their appreciation is displayed by parking vehicles on top of the root zone and nailing two by fours into the trunk. I am finally immune to such indiscretions, my satchel of ideals long ago depleted. If I can get a few wood chips on a root zone or keep Uncle Frank from demonstrating his pruning skills on the heirloom copper beech, it’s a good day. I have advised the

---

2014 WORKSHOPS

**FRIDAY APRIL 11**
Marietta, Georgia

**THURSDAY APRIL 17**
Green Brook, New Jersey

**FRIDAY APRIL 25**
Round Rock, Texas

Registration fee: $25 per person
Includes a Chipper Operator Specialist training manual (a $35 value)

Register today! www.tcia.org | 800-733-2622
property owner to have this tree reassessed and pruned in three to five years, but who knows if he will oblige?

I have unjustly condemned many a tree in my past, but years of observation and hundreds of removals have tempered my perilous proclamations. To put things in perspective, a study done in the UK found there to be a 1-in-20-million chance of being killed by a tree in public. People are hundreds of times more likely to die in a car accident, but I do not know of many who eschew the automobile because of this fact. There will certainly be situations when a cautious approach is justified, but many conditions can be abated to a risk level the client will be comfortable with. Keep an open mind. Explore and present the options available to the client, and let them make the call.

Alas, my psychic powers appear dormant lately, so I must return to the tools any good arborist employs: Experience, observation and education. All the years spent getting beat up during tree care operations need not be in vain! In fact, it can be a huge asset. Many of us are in a unique position to make observations not presented to the aerial challenged. Take a moment to contemplate the anomalies of trees you work on or encounter on a regular basis.

Note their responses to loading events and any changes over time. Keep abreast of the latest information along with how it affects your practice. It may be better to be lucky than smart, but when it comes to arboriculture, it’s best to be both.

The ash crown two years later.
Weak chain saw safety piece

I have just finished reading the story titled “Chain Saw Safety: Keeping the Fundamentals in Mind,” from the March 2014 issue of TCI Magazine, and am sad to say that I was greatly disappointed. The author left out many key points and the story turned to a lesson on working with cranes. The weight of the wood and how to calculate it for crane use is of little relevance to chain saw safety.

The reactive forces of chain movement, proper chain tension, and proper body position in relation to the saw should have at least been mentioned. The body should be positioned, if possible, so that in the event of kickback the bar would go over the shoulder and not toward the head.

He also did not properly describe kickback, which is a forceful movement backward AND upward of the bar. This upward movement sends the bar and chain toward the body. If it was only a backward movement, as the story implies, the back of the saw would hit the body; painful, yes, but life threatening – probably not.

Though drop starting was stated as not an acceptable practice, acceptable methods such as placing the saw on the ground and securing with one foot and one hand while pulling with the other were not mentioned.

The author missed an opportunity on some key points and strayed off topic. This could have been done much better. I have sold and serviced chain saws for 25 years. This includes instructing buyers, both homeowners and professionals, on features and their functions as well as proper starting. I have also enjoyed tree work as a hobby for as many years.

Mike Ellis, chain saw technician, Stewart’s Power Equipment Holbrook, Massachusetts

Where are climber’s chaps

Tweeted March 5, 2014.


At this point in time, no U.S. standard or regulation requires a climber to wear chain saw leg protection, leaving it to the climber to weigh the various hazards associated with his/her climb and decide on the most appropriate garment for the conditions. – Ed.

Photo caption lacks merit

In regard to your article “Determining Tree Growth for Climate, Health and Wealth,” on page 46 of the March 2014 issue of TCI Magazine, I find the comment under the photo of the tree from Chapel Hill, North Carolina, to have no merit.

Being an arborist, one should take in all aspects of the tree in question and the cultural aspects as well: location, surrounding homes and building styles, how old is the tree and neighborhood, and are there ways...
to preserve both the integrity of the tree and the aesthetics of both it and the surrounding area. Based upon the photo presented in the article, I would say that “poor choice for an urban tree” is an overstatement.

I would say, as well, that the tree presents an arborist with a worthy question: How do we benefit both the tree and the community?

The first thing that comes to mind is adding a bridge that matches both the wall and surrounding area that I can make out in the photo. Not much for the arborist to do, but another fine tradesman could benefit, and the arborist has a fine looking tree to continue to maintain long into the future.

I just find that the wording (might) close the mind of a perhaps younger and less-informed and weathered arborist.

S. Dana Harper, owner
Legendary Tree
Des Moines, Washington

Editor’s note: Thanks for the letter. Sloppy editing – threw a photo in with the article and messed up the caption. We should have done better.
Forest Service releases newest version of i-Tree free mobile forestry tool

The U.S. Forest Service is making it easier than ever for homeowners and urban planners to discover the economic and ecological value of their trees, with its recent release of i-Tree 2014, the free mobile software tool.

Since it was first released in 2006, the tools found in the i-Tree suite have made it possible for communities, non-profit organizations, consultants and students to analyze individual trees, parcels, neighborhoods, cities and entire states. The software has also become a global ambassador for the Forest Service – the world’s largest forest research organization – where it is put to work in more than 100 countries.

“Urban forests are the lifelines of America’s cities, and we know that in part because of i-Tree,” says U.S. Forest Service Chief Tom Tidwell. “i-Tree helps us better understand how urban forests benefit the health of our cities and the people who live in them.”

What’s new in 2014? Two of i-Tree’s...
i-Tree Design allows users to evaluate the benefits of a single tree or multiple trees using Google Maps. The design currently allows users to identify location, species and size of trees on the property and get a snapshot of how that tree is benefiting the homeowner today.

In the new version, Design also allows homeowners to estimate not only current benefits but also potential future benefits and the benefits they have received over the life of the tree. These benefits include energy savings, pollution removal and rainfall interception.

One of i-Tree’s most popular tools, Canopy, is used in many countries to create quick estimates of tree canopy cover. In the 2014 version, Canopy includes estimates of ecosystem services and values related to carbon sequestration and storage, and pollution removal.

Hydro, one of i-Tree’s most sophisticated tools, estimates tree impacts on stream flow and water quality. Receiving a thorough make-over in the new version, the tool was made more user-friendly and its capabilities were broadened from only watershed level analyses to city scale analyses. Users will also be able to produce new reports and an executive summary of hydrologic results.

In addition to Design, Canopy and Hydro, i-Tree tools include Eco, Streets, Species and Vue applications.

The Forest Service, Davey Tree Expert Company, the National Arbor Day Foundation, the Society of Municipal Arborists, the International Society of Arboriculture, and Casey Trees established Arboriculture, and Casey Trees established the benefits of a single tree or multiple trees using Google Maps. Design currently allows users to identify location, species and size of trees on the property and get a snapshot of how that tree is benefiting the homeowner today.

In the new version, Design also allows homeowners to estimate not only current benefits, but also potential future benefits and the benefits they have received over the life of the tree. These benefits include energy savings, pollution removal and rainfall interception.

One of i-Tree’s most popular tools, Canopy, is used in many countries to create quick estimates of tree canopy cover. In the 2014 version, Canopy includes estimates of ecosystem services and values related to carbon sequestration and storage, and pollution removal.

Hydro, one of i-Tree’s most sophisticated tools, estimates tree impacts on stream flow and water quality. Receiving a thorough make-over in the new version, the tool was made more user-friendly and its capabilities were broadened from only watershed level analyses to city scale analyses. Users will also be able to produce new reports and an executive summary of hydrologic results.

In addition to Design, Canopy and Hydro, i-Tree tools include Eco, Streets, Species and Vue applications.

The Forest Service, Davey Tree Expert Company, the National Arbor Day Foundation, the Society of Municipal Arborists, the International Society of Arboriculture, and Casey Trees established a cooperative partnership to further develop, disseminate and provide technical support for the i-Tree suite.
Viewpoints from a Female Industrial Athlete: 

Arbor Girl aka Riggin’ Rita

By Amara Lorch

When I became licensed to climb, prune and remove trees in Fort Collins, Colorado, eight years ago, I had no idea how much ground work I would be doing before and between opportunities to get up in the trees. Ground work is heavy and difficult. It makes my wrists, back, neck and parts I didn’t know I had ache and burn.

Being a female arborist, I face challenges integrating into the crew environment. When a new guy joins the crew, it takes a little time for us all to become comfortable. Of course, we move through the first, second, third and fourth impressions and into the fifth or sixth hour of the day. Here we find laughs and generalized respect. I have been given the nicknames Arbor Girl and Rigging Rita over the course of these past eight years. The other day, I got a third nickname.

Phil, my husband, and I were talking about the most efficient way for our small crew to complete a simple crane out. We discussed the logistics of the upcoming job. We went back and forth about what each of our roles should be. I badly wanted to experience the bucket work of a crane out, and Phil wanted, of course, to continue his role as the man in the bucket for these jobs. But, we knew we would have a very small, inexperienced ground crew for the job, and how was I going to motivate the small crew to out-lift, out-cut, and out-drag me in order to get the ground clear between picks? Phil was in a position to lead by example.

Phil has seen me work in the bucket for years; he knows my limitations and abilities as well as I do. He agreed it might be better for me to pick the tops while he directed the crew on the ground. Then, when the cuts got too large for a saw I could handle sideways, we would switch.

We had to sub out the crane because we don’t have one. When the crane and its operator arrived, we all began listening to the operator and Phil talk about what Phil would do in the bucket. I looked at Phil and him back at me. He knew my look of sadness meant I did not want to be left alone on the ground with the guys and big logs, but much rather be left alone in the bucket.

In the bucket, I was not left alone. The operator was advising me to not get my bar pinched. Good advice. Then, “Do a bird’s mouth on that one so I can get it vertical.” I thought for a second, “A face cut? Yeah, a face cut will work.” OK, I said to myself, “just like I am cutting down a tree, but I have to wait for the crane to lift the weight with the back cut before I can back away and he breaks it off.” At least, I am not on the ground.

It was a short job. Just a few hours of crane work. The 85-foot canopy had been too high for our 51-foot bucket, with a 54-foot working height with me in it. After I cleared the brush, Phil went up and cut the wood down.

So, at the end of the day, I got a third nickname – Cranie Janie.

I guess my favorite nickname is still Riggin’ Rita. I love the dynamic forces involved in removing and pruning trees, and the teamwork involved in a smooth day of rigging.

But, I like the “knuckle love” Phil gave me after my first crane out. He says I take “man cards.”* I don’t even know what that means, but I guess I do like it.

More than that, I love working in the trees and with all tree people.

* Man Card, according to www.urbandictionary.com: Requirement to be accepted as a respectable member of the male community. Can and should be revoked by other respectable males for doing non-respectable-male things, i.e. “We had to take away Harry’s Man Card because he cried in public when Kristina dumped him.”

Amara Lorch and Phillip Kinner co-own and operate Apex Tree Service, a TCIA member company located in Fort Collins, Colorado.

TCI will pay $100 for published “From the Field” articles. Submissions become the property of TCI and are subject to editing for grammar, style and length. Entries must include the name of a company and a contact person. Send to: Tree Care Industry, 136 Harvey Road, Suite 101, Londonderry, NH 03053, or editor@tcia.org.
At Altec, we believe a better product starts from the ground up. So we offer tree care products that go way beyond the standard so you can truly find a solution to meet your specific needs. Add that to our award-winning service, in-house fleet financing and unmatched reliability, and you’ve got a personalized solution custom-fit to meet your tree care needs.

**Factory Direct Sales** and Service in the U.S.
FOR PRICING AND AVAILABILITY CALL 800-958-2555

EMAIL: sales@alteccom • altec.com/treecare

Circle 3 on RS Card or visit www.tcia.org/Publications
Invest in experience.

You Deserve the Best.

There are thousands of reasons why professionals all around the world turn to Bandit for chipping and grinding equipment. Rugged construction. Custom-built machinery. Excellent fuel economy. Exceptional performance. These are just a few reasons, but there's one reason that trumps them all.

When you buy a Bandit, it's not just another purchase. It's an investment. An investment into your company. Your livelihood. Your future.

For 30 years, companies large and small have trusted Bandit to build the equipment they need. So shall it be for 30 more. From wood chippers to stump grinders, horizontal grinders, forestry mowers, and specialty wood processing equipment, there's no reason why you shouldn't own a Bandit.

Invest in your future today—invest in a Bandit.

Circle 7 on RS Card or visit www.tcia.org/Publications

www.banditchippers.com | 1.800.952.0178 | Remus, MI - USA